

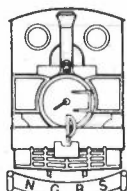


# THE NARROW GAUGE

No.91



NARROW GAUGE RAILWAY SOCIETY



# NARROW GAUGE RAILWAY SOCIETY

Serving the narrow gauge world since 1951

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The Society was founded in 1951 to encourage interest in all forms of narrow gauge rail transport. Members interests cover every aspect of the construction, operation, history and modelling of narrow gauge railways throughout the world. Society members receive this magazine and *Narrow Gauge News*, a bi-monthly review of current events on the narrow gauge scene. An extensive library, locomotive records, and modelling information service are available to members. Meetings and visits are arranged by local areas based in Leeds, Leicester, London, Malvern, Stoke-on-Trent and Warrington. Annual subscription £5.50 due 1st April.

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Cover: A typical Fowler product, 21496 arrives at Changa Manga depot with a trainload of firewood in January 1979. (D. Trevor Rowe)

# THE CHANGA MANGA FORESTRY RAILWAY

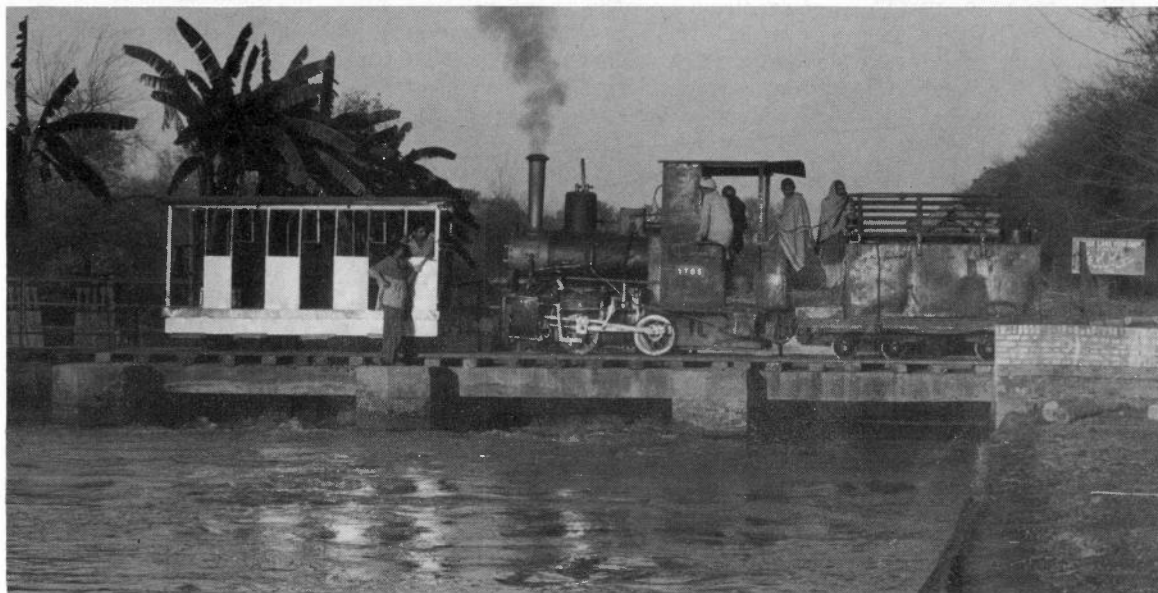
D. Trevor Rowe

On a journey southwards from Lahore to Karachi on the electrified main line of Pakistan railways one reaches, after 69km, the small wayside station of Changa Manga. This serves the vast plantation operated by the Forestry Service, and is the junction for the interesting 2ft gauge railway that brings firewood and timber to the main line. The plantation covers some 12,550 acres and consists mainly of Shisham and Mulberry trees. To provide water in this normally arid land an extensive system of feeders leads to every part of the forest from a branch canal of the Punjab irrigation network.

Planting started in 1875, and some years later a 14in gauge line was laid to bring out the timber. Bullocks provided the motive power. This proved adequate until 1921, when the present system was installed. It has been gradually extended and now totals about 22 miles, mostly permanent track although there are a number of temporary branch lines laid as required to the sections of the forest being worked. The permanent track is laid with 18-20 lb/yd rail on timber sleepers, raised on low embankments through breaks in the trees.

Two 25 h.p. 0-4-0 well tanks were supplied first, and one of these survives. It carries the running number 1763, built by Andrew Barclay (1763/1923), for Parry & Co. Calcutta, and carried their plate. The two remaining locomotives are fine 40 h.p. 0-6-0 well tanks with small, four wheel tenders, built by John Fowler & Co (Leeds) Ltd, carrying running numbers 17208 and 21496, which are also the works numbers. The former left the works in April 1927 for Bombay, and the latter must be the last steam locomotive built by Fowler in 1936. An American diesel, built in 1950, is out of use due to difficulty in obtaining spare parts.

Several thousand tons of timber are hauled from the forest each year, using bogie flat wagons for firewood, and small four-wheel wagons for logs. On Fridays (the Moslem Sunday) the "Forest Express" operates passenger trains between the main depot and an artificial lake in the forest, where a picnic area has been located. Passenger coaches have been specially constructed for these workings, which are naturally very popular, providing a day of tranquility in shady surroundings away from the heat of the plain. When I visited the line one working day in January 1979 two locomotives were in steam and one under repair. As far as can be forecast by the Manager, the future of the railway, and its steam locomotives, is assured. Some of the historical details were provided by the N.G.R.S. Library, and Frank Jux identified the locomotives from his research in the Museum of English Rural Life, Reading.



*Illuminated by the last rays of the setting sun, 1763 simmers gently on a bridge over the canal in the Changa Manga Forest.*  
(D. Trevor Rowe)



# STEAM TO SCIACCA

Peter J. Martin



*R302.038 about to leave Castelvetroano with the 15.19 freight to Sciacca on 8th March 1980.*  
(P.J. Martin)

Although there are very few regular steam workings on the mainland of Italy, the island of Sicily still had a narrow gauge steam freight service in 1980. This was sufficient incentive for my wife and I to choose the island for a winter holiday in March. At short notice we were fortunate to find a package tour offering a hotel west of Palermo only 60 miles from the railway. Most tourist resorts are on the east side of the island, near Mount Etna, over 150 miles by road. The use of a car and convenient motorway meant that the railway could be reached from our hotel in only one hour.

The 950mm gauge line runs from Castelvetroano, a small town on the standard gauge network, for 45 miles to Ribera. The daily freight service leaves Castelvetroano in mid-afternoon, with the return working next morning. On Tuesdays and Fridays the freight is scheduled to run the full distance to Ribera, but on other days it terminates at the coastal town of Sciacca (31 miles). On two days during our visit the train did not run due to lack of traffic. On other days loads varied from four to eight wagons, mainly agricultural and parcels traffic. The outward Saturday working returned on Sunday morning rather than wait until after the weekend. Journey time to Sciacca is 2hrs 20mins. Water is taken and passenger trains are crossed at the intermediate stations of Selinunte (9 miles from Castelvetroano) and Menfi (18 miles).

The locomotives are 2-6-0 tanks of class R302 built in Italy between 1922-28 by Ing. Nicola Romeo, Sarrono and Officine Meccaniche e Navali, Naples. They are both coal and oil fired, the oil being kept in a rectangular tank on top of the boiler directly behind the chimney. During our visit R302.019 and R302.038 were in use on alternate trips, each appearing to stay with the same crew. It was encouraging to note that R302.019 had recently been overhauled at Castelvetroano and had the date 13.2.80 painted on the running plate.

The passenger service is operated by railcars built by Fiat between 1949-50. There are eight return workings each day, seven to Ribera with one terminating at Sciacca.

It is impossible to speculate how long the steam locomotives will continue in use as it has been reported that a new 420 h.p. diesel locomotive has been designed and two units of the class (RD.142.2) are scheduled for delivery to the line.



*Fiat railcar RALn 6022 at Sciacca on the 11.38 Ribera to Castelvetro passenger service on 7th March 1980. (P.J. Martin)*



*The 15.19 Castelvetro to Sciacca freight train leaving Menfi behind R302.038 on 8th March. By this time the train crew were accustomed to getting in the picture. (P.J. Martin)*

# CREATING THE PAST—FOR TELEVISION

Peter N. Lowe

Film and television viewers demand a high standard of realism in present-day productions, and the provision of accurate sets, costumes and 'props' for period drama often presents a real challenge for the designer. The Yorkshire Television adaptation of "Brother to the Ox", the autobiography of a farm labourer by Fred Kitchen, required the creation of a railway construction site, and I was asked to provide some of the equipment from the Abbey Light Railway to complete the set.

The story is set in Yorkshire during the years following 1904 and tells of a farm boy who runs away to try and make his fortune working as a navvy on the South Yorkshire Railway. Farm scenes were shot at Blubberhouses and Holme upon Spalding Moor, at the only farm still using shire horses. The railway construction site was created in a corner of the Apperley Lane Quarry of W.E. Leach Ltd, Rawdon, near Leeds, where a bulldozer was used to shape a cutting head. A 2ft gauge line about 45ft long was laid, using rails, wooden sleepers and a length of portable track. Two side tip wagons, used originally at a limestone quarry near Pickering, were placed on the track. A blacksmiths hut, navvy shanties, tools, wheelbarrows and other equipment was added to give an authentic touch. Some of this had previously been used on the sets for "God's Wonderful Railway". The wheelbarrows had been specially made for this production, and looked well, but very thin axles were fitted and proved totally inadequate for proper work.

Extras taking the part of navvies filled the wagons by hand and it was intended that a horse would draw them away. However, the horse provided was unaccustomed to hauling rail wagons, which allow the traces to slacken when they first move off, and stopped instead of keeping going. This action therefore had to be deleted. Each wagon was tipped by hand, and I suggested that this be done towards the camera for maximum effect. In one take this nearly wrecked the camera!

Filming extended over several days, when the quarry took on the atmosphere of a busy contractor's site. Water was used to create muddy conditions underfoot, and smoke to generate a haze following blasting. The illustrations were kindly provided by Yorkshire Television Limited, and will convey some of that atmosphere. "Brother to the Ox" will be screened on the ITV network later this year.





