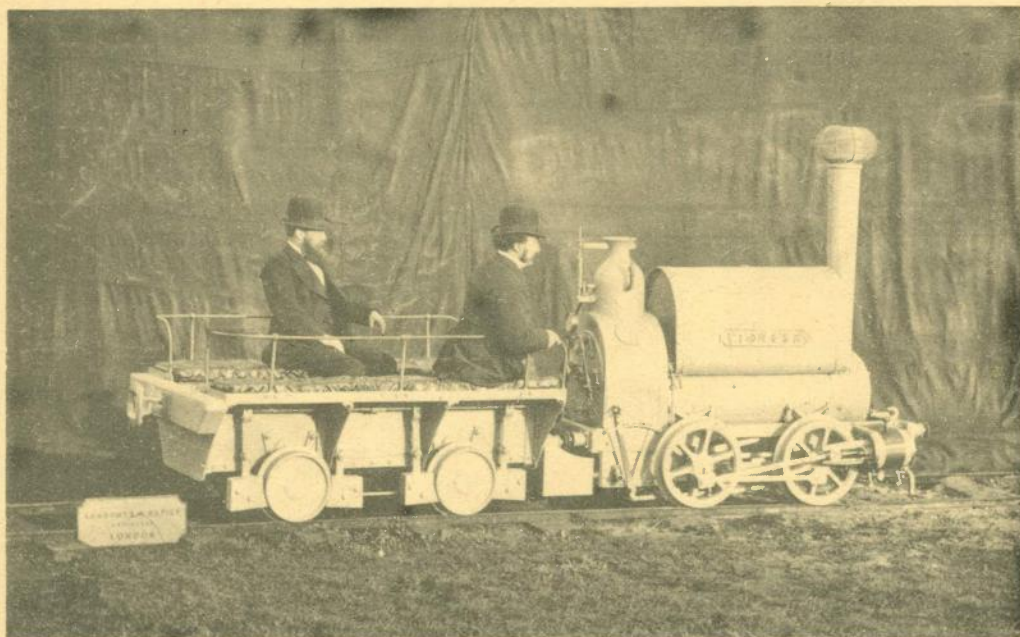


The **NARROW GAUGE**



Nº 37 FEB. 1965

THE NARROW GAUGE RAILWAY SOCIETY

THE NARROW GAUGE RAILWAY SOCIETY

Hon. Secretary: Mike Swift,
13 Quarry Close,
Brockholes, Huddersfield.

Hon. Magazine Editor: Henry Holdsworth,
76 Tower Lane,
Leeds, 12.

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EDITORIAL

16th February 1965

The long awaited No.36 Magazine was the last under Paul Myatt's editorship, unfortunately Arthur Lord-Castle who volunteered to take over the job was seriously ill last Autumn and I have therefore been asked to issue a couple of Magazines to bring us to the next Annual General Meeting when more definite arrangements can be made.

If I make a good job of them I reckon I shall have the job permanently, however here goes!!

An Editor can only publish what his correspondents send in, so PLEASE let me have articles for future regular issues of the Magazine, the "cupboard is bare" almost now this issue is out.

We hope you like the "new look"; the Editor is happy to acknowledge the idea came from Ken Plant's "Industrial Railway Record" (B.L.C.). If you are not already subscribing to this section of the Birmingham Loco Club, the modest 15/-d per year is well spent - details from Mr. A.L.F. Fuller, 28 Ridgewood Drive, Harpenden, Herts.

Full 3/8" scale prints of the TRIASSIC plan can now be obtained from the Society Plans Service, c/o Mr. Redman, 11 Oliver Hill, Horsforth, Nr. Leeds, price 2/6d plus 3d postage. (Quote NGRS 2)

I hope the idea of a correspondence column catches on, for the exchange of information and supplementary comments on published articles; I think they make a most interesting contribution to any magazine. A pen name can be used if you think the matter too controversial.

Lastly, let me know what interests you. Would you like a continuation of Ron Redman's article on Miniature Locos? Details are to hand of the Golden Acre Park (Leeds) line, and of course, similar Hudswell Locos were supplied to Blackpool and two Butlin's Camps. Many other interesting Miniature lines (some now defunct) could be described if they come within the scope of this Society.

We should also like details of any private Narrow Gauge Loco preservation (dead or alive) that you know is going on, so that a write-up can be prepared.

All the best,

HENRY HOLDSWORTH

Would my Income Tax Inspector kindly note the word "HONORARY".

SOUTH AFRICAN SURVEY

by Frank Jux

Foreword

This series of articles is not intended to be little more than informative and intriguing to narrow gauge enthusiasts. The writer has to labour in a warm climate for over fifty hours a week and this leaves very little time for historical or current investigation.

However, on the assumption that available information is better than none at all these notes were embarked upon to give readers some idea of the trains running in the Republic of South Africa to-day. The S.A. Railways have been largely ignored, since whilst nominally narrow gauge, nearly everything about it is "main line", the bulk of the notes therefore deals with industrial railways. It is a pity that colour printing is so dear for much of the attractiveness of spotlessly clean locos of varied hues must be lost.

The Sugar Cane Lines

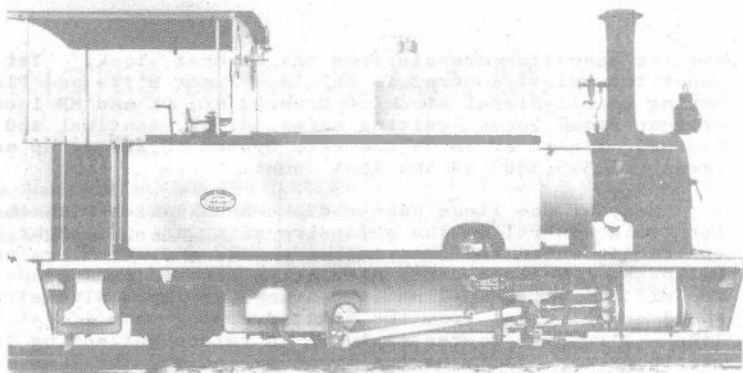
South Africa's biggest concentration of narrow gauge outside of the S.A.R. narrow gauge lines, is in Natal, where some seventeen sugar mills produce well over a million tons of sugar a year. Most mills have cane tramways running into the fields, although some have changed over to road transport, and at least one never had a tramway. The size of the system varies, but the average runs into scores of track mileage. Loco stocks vary also from two or three to a dozen or more.

When discussing the cane trains with laymen, they claimed they had never seen such small locos on such long trains, and having seen them I am inclined to agree. At one mill the driver of a spotless Hunslet 101 HP diesel, said he had just brought in 50 wagons - all loaded with cane - normally a double load, but he wanted to finish early, it being Saturday. The same driver attributed the increasing use of diesel locos on the remaining tramways to the fire hazard and greater utilisation factor. Cane fires can cause extensive damage, and cane farmers laid the blame with the mill's steam locos. Several systems are now operated entirely by diesel locos and at every other mill diesels run side by side with steam.

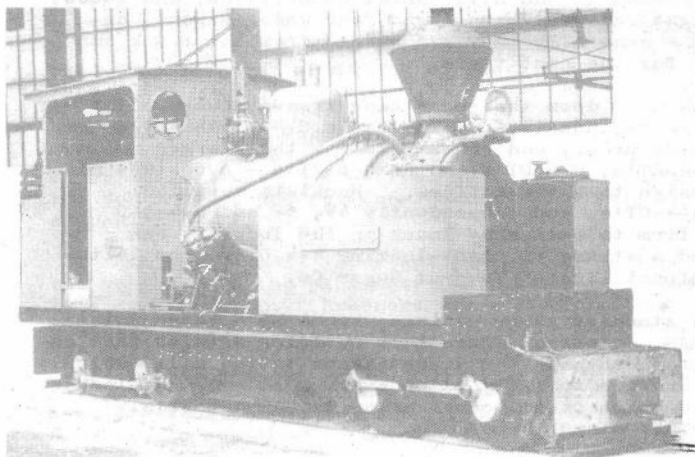
There have recently been a number of mergers and working agreements between the sugar companies to enable the number of mills and refineries to be reduced with consequent economies. Sir J.L. Hulett & Sons Ltd. (itself controlled by a consortium of sugar interests) is one of the biggest groups, having sugar mills in S. Africa, at Darnall (with full scale loco depot), Felixton and estates at Niposa, Umlhali and Tinley Manor, operating a large variety of AE types with later additions of WB articulated loco's and diesels by MR, OK and HE. It controls also Natal Estates, with a central mill at Mount Edgecombe supporting steam locos. by WB, HE and JF, and diesels by JF and MR. It has also one or two small

AVONSIDE 1837
 Built 1920
 for A.W. Smith & Co. Ltd.
 later owned by
 ZULULAND SUGAR MILLS LTD.