*The boy (centre), his tin box on his shoulder, arrives on the site to seek work. An editor of a well known magazine on industrial railways thought that this photograph was probably taken around 1900—it's actually September 1980!*

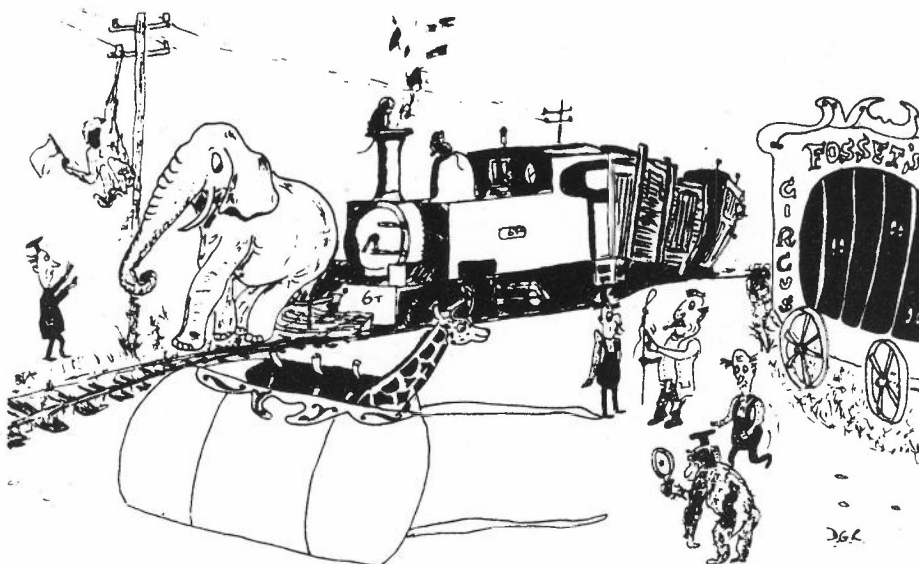


*Navvies loading tip wagons at the cutting head. The old hand crane on the lip of the excavation was the nearest thing to the steam navvy mentioned by the author that YTV could obtain.*

# FORTY YEARS AGO ON THE DINGLE ROAD

Walter McGrath

(Reproduced from the *Evening Echo*, Cork, 21st April, 1980)



It could only have happened on the "Dingle"! We have all heard about the steamroller that crashed into the Muskerry Railway train on the Carrigrohane Straight Road, Cork, but who would have thought it possible that a circus on its leisurely way to Dingle would come to grief in an encounter with a locomotive on the montainy, roadside Tralee and Dingle Light Railway? Yet that is what happened at Lougher near Annascaul, Co. Kerry, exactly 40 years ago.

We need not take seriously the accompanying cartoon by David Rowlands—a humorous fantasy prompted by hazy legends of the incident. There were no elephants or giraffes on the scene, as far as we know—but it was a very serious and sad business for at least one person—the driver of the horse-drawn caravan of Fossett's Circus involved directly in the crash.

I would never have heard of it but for a conversation in Cork with Father Dermot Healy, S.M.A. then editor of a Cork religious magazine. Learning that he was from Tralee I asked him if he had any anecdotes of the Dingle train, and he replied that his late father had been a fireman and later a driver on it in "Great Southern" days (after the Amalgamation of 1925) and that the most exciting incident of his father's career was when his train crashed into a circus one day, and he had to make many journeys to the High Court in Dublin as a result. Fr. Healy could remember the incident but had no ideas as to date.

Here was a fascinating subject to research—something that had escaped the attentions of all Tralee and Dingle Railway chroniclers hitherto. On a visit to Tralee I interviewed former T. & D. Driver Paddy Martin, Guard, Jim Ashe (since deceased) and former G.S.R. guard Bill Kinnerk. All of them remembered the incident as having taken place during the Second World War (that narrowed it down greatly) but they couldn't date it. However, I got three more "detectives" on the job—Paddy Mercer of Tralee; Seamus Crowley of the Kerry A. and H. Society and Tom Wall of the Irish Railway Record Society, Dublin, and between us we pieced the story together. Tom Wall found the vital "date" reference in the pages of the invaluable *Fayles Bulletin*, a journal of railway lore preserved at the Drumcondra headquarters of the I.R.R.S. Faile, a noted rail enthusiast, had not recorded the incident itself, but had given the High Court ruling eighteen months later.

Several horse-drawn vehicles of Fossett's Circus were making their way westward for a performance in Dingle on April 26, 1940. One of the heavy floats was being driven by a middle-aged employee of the circus. Albert Marloe, described as an acrobat and entertainer. It is thought that he was dozing at the reins (possibly after a late night's work and early morning dismantling of the "big top") and was taking little note of the roadside track of



narrow-gauge railway. This was the time of "goods only" G.S.R. trains on the Dingle line. At a number of points around Glenmore, Lougher, Emalough and Annascaul the railway criss-crossed the public road, and at the Lougher crossing the engine of the daily goods crashed right into the front of Marloe's circus float.

At this passage of time we may perhaps regard the collision as humorously typical of the vagaries of the old remote railways of rural Ireland, but it was tragic for Marloe. Both his legs were very seriously injured, and there are reports that one might have been amputated. Certainly he was walking with the aid of a crutch for years later. The first local resident on the scene was James Terry O'Herlihy. He is reputed to have had many memories of the incident, but died in 1977. He, too, had to make a number of court appearances in the subsequent litigation.

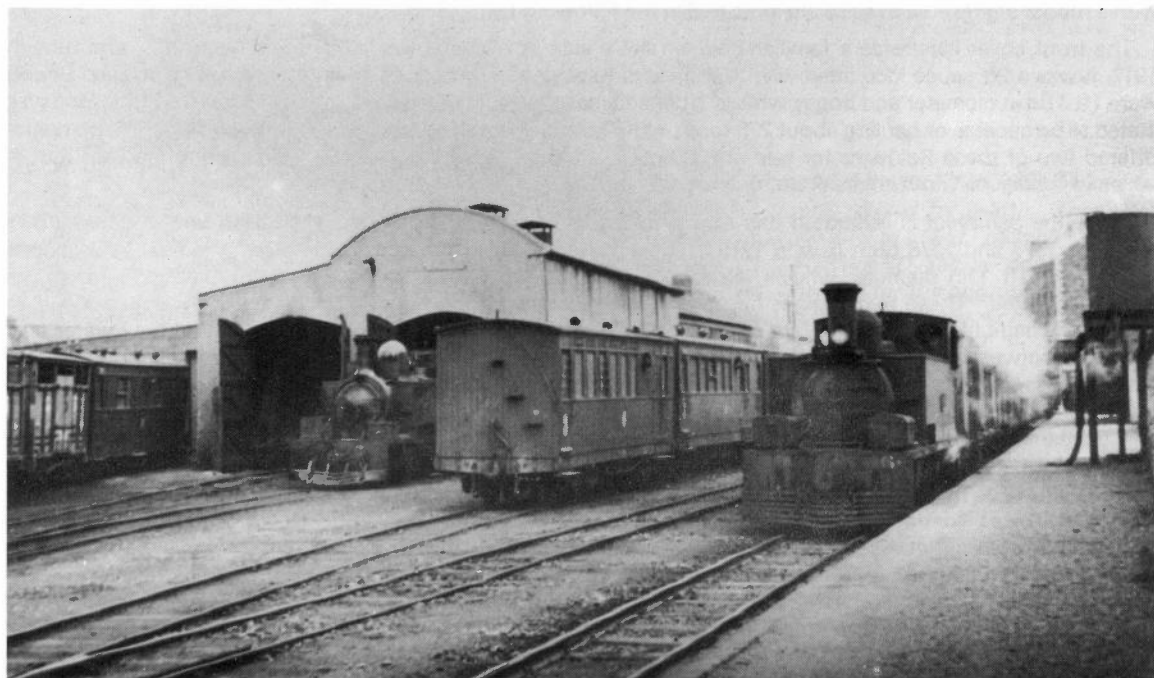
The two horses pulling Mr. Marloe's float or caravan were killed instantly by the force of the crash with the locomotive. We do not know now what animals, if any were in the float, or in the other vehicles of the cavalcade, but the legend has come down that there were memorable scenes of excitement.

The wartime newspapers of 1940 were skimpy affairs. On the next day's *Cork Examiner* the accident got twelve lines under the heading: "Killed By Train — Two Horses Fatally Injured in Kerry". A brief report followed.

Eighteen months later the *Irish Times* was equally terse in recording on November 12, 1941, that a circus acrobat, Albert Marloe, of Ballinglen, Co. Wicklow, was awarded £650 and costs by consent in his claim in the High Court, Dublin, against the Great Southern Railways for injuries received when a train was in collision with a horse-drawn vehicle of Ed. Fossett's Circus at Lougher, Annascaul, on April 26, 1940.

We know that there had been several court hearings before that settlement was reached. Guard Jim Ashe in an interview shortly before his death added the interesting snippet that although the late John Healy (father of Rev. Dermot Healy) was driving the train, he was doing so against regulations, being actually "learning the road" at the time, and this fact greatly embarrassed the G.S.R. at Tralee in defending the action.

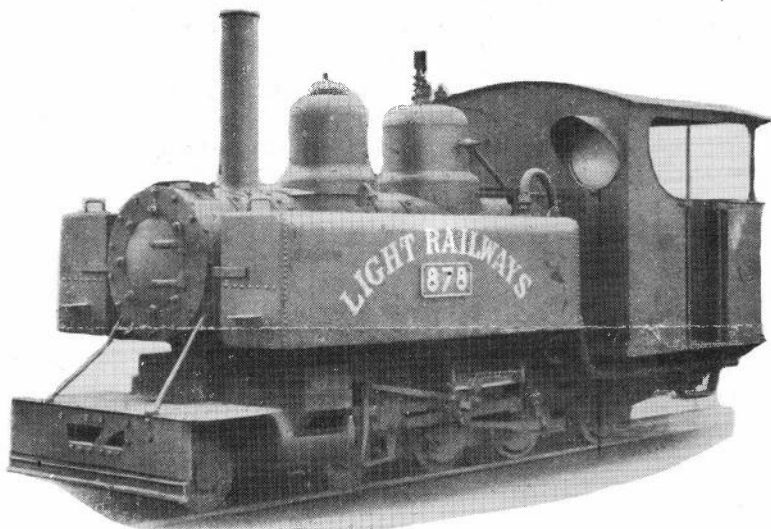
Yes, it could only have happened on the "Dingle", that quaintest of Irish railways.