Gauge 2'0"
 0-4-2 Side Tank
 Cylinders $9\frac{1}{4}$ " x 14"
 Wheelbase 5' coupled
 9'7" total
 Weight in W/O - 15 ton 4 cwt.
 Tractive effort at 75% BP
 = 5655 lbs.



THE-AVON-SIDE-ENGINE-CO-LTD-BRISTOL-Nº1837



HUNSLET 2005
 "Sezela No. 8"
 Built 1939
 for Reynolds Bros. Ltd.
 Natal.
 Gauge 2'0"
 0-4-0 + 0-4-0
 Geared Steam Articulated
 Piston Valve Vee Engine
 Wheels 2'0" diameter
 Bogie wheelbase 3'6"
 Total " 16'6"
 Weight in W/O - 18 tons
 Tractive effort at 75%
 B.P. = 8450 lbs.

AVONSIDE 1624
 Built 1912 for
 FINDLAY DURHAM & BRODIE LTD.
 later owned by
 SIR J. HULETT LTD.
 Gauge 2'0"
 0-4-0 Side Tank
 Cylinders $8\frac{1}{2}$ " x 12"
 Wheelbase 4'6"
 Weight in W/O 9 ton 10 cwt.
 Tractive effort at 75% BP
 = 4335 lbs.



THE-AVON-SIDE-ENGINE-CO-LTD-BRISTOL-Nº1624

We wish to thank and acknowledge the help of the Hunslet Engine Co. Ltd.
 in providing these three photographs at short notice.

estates operating diesels from the central stock. Yet another company under the Hulett control is Zululand Sugar Mills and Planters at Empangeni, having an all-diesel stock of Drewry, HE, OK and MR locos, with the remains of four steam locos awaiting scrap. (AE, Sentinel and HE). Total historical cost of locos and rail system in the group account was 2,691,172 rands (£1,345,586) at the last count.

Many of the lines have radio communication with their locos necessary for train control on the extensive main lines. Light lines are laid into the fields where the cane is being cut, and these are operated by hand or bullocks. Bullock carts also bring cane to rail heads for transmission to the mill. The main-line loco brings an impressive string of empty four wheel cane 'racks' from the mill, dropping them off at sidings along the line - a reverse course is taken on return collecting loaded wagons until something like fifty wagons trail behind for the last part of the homeward run. The return trip can take anything up to a day, depending on the length of the line.

Gradients and curves abound in the hilly Natal countryside, and locos work hard. As on most light railways with light four wheel wagons, derailments are not uncommon - generally they are pushed from the track and left to be re-loaded ready for the next train.

The most popular locos used upon the sugar cane tramways were built by Avonside or their successors, Hunsletts. The basic 0-4-0T is still operated by Huletts, Reynolds Bros., and other firms, with enlarged versions in the form of 0-4-2T's, 0-6-0T's and on 0-6-2T's - Avonsides also supplied an articulated design to several firms. Hunsletts supplied 0-4-2T's, 0-6-2T's and 0-4-4-0T's, and subsequently 4W, 6W and 0-4-4-0 diesels. The only other firm to sell many locos in the industry was Bagnalls, with 2-6-2T's and a string of light-looking 4-4-0T's, the latter being mainly to the now defunct line of Tougaat Sugar Co.

All of the mills have standard gauge sidings, handling a large volume of cane traffic from the SAR. Several firms have outlying estates that do not crush cane, but load it on the SAR for transmission to the mill, which may be anything from four or five to fifty miles away. Illovo and Gledhew mills both operate standard gauge steam locos, using ex SAR 4-8-2T's. Illovo also has a KS 0-4-2T as standby.

Most mills have a very high standard of cleanliness for their locos, but a few maintain a nondescript stock. The most popular livery is green, but Reynolds Bros. rich blue livery is reminiscent of Caledonian colours.

Cane is cut for nearly all the year, but the area cut varies, since a growth of two years is generally allowed by harvesting. Consequently disused portions of the line are common. The high cost of maintaining track and rolling stock may convince more companies that road transport is cheaper and easier, may we hope that it waits for a long time - Natal wouldn't be the same!

SOME NOTES on the Z.V.T.M.

Photo, Drawing and article by KEN HARTLEY
(the author of "THE SAND HUTTON LIGHT RAILWAY")

Copies available from the Editor - 6/6d to members
8/6d to non-members.

by K. E. Hartley

My own personal acquaintance with the Zeeuwsch-Vlaamsche Tramweg-Maatschappij (Z.V.T.M.) in 1931 was extremely brief - scarcely longer than the time required to focus my camera and take my only picture of one of the trains, for I was a member of a party en route from Flushing to Belgium. At the time I didn't even know the name of the Company, but eventually (after nearly 30 years!) I got in touch with Mr. H. Waldorp, of Naarden, Holland, and through him with Mr. S. Overbosch, the Dutch train expert. From them I learnt something of the line, and more especially about the locos.

The Z.V.T.M. was considered to be very modern, and was one of the last Dutch steam tramways to be built, although it did in fact incorporate two other small lines. It served an infrequently visited part of Holland, in the South West, and was consequently less well known than some of the other companies.

One of the most important places on the line was Breskens, from whence the vehicle and the passenger ferry steamers crossed to Flushing, on the Isle of Walcharen. Breskens was a considerable tramway junction, and in addition to the Z.V.T.M. the much older steamtram Mij Breskens - Maldeghem was greatly in evidence. This company, also of metre gauge, was very interesting, and its locos were of much more varied type than those of the Z.V.T.M. During the summer months it handled very heavy passenger trams from Breskens to the Belgian frontier, where they were handed over to the S.N.C.V. to continue to Knocke, near Ostend.

The track of the Z.V.T.M. was laid during the 1914-1918 war and perhaps due to increased costs was of rather lighter construction than was originally intended. The locomotive and rolling stock, however, were equal to the best in the country. Apparently, the Z.V.T.M. suffered badly from the ravages of World War II and in 1950 the whole system was replaced by bus services, and all the rolling stock was sold. By 1952 nearly all the track had been removed, but near the village of Hulst a long line of tram engines (Nos. 10, 13, 14, 16, 17, 22, 23, 24, 28 and 29) still stood, awaiting the breaker's torch. The actual scrapping dates are unknown.

The standard locomotive was a 0-4-0T with only the portion below the footplate enclosed. The design was by the celebrated Dutch steam tram designer, Mr. Verhoop, and there were 20 of these engines on the Z.V.T.M., although in all, 72 were in use on the various tramways in Holland.

There were minor differences beside weight, etc., but in general these engines were all very similar. They proved to be very successful machines and had a surprising capacity for fast running, on good track, speeds of

40/50 kms. per hour being usual, 60 k.p.h. fairly common and even as high as 65/70 k.p.h. has at times been recorded on a line in N.E. Holland.