*Taken in Tralee yard in 1940, about the time of the accident, this is thought to show the daily goods about to leave behind 2-6-2 tank 5T. At this time it left at 7.30 am, returning from Dingle at 1.30 pm according to the working timetable. On shed is 3T, soon to be drafted to the Cavan & Leitrim section.*  
(D.G. Rowlands collection)

# A WARD SALE PAMPHLET

Adrian J. Booth



*Light Railways 878, an impressive 2ft gauge Baldwin of 1917 vintage. (collection A.J. Booth)*

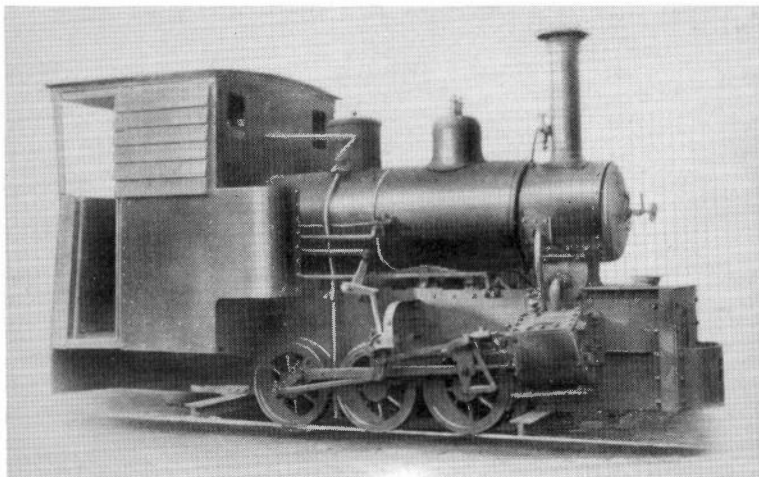
Thos. W. Ward Ltd were well known as dealers in railway equipment, and on occasion issued pamphlets detailing locomotives and rolling stock which they had available for sale. One such pamphlet in my collection was issued from Ward's Albion Works at Sheffield, designated "Special Circular A53" and headed "Light Railway Track and Locomotives . . . Narrow Gauge Rolling Stock . . . Special Offer . . . Immediate Delivery". Described inside is a selection of narrow gauge locomotives available totalling one petrol and nineteen steam. When this particular copy was issued some of the items had already been purchased, and the details overstamped "SOLD" with a rubber stamp—such sales are indicated in the following text.

The front cover illustrates a familiar Baldwin 4-6-0 side tank steam locomotive numbered 878, and new in 1917. It was a 2ft gauge loco fitted with Walschaerts valve gear, and had 9in x 12in cylinders. The coupled wheels were 1ft 11in in diameter and bogey wheels 1ft 4in diameter. Weight empty was about 11 tons, and the loco was stated to be capable of hauling about 225 tons on the level and about 50 tons up a 1 in 40 gradient. The pamphlet offered two of these Baldwins for sale at £300 each, stating "these are exceptionally powerful engines and in splendid condition." Both were overstamped as sold.

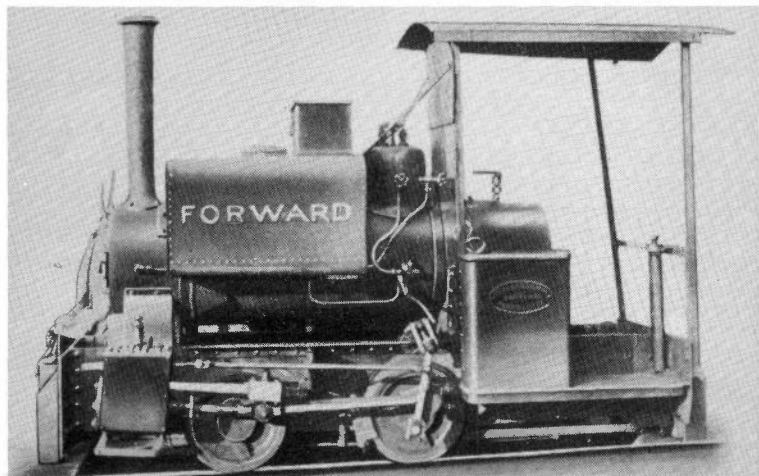
Inside the pamphlet is illustrated one of a pair of 0-6-0 well tank locos "by R. Hudson Ltd, Leeds, makers numbers 1377 and 1378 both new in 1919". These were of 2ft gauge with 6½in x 12in cylinders, Walschaerts valve gear, 1ft 11in diameter wheels, 4ft 2in wheelbase, and weight empty of approximately 5¼ tons. The pamphlet stated "These two engines have done very little work, and for all practical purposes appear equal to new." The pamphlet also gives Ward's views on the benefits of the well tank principle, stating the "water tank (is) fitted between the frames, thereby giving greater stability on worn tracks and when negotiating curves". Nevertheless, Ward's sales "patter" had not tempted a buyer, for the locos were still unsold and on offer at £350 each.

A 2ft gauge Kerr Stuart 0-4-2 saddle tank (works number 2397 of 1918) was already sold at a price of £375. It had 7in x 12in cylinders, 2ft diameter wheels, and weighed about 6¾ tons empty. Two other Kerr Stuarts (4246 and 4248 of 1922) had already been sold at a price of £325 each, and one of them named FORWARD on the photograph, was illustrated. Again of 2ft gauge, they had 6in x 9in cylinders and 1ft 8in diameter wheels. They were diminutive locomotives weighing only 3¼ tons, and were capable of pulling 90 tons on the level, and 20 tons up a 1 in 40 incline. Four other steam locomotives "one new in 1919 and the other three in 1915" were still available for sale, all being similar to Kerr Stuarts 4246 and 4248 with the exception of one, which was fitted with Stephenson's link reversing motion. The 1919 loco was offered at £275 whilst the other three were £250 each.

Of interest to operators of 3ft gauge systems were eight 0-4-0 saddle tank locomotives, all of which were marked as sold. One was a 7in x 12in Bagnall of 1919 fitted with the maker's patent link reversing motion and priced at £350. Seven more 0-4-0 saddle tanks "mostly by Bagnalls" were sold, and the pamphlet stated "these seven locos comprise part of a tremendous purchase of Contractor's Plant which we have to remove immediately, and for an immediate sale from site we are prepared to accept from £65 to £150 each for the locos in question, depending upon the condition of the loco selected".



*One of the two 2ft gauge Hudson 0-6-0 well tanks available at Thos. W.Ward's Charlton Works.  
(collection A.J. Booth)*



*A Kerr Stuart 2ft gauge 0-4-0 saddle tank offered for sale by Thos. W. Ward Ltd, and possibly named FORWARD (as a pun on their name?) for the purposes of illustration only (collection A.J. Booth)*

The final locomotive advertised was a 2ft gauge new 15hp chain drive petrol locomotive, which could pull about 40 tons on the level, with its Coventry-Simplex engine. It was stated that a canopy extended over the whole of the loco and driver and this had possibly attracted someone, since the loco had been sold at a price of £175.

Eight "practically new" 2ft gauge American patent 17½ cwt dumping cars (by the Lakewood Engineering Company of Cleveland, Ohio) were offered at £17-10-0d in accordance with an illustration. Each had a detachable steel hopper of one cubic yard capacity with dimensions of 3ft 6in by 3ft 6in at the top, tapering to a 2ft 11in measurement at the bottom. In the bottom of each hopper there were two slide doors for emptying—the size of the opening being regulated by a hand wheel and levers shewn—the levers being connected to the doors at each end of the hopper. They were stated to be in "splendid condition and all very little used" but as yet had found no buyer.

All the 2ft gauge locomotives were situated at Ward's Charlton Works at Brightside in Sheffield, where every facility for inspection was offered. How many readers would now like to inspect and purchase these gems at the prices quoted—for example a 2ft gauge Bagnall for just £65!

# UNDERGROUND ELECTRIFICATION AT SANDHOLE COLLIERY

Brian Webb

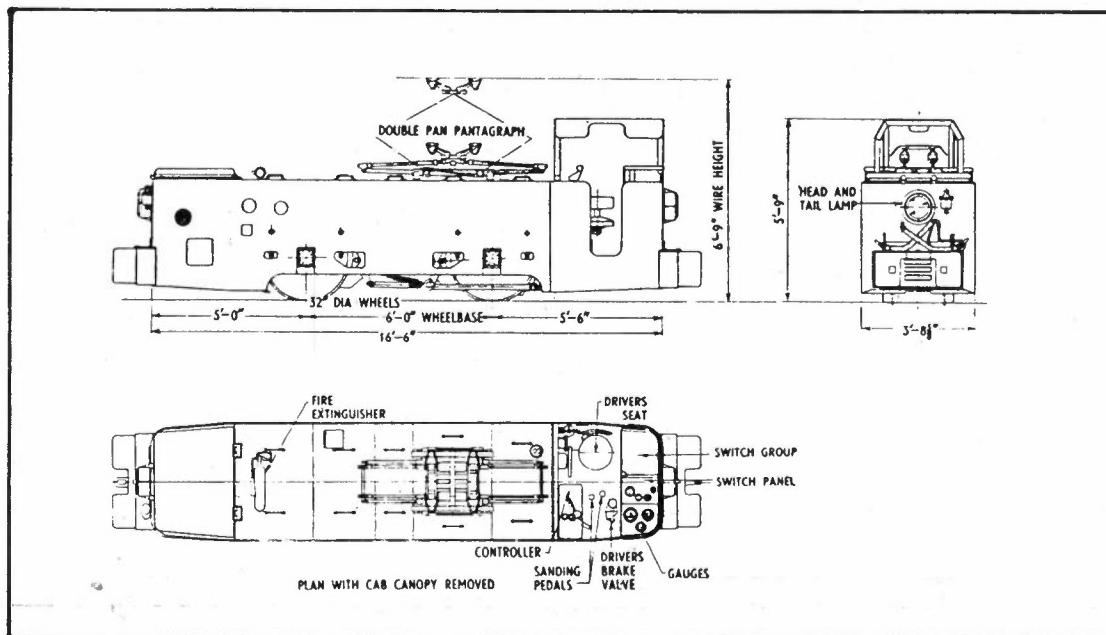
The only expanding area of industrial rail traction is that involved with the various mining industries—all narrow gauge so far as this country is concerned. The first real interest in the subject was initiated by the 1925 Mining Locomotive Competition in which one participant was the Metropolitan Vickers Electrical Co Ltd of Trafford Park (MV).

It was not until 1934 however that MV supplied its first commercial battery-electric locomotives for underground use in Britain. These were delivered to the Harworth colliery of Barber Walker & Co Ltd, but it was not until after the last war that such locomotives went into large scale use. Since then MV and the English Electric Co Ltd (EE)—both later part of GEC Traction Ltd—have received the majority of orders placed for such equipment by the NCB.

The usual alternative to battery traction is the long established flameproof diesel mining locomotive, a type never adopted by either MV or EE. To mention straight electric traction with overhead wire current collection for coal mines—bearing in mind the spectacular arcing vividly apparent on the BR electrified mainlines—would seem an impossible third alternative, but nevertheless it has been used.

The installations by the NCB at Silverwood and Chislet collieries in 1958 and 1962 respectively are quite well known, but that at Sandhole colliery probably less so.

Following their pioneer contract at Harworth in 1934 it was MV who were the first to install an overhead wire contact system in a British safety lamp coal mine. Such systems are often incorrectly termed "trolley wire" systems in industrial parlance, but as the NCB and British mines regulations do not allow trolley type collectors, pantograph type collectors are employed. The electrification scheme for Sandhole colliery, part of the NCB North Western Division No 1 Area at Walkden, Manchester, was authorised on 24th November 1950 as a trial installation, and commissioned on 27th July 1953. The South tunnel was chosen, involving some 1 ¼ miles of 1ft 9½in gauge double track, and a single 250 V dc overhead contact wire was fixed at a height of 6ft 9in above the rails using wire supplied by the Liverpool Electric Cable Co Ltd. The track, laid with 60lb rail, was bonded to provide a return path for the current. Average gradients were 1 in 100 in favour of the loaded trains. A shift output of 1200/1300 tons was handled using the colliery's existing tubs of 8/11 cwt capacity. Prior to electrification four 7 ton Ruston & Hornsby 48 hp locomotives were used. Man riding trains on the electric section were fitted with sheet steel roofs to provide protection from the overhead wire.







*A train in the South tunnel at Sandhole Colliery, showing one of the MV locomotives after the wooden framed windscreen was fitted. The arched roof supports and generous clearances are typical of modern colliery haulage roads.*  
*(collection of Brian Webb)*

The underground sub-station providing the power supply had an incoming ac supply of 2 kV 3-phase 50 Hz, this being transformed to 225 V dc by an MV 6-anode mercury-arc steel tank rectifier rated at 120 kW. Duplicate equipment was also installed to ensure continuity of supply in the event of a failure. Signalling was installed to safeguard train movements and obviate manual operation of points, and thus the chance of workers coming in contact with the overhead. To this end eleven colour-light signals and fourteen pairs of electro-pneumatic points were used controlled by interlocking power-frames at each junction and at each end of the section. Communication between the signalmen was by telephone.

The locomotives supplied were four in number, being of MV design but built at Burton-on-Trent by E.E. Baguley Ltd as subcontractors. They were allocated works numbers MV 826-9, BG 3383-6 and delivered ex-works on 30th May, 6th June, 12th May and 16th May 1953 respectively. They were ordered under MV contract 19476 dated 28th June 1951. These locomotives had steel plate frames, the end cab section being removable to reduce the length and allow carriage within the pit cages. The two motored axles ran in roller bearing axleboxes between the frames, the motors being of MV type 130 DZ. Each had a 1 hour rating of 38 hp, forced ventilation by a blower, axle suspension, and a single reduction spur gear drive to the axles. The special pantographs designed for mining conditions had two collector pans mounted 12in apart to meet NCB regulations. The pans were independently sprung to provide for irregularities in the overhead wire and provide sparkless current collection. The locomotives weighed 8 tons in working order and were fitted with compressed air and hand brakes.

The system appears to have worked successfully and by the end of 1953 over 6000 miles had been run by the locomotives. These were later fitted with glass windscreens, modified control gear with fewer notching positions, and the buffers were altered to avoid locking.

## BRIAN WEBB—AN APPRECIATION

Brian Webb was known to many members through his books and articles, as a correspondent or as a personal friend. His death, on March 13th at the age of only 46 came as a profound shock to us all.

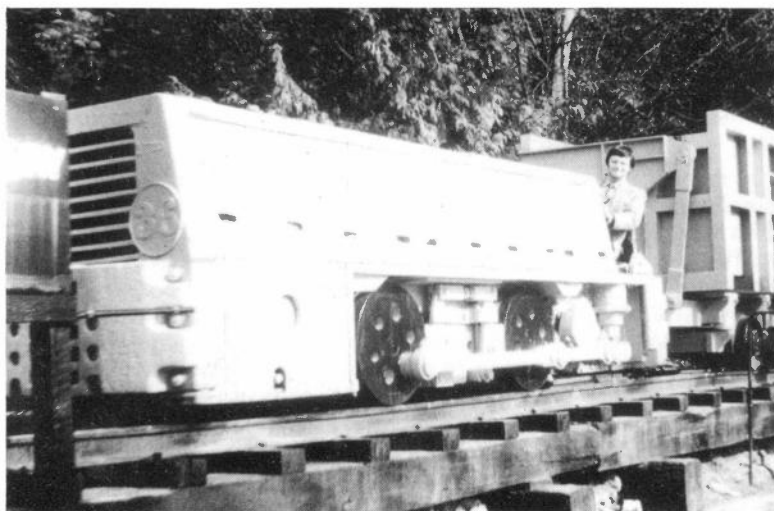
His first years were spent in Batley but after the family moved to Scarborough his railway interests thrived. Over thirty years ago a stream of excursion trains brought locomotives from many parts of the country, and fired the imagination of Brian and his fellows. Formation of the Scarborough Railway Society consolidated the group, and broadened their interests. Brian was, first of all, a fan of LNER locomotives of the post-Gresley era. He never tired of praising the B1, or likening the sound of a double-chimney A1—standing with the blower hard on—to the breath of life itself. Like many of his contemporaries he was dismayed when diesels began to displace steam, and sought a new challenge.

A growing interest in industrial and narrow gauge locomotives introduced him to a variety of much older internal combustion machines. His enquiring mind sought information on their history but, in comparison to the well documented steam locomotive he found it almost completely neglected. Because no-one else seemed interested he determined to research it himself, and it was to become his life's work and lasting memorial.

In 1965 he left his decorating job, and moved to Huddersfield for a teaching course. This brought closer contact with the N.G.R.S. and enabled him to record one of the remaining strongholds on steam. That same year his first article appeared in *The Narrow Gauge*, a note on 60cm gauge Baguley 0-6-0 petrol locomotives. The following year he accepted a post as lecturer in interior design at Carlisle Technical College, still an interesting railway centre. His new position allowed more time for research and, never one to waste a moment, Brian devoted himself to his chosen subject. Summer visits by N.G.R.S. members to his parent's home at Scarborough were always memorable. The fruits of his latest research would be unveiled, and the day always ended with films and Mrs Webb's enormous supper.

In 1973 David & Charles published his first book *The British Internal Combustion Locomotive 1894-1940* which became an indispensable reference work for the narrow gauge historian. Main line steam had now vanished and even early diesels were disappearing, so the machines which Brian once despised became his latest project, culminating in *English Electric Main Line Locomotives of British Rail*, published by David & Charles in 1976. Two years later *Sulzer Diesel Locomotives of British Rail* appeared from the same publisher, and *Lord Carlisle's Railways* from the R.C.T.S. In 1979 *A C Electric Locomotives of British Rail* appeared from David & Charles and his last book, *The Deltic Locomotive*, was completed shortly before his death. Despite these commitments he continued to write articles for this and other magazines, for he was a keen supporter of many societies.

Brian's enthusiasm, good humour and willingness to share his knowledge made him a stimulating companion and valued friend who enriched all our lives. Our sympathy goes to his mother, Mrs Eva Webb, his friend and helper, Sandra J.C. Tassell, and his many colleagues.



*Brian Webb enjoying his favourite pastime: discovering another vintage diesel. This North British "Miner" (NBL 27720/1957) went to Dominion Coal Co, Anaconda Mines, B.C. and is now preserved at Britannia Beach, near Vancouver, B.C. April 1980.*

*(Sandra J.C. Tassell)*

# HUNSLET 2176— THE BIOGRAPHY OF A WAR SURPLUS DIESEL

Brian Gent

Hunslet 2176 was one of a batch of 25 Hudson-Hunslet diesel locomotives ordered by the War Office in April 1940, and allocated serial numbers 2173 to 2197. The general design followed three examples delivered in the previous year (2012-2014), but incorporated a McLaren LMR2 diesel engine rated at 25 h.p. at 1500 r.p.m. rather than the Ailsa Craig RF2 engine fitted to these earlier locomotives. They were to suit 60 cm gauge track, and weighed approximately 4 ¼ tons in working order. The engine drove through a two speed forward and reverse gearbox giving track speeds of 3 ½ and 7 m.p.h. and a Hunslet Patent friction clutch and heavy roller chains to both axles.

A crank handle was used to start the engine, and braking was by a pillar hand wheel in the centre of the open cab. A sandbox and link-and-pin pattern drawgear were fitted. The locomotives were painted in khaki green.