The Z.V.T.M. "Verhoop" engines were built as follows:-

Nos. 10-13 Arn.Jung. Lokomotivfabrik Nos. 2271-2274/'16

" 14-16 " " " 2476-2478/'17

" 17 " " " 2479/'17 - in service 1918

" 18-21 " " " 2480-2483/'17 " 1918

" 22-26 " " " 3147-3151/'20 " 1921

" 27-29 Henschel Nos. 21371 - 21373/'29

Nos. 10-17 and 22-26 weighed 21 tons in working order, and differed only in small details, but Nos. 18-21 were smaller and weighed 19 tons. They had smaller boilers and engine details - the cylinders were 290 mms. x 350 mms., wheels 850 mms. diam. and wheel base 2,000 mms. The three 1929 locos by Henschel were also a smaller type and weighed 18 tons in working order.

In general, the design was an 0-4-0 inside cylinder tank engine, with water tanks arranged below the running plate, alongside the wheels - a common feature of Dutch tram loco design, which probably gave steadier running, but was not so good for getting at the motion. The motion was completely covered-in by plates reaching part-way up the boiler - these had sliding panels to permit of oiling and examination of the gear.

The cab was almost fully enclosed and well provided with windows at both sides and ends and also had horizontally pivotted ventilating slots all round. On the left-hand side, in front of the cab, was the coal bunker (the fuel was largely briquette) and on the right-hand side (i.e. driver's) was a door leading from the cab, and via a small end door in the side sheet, to the running plate. In the back sheet of the cab was a full height sliding door and there was a step-plate over each centre buffer. Couplings appear to have been "link and pin", and steam heating and brake connecting pipes were also mounted on the buffer beams. It is not known whether Westinghouse or Vacuum brakes were used, but no air pump is visible on any photographs so far seen. A pair of large, round, continental-type head lamps flanked the smoke-box, but do not seem to have been fitted at the cab end.

The boiler carried a stove-pipe chimney, a steam gong, the steam dome with regulator, and safety valves mounted on top, and near the cab a feed dome. In later years - after 1931 - a flat, square sand-box was interposed between the domes. On the R/H running plate was a box-like apparatus used for treating the feed water with soda. Of the other locomotives of the Z.V.T.M., Nos. 1 and 2 were 0-4-0T - apparently enclosed "tram" type - built in 1890 by the Dutch firm Backer & Rueb, of Breda, for the Yzendijkse Stoomtram Maatschappij, No. 3 came from the same company, but was a Hohenzollern, of 1898, and was a typical Belgian "built-in" 0-4-0 loco.

There were also two engines used in the building of the Z.V.T.M. and later taken over from the builder, which were originally from the tramways of Danzig, and one from Cologne.

Z.V.T.M.

Small Class

Jung Loco

0-4-0 Tank

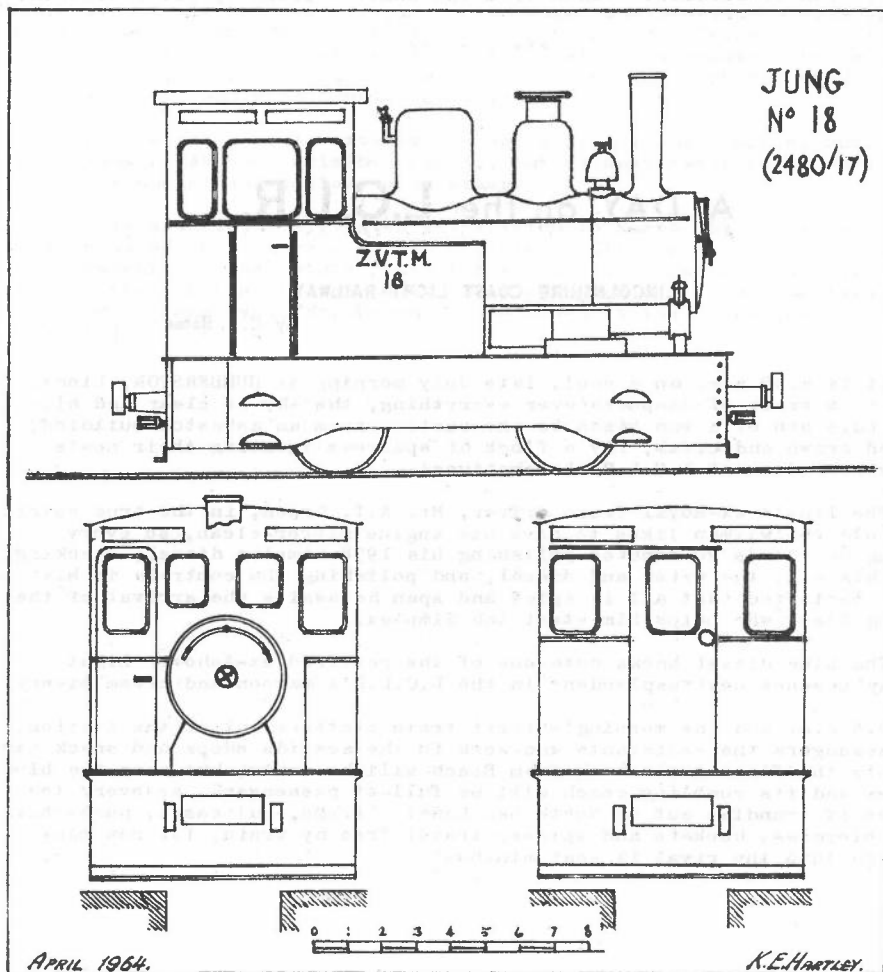
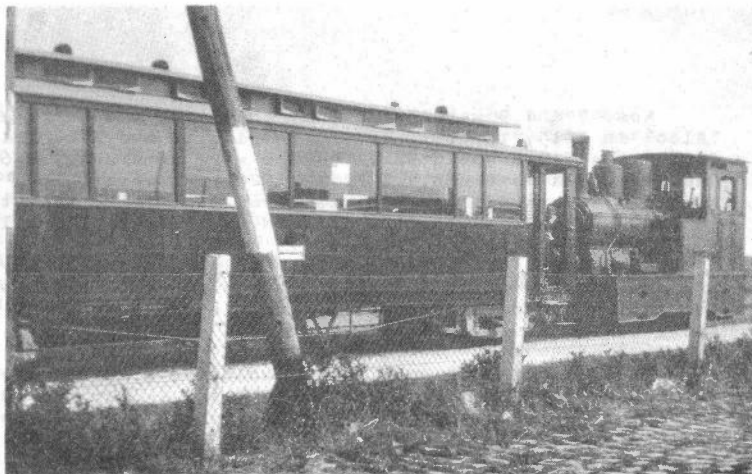
at

Breskens

Summer 1931

Photo and Drawing

Ken Hartley



Nos. 7 and 9 were originally built for the Belgian S.N.C.V. by "Alco" in 1915, to serve on the Belgian tramways behind the frontier, during the first World War. These were apparently 0-6-0 tram engines, and were sold to the Z.V.T.M. in 1920. However, they were so heavy on coal and water and moreover destroyed the track, that they were cut up in 1929. Their numbers on the S.N.C.V. were 1013, 1015 and 1020.

No details of the colour scheme in the earlier days of the Z.V.T.M. are available, but in 1931 and onwards to quote Mr. Overbosch, "the whole locomotive was painted a sort of dark olive green. I believe only the smoke-box door and chimney were black. No red buffer beams".

The coaches were smart bogie saloons, with enclosed end balconies, and they were finished in varnished teak. They ranked amongst the best in use on the Dutch tramways. Unfortunately, no further details of these, and none concerning the goods stock at all are available.

The accompanying drawings of No.18 have been made from a dimensioned sketch, with measurements taken from the maker's print by Mr. Overbosch.

A DAY on the L.C.L.R.

LINCOLNSHIRE COAST LIGHT RAILWAY

by C. J. Bates

It is 8.30 a.m. on a cool, late July morning at HUMBERSTON, Lincs. There is a trace of dampness over everything, the sky is clear and blue and a pale orb of a sun rises to the east. From an asbestos building, painted brown and cream, fly a flock of sparrows vacating their nests in the more dormant L.C.L.R. locomotives!