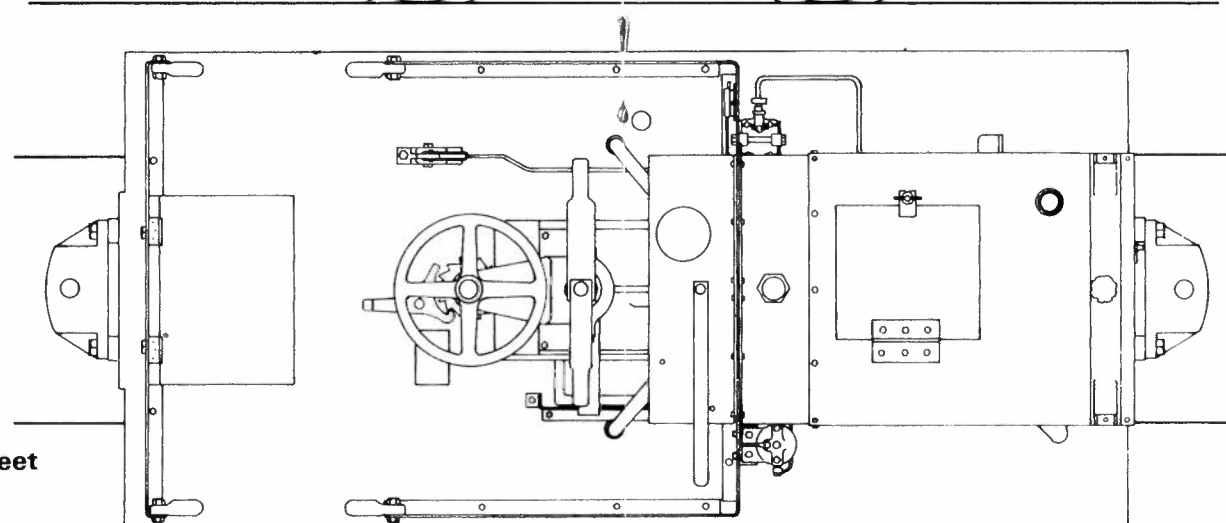
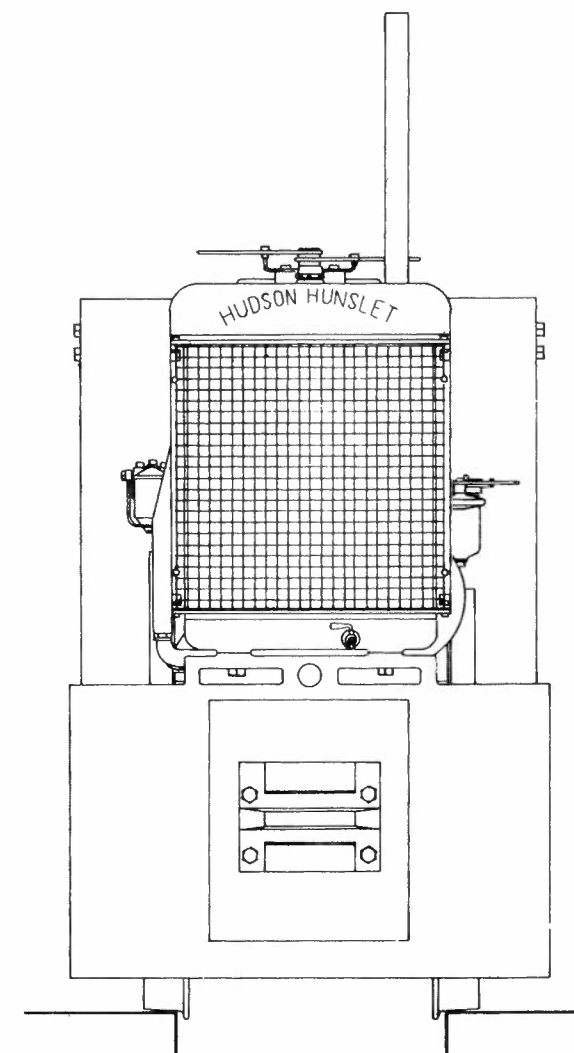
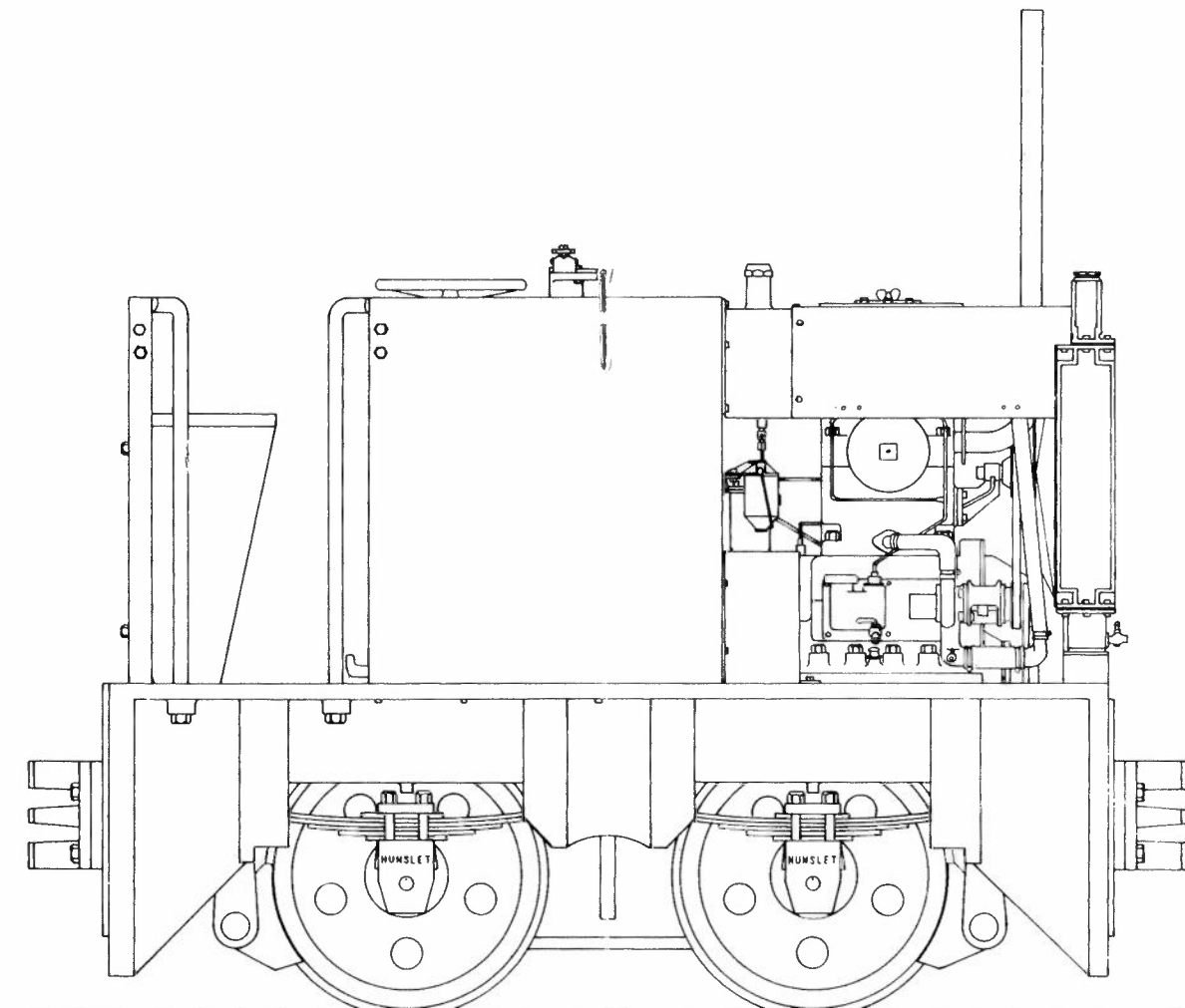
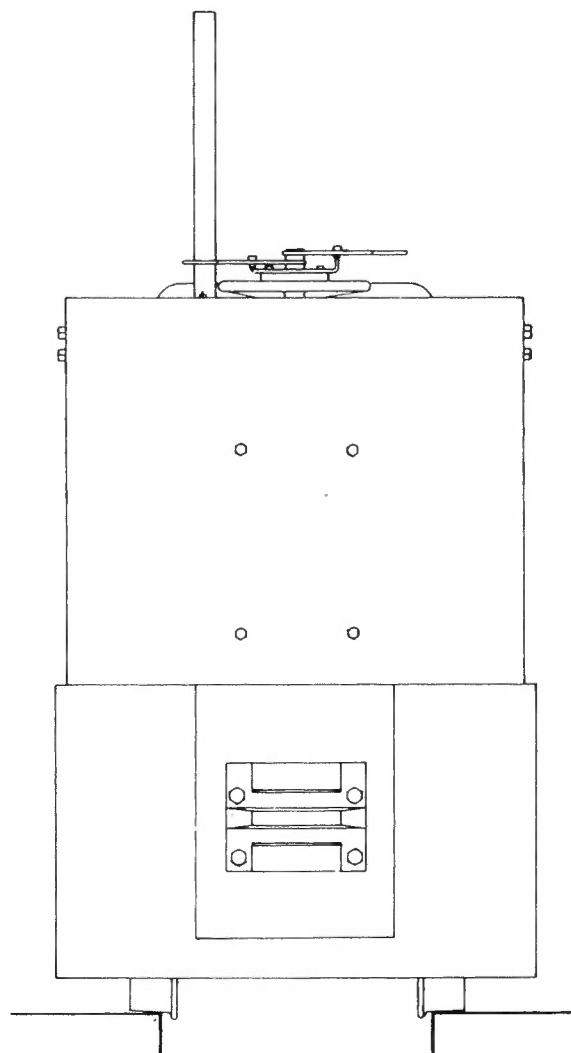
The whole batch was delivered to the W.D. depot at Donnington, Shropshire between July 1940 and February 1941, 2176 being despatched from The Hunslet Engine Co Ltd on August 17th. Most were stored at Donnington, and it is possible that some were never used at all, being disposed of at "War Surplus" sales years later still in the original packing. In any event 2176 seems to have passed to George Cohen, and was sold to the Burton Constructional Engineering Co Ltd, Burton on Trent prior to 1963. It worked on an extensive system serving the workshops and stockyard, and a photograph showing it here in August 1969 was published in NG63.

In September 1972 it was purchased by John Thomas, and loaned to the Leighton Buzzard Light Railway, where it was used occasionally. Then, after being out of service for some time, it was sold to Pete Vallins and transferred to the Brockham Museum, near Dorking, Surrey in 1974. Pete completely rebuilt the 25 h.p. McLaren engine using parts of an identical engine removed from Hunslet 2290, TYKE, on the Festiniog Railway, and did a thorough restoration job on the remainder of the locomotive.

When Pete Vallins moved to the West Country to set up in business he was unable to take the locomotive with him, and it changed hands again, this time to the Great Bush Railway, Hadlow Down, East Sussex on November 3rd, 1977. After the addition of a sandbox and modifications to the throttle and clutch it was fully repainted in the G.B.R. livery of Buckingham green, with red buffers and black wheels, and received No.15 and the name OLDE in celebration of Harvey & Son's winter ale, brewed in Lewes and consumed in great quantities by the railway staff. OLDE never worked passenger trains on the Great Bush Railway because the crude gear change and clutch compared unfavourably with the Ruston & Hornsby locomotives then on passenger duty, and consequently it saw little service.

In 1979 an exchange was arranged with Bill and Dave Best of Bredgar, Kent, who received OLDE on the 19th May in return for their 20 h.p. Hibberd locomotive, which was duly delivered to the Great Bush Railway. This Hibberd is one of the "Planet-Simplex" design, but its works number and building date remain a mystery. The drawing shows OLDE as it appeared in early 1979, without the engine covers carried at Burton-on-Trent, these having been lost in the intervening years. The photograph was taken by John de Havilland shortly before the name and number were painted. Carol Gent is at the controls.





12 0 1 2 3 feet  
Scale

**GREAT BUSH RAILWAY  
No 15 OLDE  
HUNSLET 2176 of 1940**

John de Havilland © 1979



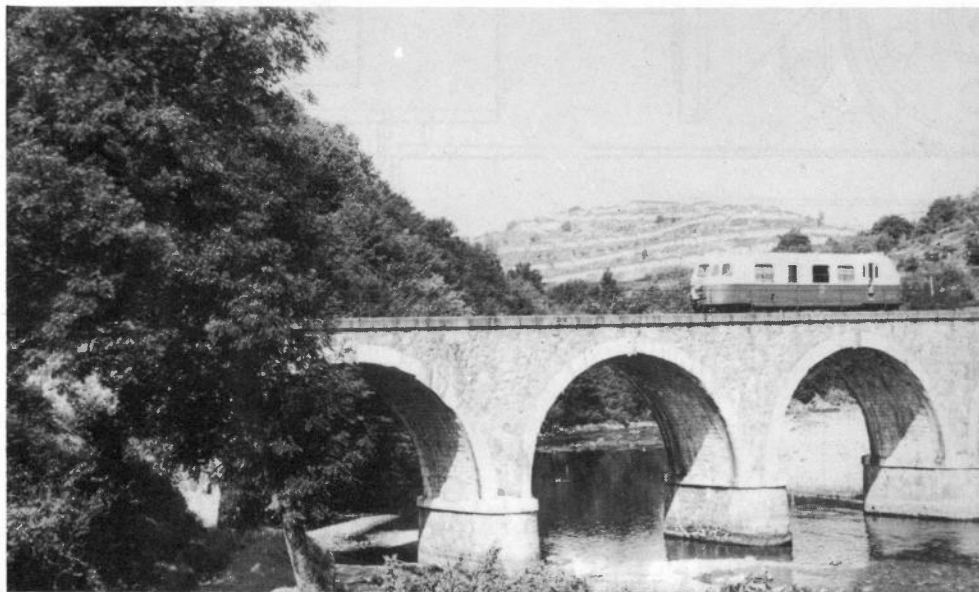
# RECOLLECTIONS OF THE P.O. CORRÈZE

Peter R. Lemmey

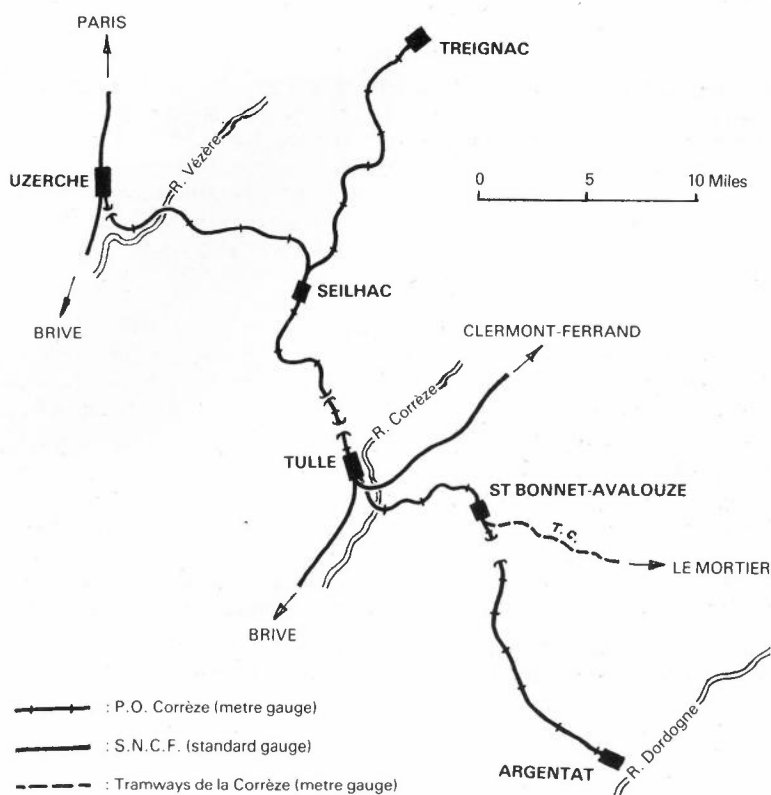
It seems strange, now, to think it was almost twenty years ago. We had motored across the Auvergne mountains from Clermont Ferrand to the small town of Argentat on the banks of the Dordogne. The September evening was warm, with premonitions of thunder. Approaching the centre of the town, we clattered over a level-crossing, beyond which was revealed a small narrow gauge terminus—several lines of metre gauge track fanning out beneath the grass, a neat station house with a small loco-shed and water tower beyond, and various goods vans and wagons on sidings under the trees. A small red-and-cream railcar could be seen at the platform. Parental concern over finding somewhere to stay put paid to any exploration there and then, but a visit to the station the following morning became an immediate priority. And this chance holiday encounter with the P.O. Corrèze system down in the hill country of south-west France during 1962 bred a fascination with French narrow gauge railways which later took me to several of those light lines still then surviving, and while each such system had its own attractions the Corrèze lines remained a particular favourite. Although the P.O.C. has been closed for a decade now, I still remember the fun to be had travelling around on it, and hope that this article will convey some of the atmosphere of this attractive and rural light railway.

The chief geographical feature of the *departement* of Corrèze is the pattern of rivers flowing from the heights of the Massif Central south-westwards across the area towards the Atlantic. These rivers—the Vézère, the Corrèze and the Dordogne—have carved deep and winding valleys through the rolling wooded uplands, and the engaging character of the P.O.C. derived in no small measure from the hilly green countryside through which it ran. Timber and agricultural supplies were the staple traffic of the railway throughout its life from 1904 until 1970, and accurately reflected the economic activity of the Corrèze *departement*, basically a region of small family-run farms with the hydro-electric schemes on the upper Dordogne the only heavy industry.

The headquarters of the P.O.C. were at Tulle, the *prefecture* of the Corrèze, a town of some 20,000 inhabitants hemmed into the narrow valley of the river from which the *departement* takes its name. The railway station is at the lower end of the town, and still served by trains on the former P.O. cross country route from Bordeaux to Clermont Ferrand which curiously have always had to reverse there to continue their journey. The narrow gauge, on the other hand, ran straight through the station, heading northwards for 21 miles to Uzerche on the Paris—Toulouse main line with a branch heading off at Seilhac up to Treignac, and south from Tulle down to Argentat on the Dordogne 18 miles away.



*A Billard 80 h.p. railcar crossing the R. Corrèze on the outskirts of Tulle, en route to Argentat in the summer of 1962.*  
(D. Trevor Rowe)



For the opening of the P.O. Corrèze system in 1904, the Société de Construction des Batignolles delivered ten 2-4-0 side tanks; they were large wheeled, ungainly machines and not totally suited to the task in hand, for in 1906 four 0-4-4-0 Mallet tanks were ordered from the A.F.G. company of Blanc Misseron, and these engines, 101-104, remained the mainstay of the freight workings until two new B-B diesels arrived in 1963, with No.101 still being steamed fairly regularly until the closure in the spring of 1970. These Blanc Misseron semi-articulated tanks were sturdy and well-proportioned locomotives, and shunting their mixed trains in the grassy yards at Argentat or Seilhac they typified the P.O.C. for many visiting enthusiasts. One rather curious feature of these engines was the cab, seen from the outside apparently capacious, in fact mainly occupied by the back of the fire-box with much of what space remained stacked with briquettes; so much so indeed that if ever you were asked to ride up on the footplate with the crew it seemed easiest to travel hanging out on the steps, particularly as the regular driver was so stout as to make you wonder whether they had had to assemble the locomotive around him.

As on so many French narrow gauge lines, railcars were adopted enthusiastically by the P.O.C., although only with mixed results to begin with. In 1938 some really rather reprehensible De Dion Bouton four-wheelers were obtained second-hand from the Tramways de l'Ain concern; they were however little improvement on the lumbering 2-4-0 tanks, and it was not until the arrival of six Billard 80 h.p. bogie railcars from the C.F.D's Dordogne line in 1953 that a really satisfactory passenger service was provided, indeed one that effectively staved off any bus competition right up to the end. These A.80.D. series cars were to be found on a fair number of *secondaires* in their latter days, and remarkably efficient they were too, running economically and at a respectable speed on none too substantial metric track.

The P.O.C. Billard railcars, always well kept in S.N.C.F. red-and-cream, were great fun to ride in, particularly since they were designed with a very low centre of gravity so that the floor of the vehicle was almost at rail level, thereby emphasizing to the passengers any sensation of speed. Waiting at a station with the Willeme diesel engine ticking over comfortably, they would rock gently on their suspension in deceptively peaceful fashion. When everyone was on board, parcels and packages under the seats and bicycles and mopeds propped up near the door, an abrupt change of mood would however come over the little autorails. With the driver easing the brakes and working up through the gears, the growl of the engine would increase, accompanied by the roar of

## RECOLLECTIONS OF THE P.O. CORRÈZE



*The essential P.O. Corrèze. A view from the rear of a mixed train near Laguette on the Argentat line, with a Mallett at the head.*  
(Lance King)



*Le Mortier on the Tramways de la Corrèze in June 1956. On the left, De Dion railcar PE 53 near the end of its career; on the right, T.C. 0-6-0 tank No. 8. Both trains are bound for Tulle, and will work over the P.O.C. beyond St Bonnet-Avalouze.*  
(Lance King)

the castor-like wheels on rails directly beneath one's feet, a noise to which would be added the screech of the flanges on the many curves. In this way, and with the occasional two-note blast from the air horns on the roof, the P.O.C. conveyed its passengers as if by a series of leaps and bounds around the system. The best view of the journey could be obtained from the seats above the unpowered bogie which were ranged round the end of the car as though in a miniature observation saloon. On a rapid descent from Seilhac down through the tunnels to Tulle, this could be quite an exhilarating vantage point.

During the years I knew the line, the weekday passenger service comprised four railcar workings each way between Tulle and Uzerche, three return trips up the Treignac branch, and four runs in each direction on the Argentat line. In addition to this autorail activity, there was a *merchandises-voyageurs* or mixed train on weekday mornings to Argentat, returning at 17.20, and a similar working up to Seilhac three times a week. From 1963 these latter services were theoretically diesel-hauled, although in practice Mallet 101 remained a not infrequent performer on these trains right up to the end.