The line's ex-Royal Train driver, Mr. A.T. Green, in the true spirit of an old railwayman likes to have his engine mirror-clean, so every morning he spends 20 minutes polishing his 1938 Simplex diesel, checking up on his oil, the water and diesel, and polishing the controls in his cab. Satisfied that all is spick and span he awaits the arrival of the Booking Clerk who helps him start the Simplex.

The blue diesel backs onto one of the restored ex-Ashover Light Railway coaches now resplendent in the L.C.L.R.'s maroon and cream livery.

9.5 a.m. and the morning's first train clatters out of the station, its passengers the assistants who work in the seaside shops and snack bars. Probably the first train back from Beach will be empty, but soon the blue Simplex and its rumbling coach will be full of passengers, as every ten minutes it trundles out of North Sea Lane. Prams, suitcases, push-chairs, dogs, bicycles, buckets and spades, travel free by train, for how many prams go into the rival 11 seat minibus?

However, trade at 12.30 drops to the extent that the timetable shows a 45 minute gap, when the staff have their lunch break. During the afternoon only a thin trickle of passengers use the railway, but by 4 p.m. it has become a steady flow. Meanwhile the volunteer staff have arrived, few are over 16 years of age yet they are all conversant with the principles of operating a railway. At 4.30 p.m. it is they who push out the temperamental but indomitable old 1926 Simplex, who start it and who drive it. From 5 p.m. to 9.30 p.m. it is these young volunteers who run the railway, with only the minimum of supervision from the adults.

As night draws on traffic increases. Holidaymakers return from Cleethorpes and the local pubs. The dim lights in the Ashover coach glow yellowly and the lights in the station lamps flicker in the evening Lincolnshire breeze. The booking office is alive with conversation from oiled-up staff, mixed with the strain of pop music and the smell of smoking lamps.

Yet by 9.30 it is all over; the veteran Simplex is asleep in its shed and the bats are flying. The huge Ashover coach stands high on the trackbed and dwarfs the lamp-swinging guard walking beside it. The last lamp is blown out and the tired staff walk slowly over to their cycles, happy in the knowledge that tomorrow is Sunday when steam returns, and when "Jurassic" will run again.

Interested? Well write to the Secretary of the L.C.L.R. Society, at 14 Rookery Avenue, Grimsby, Lincs., but as membership costs only 3/- per annum please enclose a 3d stamp.

(This article by Mr. Bates was written in March '64. In our next issue we shall have a second article describing a "Steam day" and some comments on the future plans for the line. Contrary to other reports the L.C.L.R. is very much alive and plan a new and extended trackbed. Thank you, Mr. Bates, for an interesting "first hand" article.)

PECKETT No. 1270 "TRIASSIC"

Details - Bob Schofield
 Drawing - Barrie McFarlane
 Photos - Mick Lee

No. 1270 was built in 1911 by Peckett & Sons Ltd., Atlas Locomotive Works, Bristol. It was one of several "Jurassic" Class Locomotives supplied to Messrs. Kaye & Co. Ltd., Southam, Nr. Rugby.

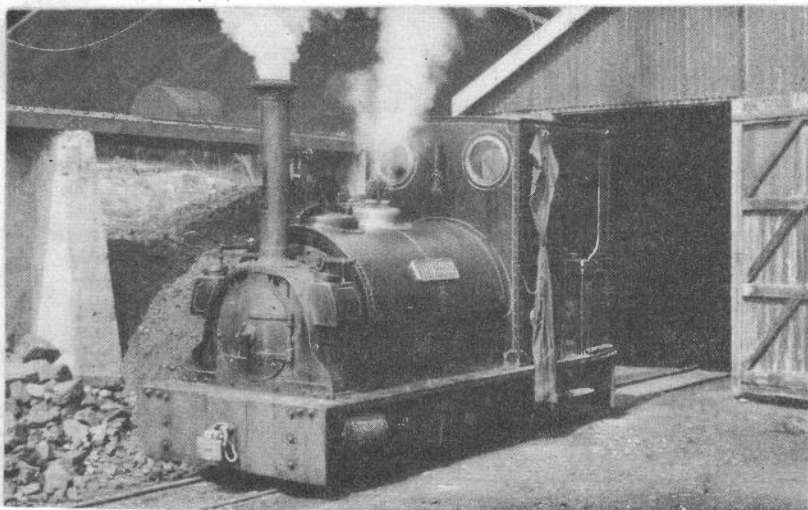
"Jurassic" Class

Gauge	1'9" - 2'6"
Cylinders	7" diam. x 10" stroke
Coupled Wheels	1'8" diam.
Wheel Base	6'6"
Working Pressure	160 P.S.I.
Weight in Work Order	7 Ton 10 Cwt.
Weight (Empty)	6 Ton 5 Cwt.
Capacity of Tank	160 Gallons
Tractive Effort	3332 lbs.
Extreme Height	8'5"
" Width	5'3"
" Length	12'6" (over Buffer Beams)

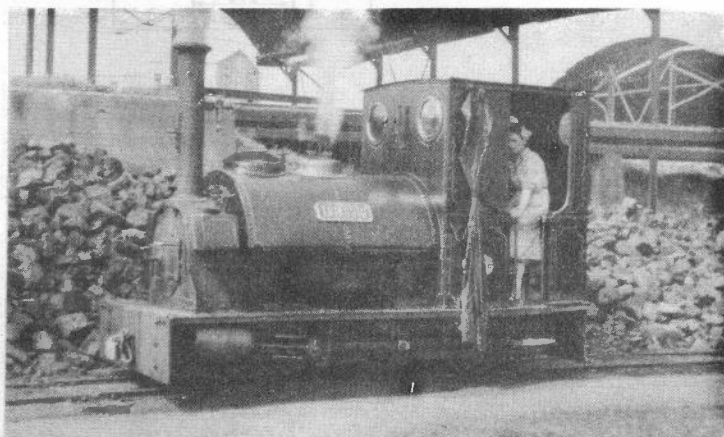
The Boiler was built of Seimens-Martin mild steel with longitudinal seams butt jointed with double cover plates quadruple riveted. The firebox was of copper, riveted with Low Moor iron rivets. Brass tubes were fitted. It was tested by hydraulic pressure to 260 lbs. p.s.i. "Triassic" was dispatched from the Works on the 14th August 1911.

SOME OTHER LOCOS IN THE SAME CLASS

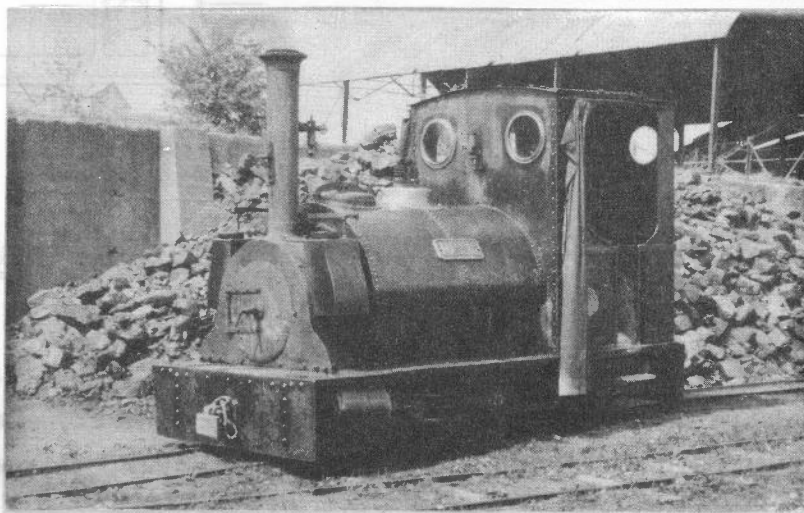
678	1897	1'9"	"GAMECOCK"	Charles Nelson & Co. Ltd., Stockton Limeworks.
753	1898	2'0"	"No.3 COSSINGTON"	Westbury Iron Co. Ltd., Wilts.
785	1899	1'9"	"NIRAS"	Charles Nelson & Co. Ltd.
918	1901	1'9"	"JURASSIC"	"
1008	1903	1'11½"	"JURASSIC"	Kaye & Co. Ltd., Southam Limeworks.
1119	1906	1'11½"	"NEOZOIC"	"
1216	1909	1'11½"	"LIASSIC"	"
1270	1911	1'11½"	"TRIASSIC"	"
1327	1913	1'11½"	"MESOZOIC"	"
1632	1923	1'11½"	"LIASSIC"	"
1412	1915	2'0"	-	Moorewood Colliery Co. Ltd.