On all three routes of the P.O. Corrèze the scenery was pleasantly varied. Beneath the overall roof of Tulle station the narrow gauge used to occupy Platform One. Trains heading north from the station towards Uzerche would set off past the bay platform by the water towers where the Seilhac mixed would sometimes be brewing up, out over a busy level crossing and then start climbing steeply away from the town up the green valley of the tributary R. Céronne. As far as the halt at Pont-de-Peyrelevade the gradient was a continuous 1 in 45, the line winding along beside a rushing watercourse with several tunnels and viaducts. A vivid memory remains of travelling along this stretch of line on a steam tour which took place in August 1969 (of which more in due course), when we went churning up the hill behind Mallet 101 as the morning mist was clearing, the sun slanting down through the trees and a long banner of steam hanging above the track in our wake. Beyond Pont-de-Peyrelevade the railway climbed on rather less steeply through Naves and St Clément-Lagraulière, stations serving large villages and usually busy with timber traffic, eventually reaching Seilhac, junction for the Treignac branch. As well as the usual neat station building and goods shed, Seilhac was also provided with a small loco shed, little used in later years. To the north of the station, the Treignac line climbed gradually away to the right, the Uzerche route pressing on through thick woodland past the small secluded stations at St Jal and Espartignac before curving down into the Vézère valley for the last mile or two of the run. Rounding a wooded spur above the river, the metre gauge eventually reached the pretty station of Uzerche (Ville) which faced the famous prospect of the old town's towers and turrets on the opposite hillside, and from there climbed steeply across a viaduct over the roofs of the lower town, through a short tunnel, and so to the S.N.C.F. station.

The morning Argentat mixed was a particularly pleasant run; as often as not one would have the coach at the rear of the train to oneself, this being one of the three green bogie vehicles obtained by the P.O.C. when the extensive Sarthe system around Le Mans shut down. The balconies at each end of the coach gave excellent views of the passing countryside as well as of the loco trundling along at the head of the train. And with the leisurely stops in wayside stations which afforded ample opportunities to chat with the crew, admire the neatly-tended station gardens, or investigate archaic pieces of railway equipment half-hidden in the grass, the journey would pass very agreeably, with arrival at Argentat just in time for lunch.

If you chose the Treignac route at Seilhac, the train would take you winding up and down across the edge of the Monédières hills where tracts of heathland and bracken alternated with groves of oak and chestnut trees. The wayside stations on this section tended to be very sleepy indeed, although the yard at Chamboulive usually occupied the infrequent freight trains for half an hour or so with its timber wagons. The station at Treignac, up a hill from the town, was the epitome of a country terminus, the staff there more occupied with horticulture than with trains.

The Argentat line set out from Tulle southwards, dipping down under the standard gauge Clermont Ferrand route and then passing the P.O.C. depot on the right with its eight road shed-cum-workshop. Here could be seen the Mallots parked by the coal stage when inactive, together with any railcars under repair.

For the first mile or so the metre gauge ran across fairly level country, but once through the little station at Laguenne it began to climb into the hills, winding up a valley towards St Bonnet-Avalouze. This was perhaps the most attractive section of the railway, with the line twisting back and forth among the wooded slopes, passing shaggy meadows, walnut orchards and rambling stone farmsteads on the way. Until 1959 the track as far as St Bonnet-Avalouze also carried the ramshackle trains of the Tramways de la Corrèze, which struck off thence eastwards on a serpentine course of their own across the hills to Le Mortier and Neuvic. When I first passed that way in 1962 some of the T.C. stock was still mouldering away in the sidings at St Bonnet station including four small Pignet 0-6-0Ts and some of the De Dion four-wheeled railcars which the P.O.C. had eventually handed on to the Tramways concern. One of the tank engines is now preserved in the St Mandé museum in Paris; to have ridden behind one through to Neuvic in the days when St Bonnet-Avalouze was a narrow gauge junction would have been another fascinating journey.



Beyond this former junction the P.O.C. climbed on to Pandrignes St Paul, a rather dank spot closed in by fir trees where locomotives often paused for water before heading on through a longish tunnel and down the other side of the watershed towards the Dordogne valley. Hurrying down the hill the Argentat trains would skirt the back gardens of the hamlet of St Sylvain then shortly afterwards cross the main Tulle—Argentat road, protected by a pair of red and white lattice steel gates. From there onwards to the end of the line the railway ran almost entirely at the roadside, only diverging to reach the stations at Forges and St Chamant, situated at the back of the villages they served.

Many French light lines had roadside routes—it was often their undoing—but this was one of the last sections to survive, and sometimes had an unsettling effect on motorists who would look out of their vehicles to see a train rattling along beside them almost close enough to touch.

Argentat is an exceedingly pleasant spot, with some fine old houses embellished with balconies and turrets on each side of the river. The station was just off the main street, only a few steps from the Hotel Fouillade, which never failed to provide an evening meal fit to repair the ravages of a day on the narrow gauge.

From its opening through until 1962 the P.O. Corrèze system was run by various subsidiary organizations of the P.O. and later the S.N.C.F., and by the mid-1950's a certain benign neglect characterized the management of the railway, a closure attempt by the Minister in 1960 being staved off more by virtue of popular local indignation than any resolve by the operators.

Matters began to change markedly for the better when, on 1st January 1963, the C.F.T.A. organization who are something of light railway specialists in France took over the running of the railway on behalf of the S.N.C.F. A systematic improvement of the permanent way was started, several of the station buildings were upgraded, the Mallets, ever more expensive on maintenance, were pensioned off in favour of two new 400 h.p. bogie diesels, and an attempt was generally made to put the railway back on its feet. During the 1960's the freight traffic bore up well; the passenger loadings continued in gentle decline—not surprising though, in view of increased car ownership and the creeping rural depopulation in that part of France. The line, as always, was running at a loss, but when in 1967 all the rather tatty freight stock was replaced by much better material drafted in following the Réseau Breton closure, it appeared that the line might have some sort of future.



*The morning mixed for Argentat, with 0-4-4-0 tank 102 in charge, pauses at Forges on 31st May 1956.  
(Lance King)*



*Mallett 101 rounding a curve on the Treignac branch with the C.R.C. special train on 31st August 1969.*  
*(V.W. Blake-Dyke)*

Sadly, it was not to be; early in 1969 the government in Paris made one of its periodic attempts to reduce the S.N.C.F.'s deficit by ordaining the closure of various uneconomic routes, and the list included the P.O. Corrèze. It was announced that the passenger services would cease in the autumn of that year, total closure to follow in Spring 1970.

And that was indeed what happened. One last episode in the railway's career deserves, I think, to be recorded however, particularly as it was orchestrated by railway enthusiasts from this side of the Channel. The Continental Railway Circle, based in London, had the excellent idea of chartering the steam train to tour the system one August weekend, so giving British enthusiasts a last opportunity for a run behind a Mallet tank through the Corrèze. The P.O.C.'s reputation had obviously spread wider than just its native land, for the response to the C.R.C.'s proposal necessitated two such special trains being steamed, one on the last weekend in August and the second a fortnight or so later, each trip starting from Tulle with a visit to Argentat on the Saturday afternoon, returning to the *prefecture* for the night and touring the northern part of the system on the Sunday.

I had been staying in the district for the week preceeding the first tour, and I looked in on Tulle station on the Friday morning in case the 0-4-4-0 tank was taken out for a rehearsal on the Argentat mixed. In the event, that train was diesel-hauled, but sure enough early on Saturday a column of smoke could be seen curling up above the shed, and No. 101 was soon running up and down the yard marshalling its train, two former Sarthe bogie coaches and an R.B. *fourgon*.

The run down to Argentat in the warm afternoon, a last journey for most of us, was interrupted by stops for photography in most of the wayside stations, and allowed plenty of time for refreshment of engine and passengers at the terminus. As I have already mentioned, the second day of the trip began with a stirring assault of the bank out of Tulle up to Seilhac, where there was a run-past before we set off up the Treignac branch. A lengthy sojourn at the top end of the line allowed the tour's participants to bask in the sun while the Mallet was perched on the turntable. Eventually it was "All Aboard" again and back to the junction, where the loco ran round before moving off on the last leg of the run, rattling along through the woods towards Uzerche. With 101 working bunker-first, we made a last photo-stop at Uzerche (Ville) before the final short climb up over the viaduct which led to Uzerche (S.N.C.F.), Paris, Dieppe and home. It was a memorable farewell.

Passenger workings ceased with the start of the 1969-70 Winter timetable, the freights continuing to run until the following Spring. One way and another, a fair amount of the rolling stock survived the closure. The indomitable Billards were transferred to the C.F.T.A.'s Corsican operation, where presumably they still see use. Mallet 101

was presented to the Fédération des Amis des Chemins de Fer Secondaires, and is now based on the Dunières—St Agrève section of the old Vivarais system preserved by the C.F. Régionaux, where I saw it in action in 1974. On that occasion its new operators seemed to be thrashing it along as if there was no tomorrow, and it was not therefore wholly surprising to learn that since 1975 it has been in temporary retirement awaiting an overhaul. The three Sarthe coaches and 0-4-4-0 tank 104 are now at Tournon on the C.F. Vivarais line; the coaches have recently been refurbished, though the loco is stored in need of missing fittings.

It did not take long for the track lifting gang to get to work once the P.O. Corrèze had closed. France is of course criss-crossed with the grassy trackbeds of defunct narrow gauge lines, some shut way back in the 1930s, their remains to a greater or lesser extent visible today. Looking out for traces of the P.O.C. on a visit to the Corrèze only four years later, it was as if the line had been shut for decades. The depot at Tulle is now used by a firm dealing in agricultural machinery, and many of the wayside stations have been converted into offices or private houses. Much of the section of roadbed beside the R.N. 120 down to Argentat has been engulfed by road-widening, while at places like Seilhac nature has reclaimed the yards to such an extent that it was not easy to trace exactly where the rails used to be. The countryside remains as attractive as ever, but it was difficult to believe that trains had been running to and fro daily only a few years before.

And it was, I suppose, the countryside which made the P.O. Corrèze such a memorable line. The railway itself was not really so exceptional for France; metric systems with a combined steam and diesel fleet were at one time legion. It was of course one of the last of its kind, perhaps the very last to use steam, and that gave it a certain distinction, but it was more than anything else the way in which the line seemed so very much a part of the area through which it ran that gave it its unique character. A hot August day at a shady wayside station, with the grasshoppers chirruping in the grassy track, the voices of the train crew chatting to the stationmaster's family in the booking hall, the hissing of the Mallet tank on a timber train, and the station clock ticking away the summer afternoon: all this was redolent of rural France at its most hypnotic.