TRIASSIC
10.5.1954
KAYE & CO.
now
RUGBY PORTLAND
CEMENT CO. LTD.
SOUTHAM.

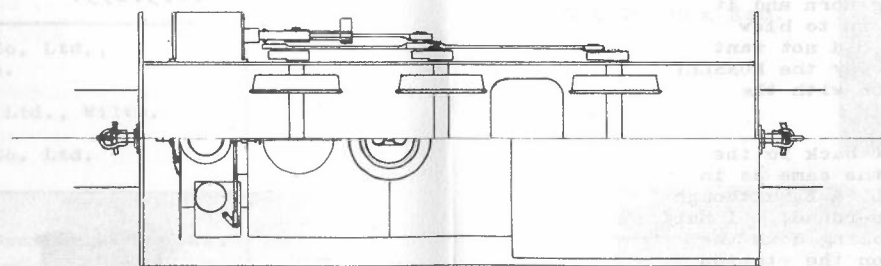
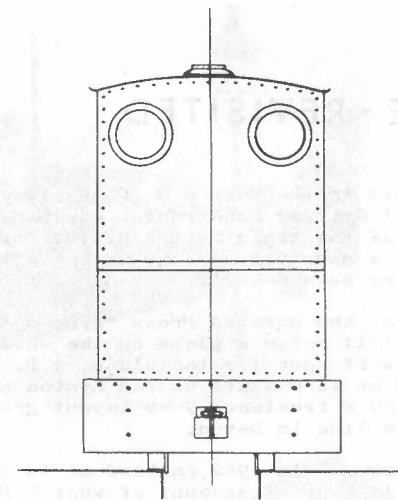
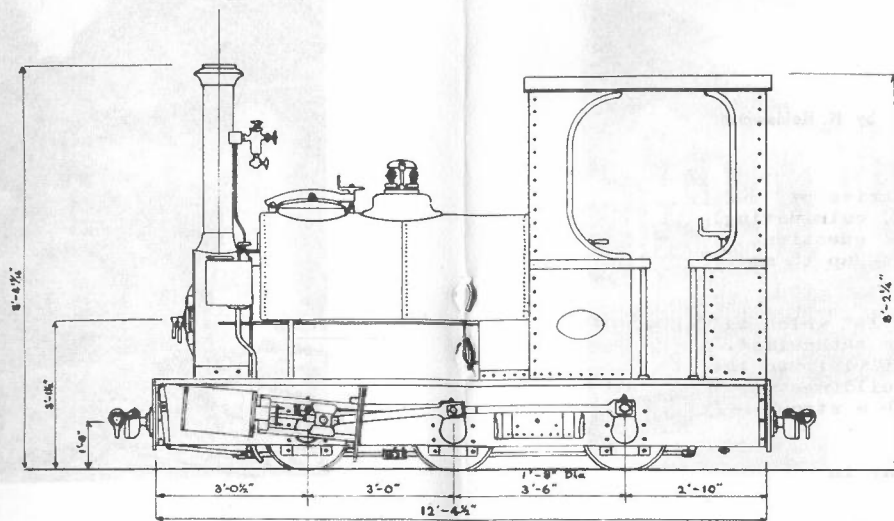
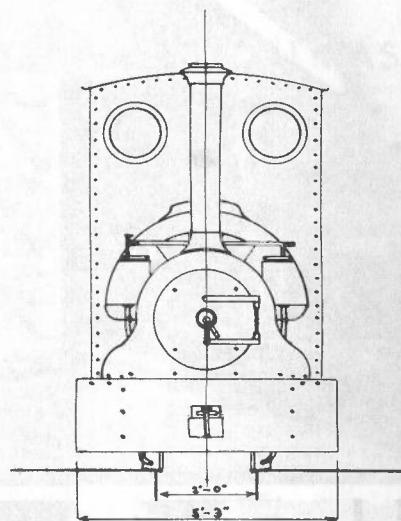


TRIASSIC
10.5.1954

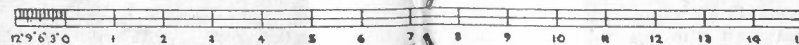


LIASSIC
10.5.1954

Photos kindly supplied
by M.J. Lee Esq.
from
R.N.R.'s Collection



SCALE



B. MCFARLANE

THE NARROW GAUGE RAILWAY
SOCIETY

PECKETT & SONS LTD - WORKS No 1270 - BUILT 1911
"TRIASSIC" EX-RUGBY PORTLAND CEMENT CO., LTD.

BASED ON MAKERS DRAWING No 4916
N.G.R.S. DRAWING No 2

BARNSTAPLE - REVISITED

by H. Holdsworth.

I owe my interest in the Narrow Gauge Railways to a series of articles in the Model Railway Constructor way back in 1954, culminating in a fine photo of TAW and train by Mr. D.E.H. Box with the question "Well would you like a narrow gauge layout?" After ripping up 18 mm layout No.6 the answer seemed yes!

My first book was the Oakwood Press "Lynton & Barnstaple" which is still in print and still worth a place on the shelves of an enthusiast. Thus I still have a soft spot for the old L. & B. A brief visit to the area in 1958 enabled me to measure up the Lynton station buildings for modelling purposes and a freelance 7 mm layout grew up with a strong leaning to the little line in Devon.

A holiday in Cornwall in 1962 enabled me to spend a day in Barnstaple and this is a brief account of what I found.

Firstly a visit to the North Devon Museum where the Curator kindly showed me the albums of professional photographs taken during the construction of the line and newspaper cuttings of the period. The most vivid recollection is a description of the party held on the opening day and the firework display at nightfall, with amongst other things "a 140 foot facsimile of a loco and carriages", "three 'bombs' 2½ cwt. each 9' circumference, fired from a mortar 7' high - largest in the world". So we can safely say the L. & B. set off with a bang!

In a speech on opening night Sir George Newnes said that the folk in the valley would miss the cheerful sound of the coaching horn and it had been suggested the guard be suitably equipped with a horn to blow before stations. The idea was abandoned as the Directors did not want it thought they were blowing their own trumpets. (By the way the HUNSLET locos shown in this same album have absolutely no connection with the L. & B. other than being steam and narrow gauge!)

The Joint Station at North Walk now has its canopy cut back to the length of the station building, but otherwise looked much the same as in L. & B. days. One could almost feel the presence of the L. & B. although only a weed grown patch of ground shows the site of the run-round. I half expected to see a plume of steam and hear a little train coming down the riverside past the trees to the Signal Box! A passenger on the station started reminiscing about the little green engines and coaches - this 25 years after the line had been lifted!

Down the riverbank towards Pilton taking photos of the surroundings, the site of the Quay siding between the two bridges can be seen behind the Fire Station. In 1962 the level crossing gates at Pilton were still in position but in bad shape. The curve of the line into Pilton Yard can be checked by the buildings. I was fortunate also in being allowed into the Builders Merchants Yard to see the last remaining length of rail and the still Manning - smoke-blackened roof of the old Engine Shed.



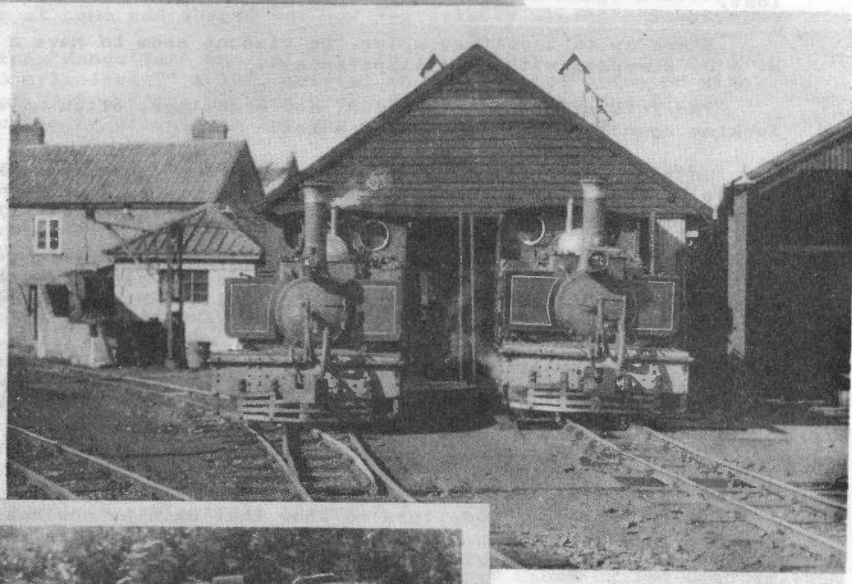
**BARNSTAPLE
1933**

**Photo
Author's Collection**

**Believed by
F. E. Box Esq.**

**PILTON
in 1935
Photo
Author's Collection**

**Believed by
D.E.H. Box Esq.**



**SNAPPER HALT
June 1962**

**ALL STATIONS
TO LYNTON -
SLOW TRAIN**

Author

Checked at the end of nearby Raleigh Road but only the concrete abutments of a low bridge over the mill-lead could be traced along with an embankment.

On by road to Snapper Halt and found the entry unexpectedly in a belt of trees, the half coach SR 6993 (L. & B. 15) was there, slowly rotting away. Owners caught me up on the roof measuring up the size and position of roof vent and lamp bung etc. Rather upset them I think as they had usual vandal trouble. However after they said the remnants would be burned at the next Bonfire Night I did persuade them to SELL me a door and lamp fittings as a memento. That door took me 2½ hours to get off, but I brought it home on the car roof rack triumphant.

Chelfham viaduct seemed remarkably small to what I expected, all the greyish bricks covered in a lime deposit rather spoilt its appearance close up. Besides its parapet was taken down when it was converted into an aqueduct to carry a pipeline down the valley, and the delicate proportions lost.

Steps up to a cottage under the viaduct seem to have a facing of old L. & B. sleepers with rail clips intact.

The folk at Chelfham Station, now a cottage, often have enthusiasts looking round, it hasn't changed a lot.

As time was running out I could only make a quick check on all points of the L. & B. near the road, following the Ordnance Survey maps I bought in 1960 which still show the line!

The folk at Bratton Fleming still have a "Southern" trespass notice on their gatepost, and a Traction Engine is now parked in the goods yard. I learned later a short length of track still carries the remains of a "truck".

On to Blackmoor Gate, now a cafe, for a welcome cup-o-tea and the purchase of postcards showing the Railway. The Goods Shed and the Stables have been converted into attractive cottages.

A 100 mile drive back to Newquay forced me to break off at this point - I look forward someday to going over the rest of the line.

It may interest modellers to know that Skinley now has a series of new drawings on "LEW" and four coaches in various scales and the Society plans service will shortly include the "BALDWIN".

Please support your Society by buying Ken Hartley's "SAND HUTTON".

To members - 6/6d. To non members - 8/6d (+ 4d postage),

from the Editor - and well worth every penny !!

THE MANCHESTER QUARRY TRAMWAY and its LOCOMOTIVES

by M. H. Billington.

The locomotives shown in the accompanying photographs are of one of the many neat designs produced by the Hunslet Engine Co., of Leeds for use in quarries and similar industries. Built in large numbers for customers at home and abroad but now regrettably almost extinct.

The engine "Mancetter" was built in 1893 and bore the works No. 598; this loco had cylinders 7" x 10", driving wheels of 1'8" diameter with a wheelbase of 3'3" and its working pressure was 140 lbs. per square inch, quite customary dimensions for the type.

Its gauge, however, was unusual in being of 2'8½" width between rails and "Mancetter" was delivered to Mr. W.L. Ireland for use at his granite quarry at Mancetter, a pleasant village only a mile or so from the North Warwickshire Hatting town of Atherstone.

However, the quarry was situated about 1½ miles from both the village and from the nearest railway line and in order to facilitate the transit of stone a tramway was laid to the main Euston-Crewe line of the L.N.W.R.

The tramway commenced at a run round loop on the bank overlooking the down line of the main line railway, to which several chutes enabled the stone to be discharged from the tall side tipping wagons into the L.N.W.R. wagons below. There was also a weighbridge here; the shunting was always done by horses. Just beyond the weighbridge the line which was formerly laid in a northwesterly direction changed its course and describing a complete semi-circle turned S.W. The loco used to trundle the empty trucks in a fairly straight line until the lane which runs from Mancetter village to Purley Park (a noted woodland spot) is joined and then the line and the lane crossed the Coventry Canal by two bridges, the tramway by a girder bridge and the lane by a hump-backed bridge. Continuing together but with the line at a higher level, sidings ran alongside the Canal, where three chutes enabled stone to be dumped into waiting barges. There was also a siding running along a stone wall embankment to a stock tip, and on the other side of the "main line" there were two lorry chutes where during the course of the years many different types of vehicles must have loaded up, horse, steam and motor powered!

Shortly after this the rails and the lane reached the same level and then the lane turned across the track and climbed sharply upwards into the park.

The line passed Quarry farm and came to the loop where locos coming with loaded trains would "run round" and propel their loads to the sidings. There was also a small stock tip here in later days and a line ran off to serve it.

Continuing in front of a very attractive stone cottage with mullioned windows and below "Quarry House" the line ran on towards the various sidings giving access to the Tar Plant, the Crusher and all the other places housing the usual machinery associated with the quarrying industry. Beyond the crusher the line began single again but only for a very short distance, as soon there was an incline on the left hand side, and a line went off into the Jubilee quarry on the right. Neither of these were loco worked however, but the main line continued into the quarry where several other inclines connected with the track. The limit of loco working was at the first of these inclines for many years and horses did the rest. In later years the locos worked right along the quarry bottom.

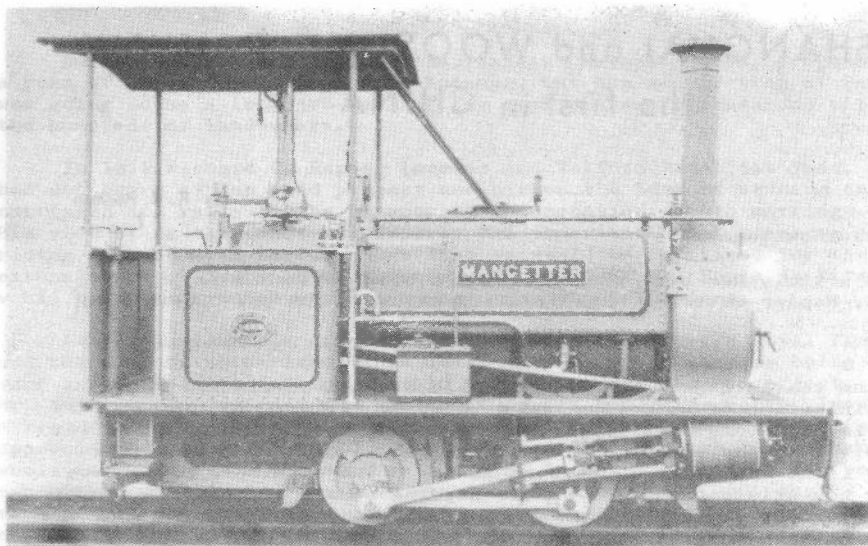
"Mancetter" was joined in 1901 by a sister loco (Hunslet No.754) named "Oldbury" after a nearby hamlet and the pair worked together until 1942 when a Ruston Hornsby Diesel loco (No. 218038) joined the stock. Mr. S. Holtham who told me a great deal about the quarry, said that "Oldbury" was the better loco, but I never thought to ask how he liked the Diesel!

Unfortunately, "Mancetter" was withdrawn shortly after the war and its disposal date is not known for certain. "Oldbury" was withdrawn c.1948 and when I saw her in 1950 she was standing silent and cold, covered with granite dust and a tatty tarpaulin and only the Diesel was then working.

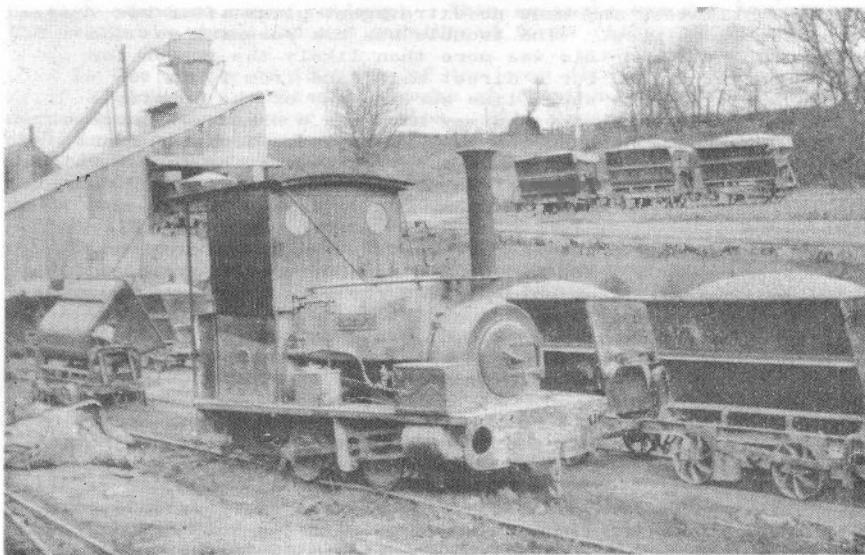
"Oldbury" was sold for scrap to Asher Bros. of Codnor, Derbyshire, in 1955 (the year after the tramway was closed and finally lifted) and the Ruston loco went to the neighbouring Hartshill quarry upon being re-gauged to 3 foot.

Since that time the quarry has been extensively developed, the hole is much larger, new plant has been erected and the girder bridge over the canal is the only tangible evidence of the former line. A one way road over this carries heavy lorries with their loads from the quarry. It is now a very efficient concern but I would much prefer to see it as it was with those grand little locos pulling their trains alongside the lane and under the leaves of the trees.

For the information given in this article I am most grateful to Mr. D'Arcy Tremlett, former Managing Director of the Mancetter Quarry and to Mr. S. Holtham, who drove "Mancetter" and "Oldbury" for many years, and to my good friend, Mr. J. Lee for the very fine photograph of the latter loco (taken 7.3.53).



"MANCETTER" HUNSLET 598 of 1893
 Official Works photograph per Hunslet Engine Co. Ltd.



"OLDBURY" HUNSLET 754 of 1901
 Photographed 7.3.1953 by M.J. Lee Esq.
 Both Photographs from the Author's Collection.

THE SHANGHAI and WOOSUNG RAILWAY

the first in CHINA

by R. N. Redman

Author's acknowledgment -

This article has been compiled from a book published in 1878 by Richard C. Rapier entitled "REMUNERATIVE RAILWAYS FOR NEW COUNTRIES".

PART ONE

"THE PIONEER"

In the years 1863-64 Sir R. MacDonald Stephenson visited China with the intention of promoting and developing railways in that country, after having had considerable experience and success in India. He was well received by the enthusiastic Chinese public and for a time it looked as if he would introduce some lines. The country's roads were virtually non-existent and its canals needing constant repairs. In his opinion materials of most kinds were available and labour as we know was plentiful so that the railways could be built by the Chinese themselves, any financial arrangements being easily dealt with by English houses. He also pointed out the physical features of the country were highly favourable for the construction of railways and the Chinese would benefit more by their introduction than any other country had done to date.

Stephenson proposed a very extensive network of lines but was careful with his estimates, and made no extravagant plans after his experience in other countries. The trouble was his research was too thorough for the Chinese and this was more than likely the reason for his failure. He even called for a direct main line from Peking to Calcutta. Had he fixed on a short line serving one of the country's ports with its European settlements he may have had a chance of success. As it was, local Governors opposed the idea of railways from the start thinking they would interfere with their taxation powers, on top of which the Emperor of China was to them the fountain of all knowledge and thus resented the introduction of Western ideas.

In 1865 a Company was proposed for constructing a railway from Shanghai to Woosung, with a jetty and bonded warehouse at Woosung, the idea being the railway would cut out the need for large steamers having to make the difficult passage up to Shanghai with its navigational problems. Mr. Henry Robinson, M.Inst.C.E., was Engineer of this Company and proposed a line lifted up on piles and girders so that it would not interfere with graves etc., or disturb vested interests or prejudices of the local population. A resident of Shanghai, Mr. Pickwood, devoted much time in China in attempting to finalise the arrangements, but unfortunately his premature death deprived the Company and the project of its chief promoter.

In all the European settlements the construction of roads had to be undertaken by the Europeans. In many areas these roads were the only ones worthy of the name, so this practice sometimes led to the construction of longer roads not confined to the settlements.

During the early 1870s, Messrs. Jardine Matheson & Co. proposed a road of sorts from Shanghai to Woosung, but the acquisition of land was going to be a long job calling for much patient discussions with the hundreds of landowners.

In 1872 Richard C. Rapier (member and Telford Medallist Inst. C.E.) had not heard of the road project and hit on the idea of sending engines, carriages and rails to the Emperor on the occasion of his marriage. His view being that once the Emperor had experienced the pleasure of riding on a 10 mile narrow gauge line he would be impatient for the extension of railways in his country and no doubt Mr. Rapier's firm would benefit from the usual contracts for the extensions.

After considerable discussions involving the British Royal family and the Duke of Sutherland, this novel idea was abandoned as being a very expensive gift and not certain to produce the desired effect. Mr. Rapier then designed and had built at his Waterside Works, Ipswich, a tiny 2'0" gauge 0-4-0 locomotive intended to be capable of hauling an appreciable load at 15 to 20 m.p.h. and yet small enough to be packed whole in a crate for shipment to a friend in China for trial and possible exhibition work. Construction started in Autumn 1873, but the 22 cwt. machine was not completed until Autumn the following year. On testing, the engine worked well and a Mr. John Dixon who had taken a great interest in the project provided about half a mile of light rail and fixings to be sent with the locomotive to China. About this time the proposal to lay track on the Shanghai to Woosung Road came to light, estimated cost to be £100,000. After paying for the land, the available capital had been reduced to £20,000 due to prolonged negotiations with the landowners. The estimates for the cost of construction were made on the spot by a Mr. F.N. Sheppard, basing his prices on the cost of a typical British standard gauge railway! This estimate was far too expensive for the available money and was considered to be rather a risk.

In the Spring of 1875 two of the road directors, Mr. MacAndrew and Mr. F.B. Johnson, visited the works at Ipswich with Mr. Dixon to see the narrow gauge steam power in action. The engine ran on a circle of one chain radius at a steady 15 m.p.h. as well as working with several trolleys loaded with iron. There and then they decided this was the kind of locomotive to break the ice in China, "large enough to work well, too small to be objected to".

Secondary trials were then held on Colonel Tomline's private tramway at Felixstowe about Easter 1875 with three or four trucks. It carried passengers for several days, frequently hauling 40 people and on one occasion 80 passengers had a ride (on three or four trucks!!).

Up to this date the 0-4-0 locomotive had cast iron wheels 18" diameter and 4" diameter cylinders. As the boiler provided ample steam they were increased to 5" to suit the expected hard work and the wheels fitted with steel tyres and opened out to a gauge of 2'6". A larger saddle tank was fitted; in Mr. Ransome's opinion this was at a sacrifice to its appearance, but it was considered necessary for runs of several miles at a time. All these alterations increased the weight up to 30 cwt. in full working order and in view of its aim in life it was duly named "PIONEER". The gauge for the loco had been fixed at 2'6" as being the widest the loco could be extended and was a gauge suitable for passenger working with more scope for future development in motive power.

After it had been decided that "PIONEER" would go to Jardine's road estimates were prepared by Ransome's to suit the money available. The first trouble was ballast; this was rather an expensive commodity, but

was eventually taken care of by using 2,500 sleepers per mile to fill up the space! Rails of 20 lbs. per yard were to be used as these would take the proposed 6 ton locomotives to the next design. As was expected all this cost far more than the available funds, but fortunately John Dixon saved the day by offering to take a contract to build and equip the line for £20,000 cash and £8,000 in shares. Mr. Gabriel James Morrison, M.Inst.C.E., was appointed to the office of Company Engineer and Contractor's Agent. Mr. G.B. Bruce consented to act as Honorary Engineer in England.

The contract was arranged in August and Morrison left England on October 1st via New York and San Francisco. At the end of October his five assistants sailed from London in the steamer "Glenroy" direct to Shanghai.

These men were taking a considerable risk both from working long hours in an alien climate and possible interference from local authorities and misunderstanding from the mass of the Chinese public. Their names were J. Sadler (Foreman), W.G. Jackson (Chief Working Engineer), D. Banks (Second Engineer), J. Sadler, Junior (Second Foreman), G. Sadler (General Assistant).

Events showed the risks in many ways; all suffered from dysentery and Mr. Sadler, Senior, died at Chefoo on 15.9.76 after a long illness. David Banks was tried for the manslaughter of a soldier who actually committed suicide. The trial was not serious, but had to be held to save Banks from being murdered on the spot. William Jackson twice had his train stopped by a menacing mob of about 500 people. Such were the trials and tribulations of these Empire builders.

The "Glenroy" also had on board the "PIONEER" as well as half the track materials and arrived at Shanghai on December 20th 1875. The rails and sleepers were then transferred on to river craft for transport to various points on the railway.

On arrival the Engineers found a part constructed embankment about 8' high had been built in order to secure possession of the right of way and prevent old owners re-entering and growing crops. One can understand why the land had cost so much, as 400 different owners had parts of the 9' miles involved and it had been a matter of personal bargaining with each owner to secure it. Ransome noted that "John Chinaman" is, however, always open to the persuasion of the dollar and difficulties were got over sooner or later by greater or less expenditure.

The first main job of the staff was to supervise the erection of about 15 small wooden bridges over the various creeks; about 20 wooden culverts had already been built. On the 10th January 1876, track laying was started in earnest by Mrs. Morrison driving the first spike, plate laying and ballasting now progressed rapidly.

It was now time to move "PIONEER", the 26 cwt. was carried by 16 men a distance of 3 furlongs without stopping to draw breath. This method was especially interesting as it was in direct contrast to the superstitions of the Chinese people and as Ransome reported "here we have willing labourers carrying the first offender with a zeal and vigour which could not have been surpassed by a like number of the most ardent locomotive superintendents in England".

DETAILS OF LOCOMOTIVE "PIONEER"

0-4-0 Saddle Tank Engine

Gauge	As built 2'0"	As rebuilt 2'6"
Cylinders outside	" " 4" x 6"	" " 5" x 6"
Wheel diameter	" " 1'6"	" " 1'6"
Weight in working order	" " 22 cwt.	" " 30 cwt.
Grate area	2 sq. ft.	(approx.)
Rigid Wheel base	3'0"	

DETAILS OF PHOTOGRAPHS

FRONT COVER

Locomotive "PIONEER" in rebuilt form 1875.

Taken at Ransom & Rapier's Waterside Works, Ipswich.

Note the special driving and passenger car fitted with brake gear.

This car is not shown on any photographs of the loco when in service in China, no brakes were fitted on the locomotive.

(Photograph courtesy of Ransome & Rapier Ltd.)

BELOW

Arrival of "PIONEER", the first locomotive in China, January 1876.

(Photograph from collection of R.N. Redman)



On the 14th February 1876, "PIONEER" made its first trip over $\frac{3}{4}$ mile of track. The news was telegraphed to England and was received in London the same day - "Engine ran to-day, Chinese delighted" - (a pleasant Valentine).

The Chinese people now flocked to see the locomotive perform, thus interest was continually growing, so much so that the local elders began to view the railway with some alarm. They stopped the engine from working for a period of one month, but construction continued until definite instructions were obtained from Pekin. As no directive arrived the locomotive resumed work and local enthusiasm knew no bounds. As Rapier noted - "in much the same way as when the Lord Chamberlain complains of a play and half of London then go see it".

"PIONEER" worked most of the time on ballast trains and on all empty return runs was crammed with free passengers. The desire to ride affected all classes and when high ranking persons arrived for a free trip, Mr. Morrison had seats placed in the wagon and laid carpets down. As construction proceeded in this fairground atmosphere, sinister rumours began regarding local government powers. To try and win over to the railway, all the "doubters", it was decided to run an official excursion on May 26th. Admiral Lambert accompanied the mixed party in five furnished ballast trucks for a run of just over 5 miles.

About this time a new craze started and the Company was besieged by would-be engine drivers. Most of the applicants had assisted on river steamers and had the idea they could then drive the "steamboat on the shore", as the new train was then called, later to be titled "firedragon carriages" after the full size trains had arrived.

The stage was now set for the arrival of the first permanent train with its 9 ton locomotive "CELESTIAL EMPIRE" which by Chinese standards was a big engine. The railway staff had put up with many upsets but plenty more were to come.

To be continued

EDITOR'S ACKNOWLEDGEMENT

The Editor would like to thank the Contributors to this Magazine, the Authors, the Photographers and the Drawers-up-of-Plans. Last, but certainly not least, Mrs. Margaret Holdsworth for burning much "midnight-oil" typing the draft copy and Mrs. W. Watson of Messrs. Margaret Fenton Ltd. for making such an excellent job of the finished product.

LETTERS to the EDITOR

Sir,

I should like to know if any member has details of the Farthinghoe Locomotive & Engineering Works, believed established in 1868. A possible Centenary Book is under discussion with the present Management if enough details are forthcoming.

Yours truly,

J. Eddiscombe

Sir,

Preservation of Locomotives

I should like to hear members' views on the amateur preservation of the Steam Locomotive. It seems to me that so much work is involved in cleaning, repairing and painting that this can only be undertaken successfully by full time professional labour, and the finished results displayed in a warm, dry position to prevent too quick deterioration of their efforts.

May hundreds of hours of labour have been spent in the Leeds area working on BARBER which now lies forlorn and unloved in store, it cannot be appreciated in its present surroundings and "if and when" it comes out into the light of day it will need another 1,000 hours spending on it to bring it up to scratch.

How much better to get pen to paper and record the scene at Harrogate Gasworks as it was in the fifties, backed up by a few photographs showing the locomotive alive, warm and working, rather than keeping a dead and cold engine as a remembrance. (Any offers for the next Mag? - Ed.)

The Preservation Societies have a different problem but at least they are keeping that lovely sight, sound and smell of WORKING steam. I know we sometimes look down our noses at the butchery which goes on in the name of necessity, but on the whole they are doing a great job and deserve all possible help.

Perhaps we should also commend the back garden lines. Some wonderful work has been done by various folk up and down the country in bringing virtually scrap locos into working order. Secretly we all envy the handful of folk who have the ability and the daring to have a go at this side of our hobby.

We still have plenty to photograph and record, whilst thousands of photographs of locos and rolling stock have been taken the surroundings of a line are just as interesting and important and details need to be handed down to the following generations.

Yours truly,

"7586"