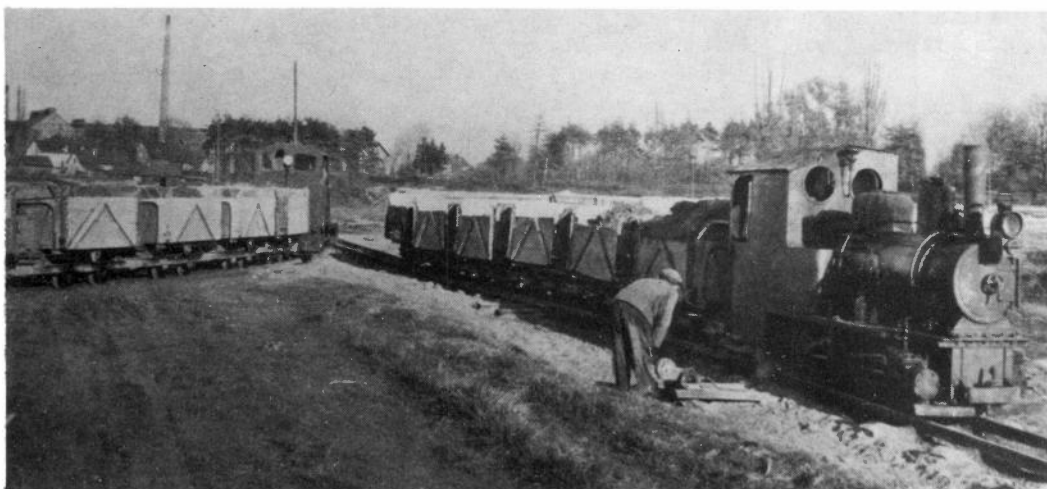
Far better than the written word can photographs convey the substance of a subject such as this, and I am therefore particularly indebted to Jimmy Blake-Dyke, Lance King and D. Trevor Rowe for providing the illustrations from their collections. I am also pleased to acknowledge the help gained from the French F.A.C.S. society's magazine in sorting out some of the historical details, and readers interested in obtaining a fuller description of the line's origins are referred to issue no.93 of that journal.



*Smart to the end, Billard railcars stand at Seilhac junction in 1969.  
(R.A. Bowen)*

# FALZZIEGELWERKE LUDOWICI—HIGH CAPACITY 500MM GAUGE

Wolfgang E. Ludwig



*The unidentified steam loco crosses a diesel hauled train at the siding near the pit in 1930. In the background are the brickworks chimneys.*

*(collection W.E. Ludwig)*

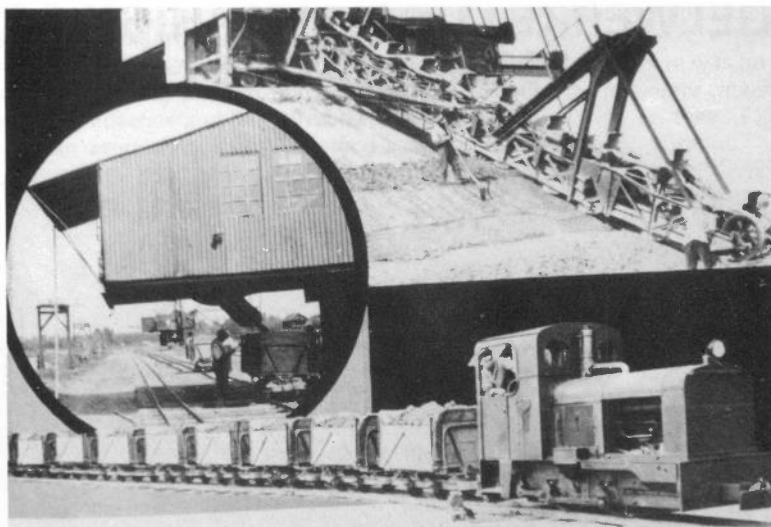
In the South Palatinate of Germany, between Karlsruhe and Ludwigshafen on the west bank of the river Rhine, clay has been dug for nearly 2000 years. Excavations in the area have shown that the Romans operated potteries and brickworks, and brickmaking has continued to be an important industry up to the present day. One of the greatest modern brickworks was located at the village of Jockgrim—Pfalz: the Falzziegelwerke Ludowici. I was fortunate enough to see this works, and the unusual railway system bringing clay from the pits, in July 1972. I say fortunate, because on the 5th September 1972 the main works was destroyed by fire, and reconstruction was not considered to be practical as the deposits of clay were almost worked out.

The line had a gauge of only 500 mm, but was 1.5km long. In this distance it passed beneath the DB line from Wörth to Germersheim, and crossed the road from Jockgrim to Hatzenbühl on the level. Here, and at another level crossing, a flagman was stationed to stop traffic when the train passed. The rails were well laid on wooden sleepers, and the track was regularly maintained and renewed. This was necessary, for production depended upon a regular flow of clay, and the weight of a loaded train was nearly 49 tonnes.

Clay was excavated by a large chain-and-bucket machine running on widely spaced double track along the edge of the pit, and conveyed to discharge chutes at the rear, which spanned two 500mm gauge rail tracks. Wagons could be loaded on either track, and it was usual to use each alternately. A locomotive would place a train of empty wagons under one chute, and haul the loaded wagons away from the other track to a siding near the pit. Here a second locomotive would arrive with empty wagons from the works, and the trains would be exchanged. Each train consisted of three bogie wagons, which were hauled when loaded and propelled when empty—at speeds up to 10 k.p.h. On arrival at the works the wagons were tipped by compressed air to discharge the clay onto a stockpile beneath the track.

A steam locomotive once worked the line, but unfortunately I have been unable to discover the details of this. Three diesel locomotives were used latterly: 102 was a 38-42 h.p. Deutz 0-4-0 with jackshaft drive (works number 13719), 103 a similar but older machine (Deutz 6747), and 108 a 50 h.p. four wheel Gmeinder (4436) built in 1949. This weighed 8.6 tonnes and was usually used on the main line. When not in use these resided in a spacious brick-built two-road shed beside the works. A three-way point outside the shed gave access to this and the adjacent repair shop.





*From a publicity brochure dated 1935, this view shows the excavator (top), loading wagons (left), and a Deutz diesel on a loaded train. ( W.E. Ludwig)*



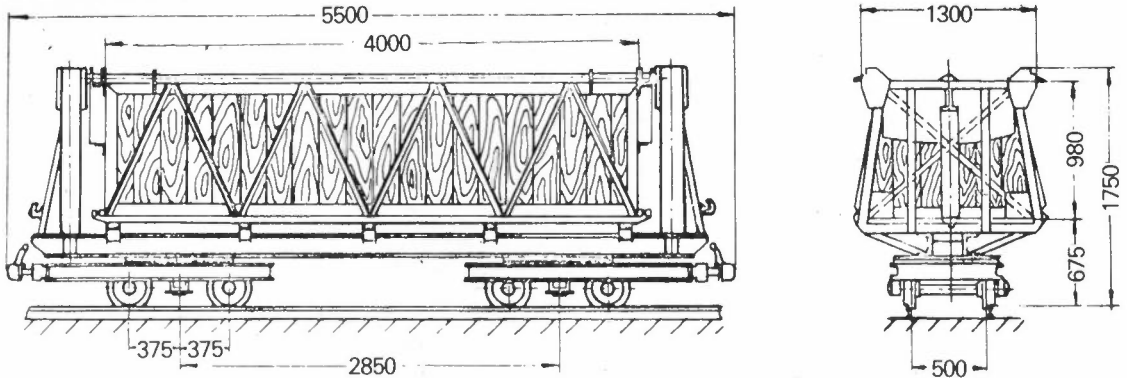
*Deutz 102 leaves the pit with a loaded train. The tracks in the foreground carry the excavator. (W.E. Ludwig)*



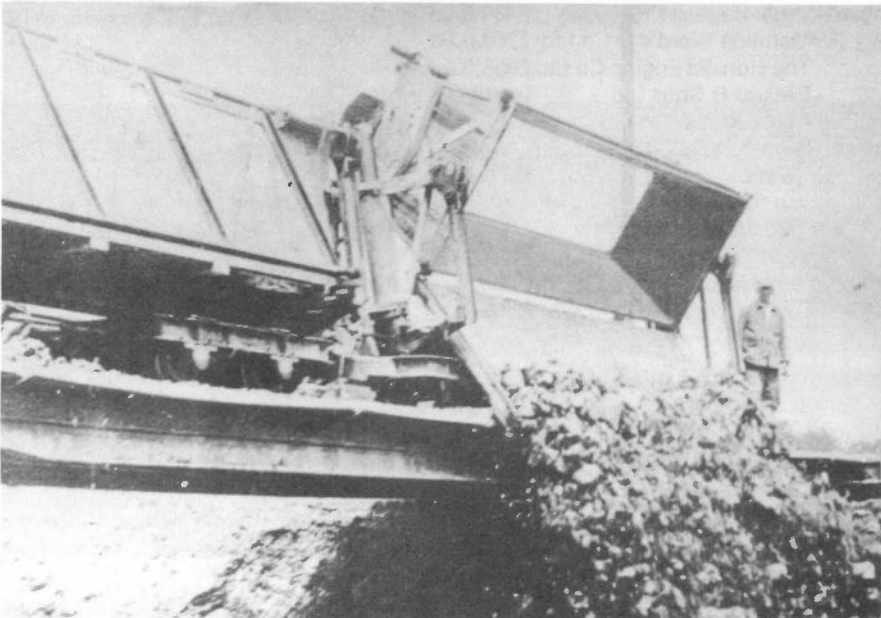
*Locos 108 (right) and 102 (centre) exchange trains at the siding. (W.E. Ludwig)*

The original four wheel wagons had steel channel frames. One cubic metre capacity wooden bodies were carried on central pivots, and discharged by being hauled past a stationary ramp beside the unloading point. A wheel on the fixed side of the wagon ran up this ramp, tilting the body and allowing the load to be discharged from the top hinged side door. The door catches had to be released manually. The later wagons held four cubic metres of clay, a very high capacity for such a narrow gauge. The accompanying drawing shows the unusual body design, which was carried on two four-wheel bogies. Each weighed 3.4 tonnes empty. Air cylinders were fitted between the frame and the top of the body, and connected to a supply of compressed air at 7.5 atm. (110 p.s.i) lifting the body and allowing the floor to tilt and release the load. These wagons were built at the works, and although the design was patented I am not sure if it was used elsewhere.

Today the railway is gone and nothing remains of the little trains which once swung along the track from the clay pit to the works.



*This drawing clearly shows the steel framed wooden body, tapered towards the top to release the load, the unusual suspension system and the air cylinders.*



*A wagon being unloaded. Note that the bottom of the body is wider than the top, and the steep angle of the floor. (collection W.E. Ludwig)*

## MAIL TRAIN



## MARGARETS and MERCEDES

Allan Baker's article in NG 89 was most interesting and informative. His writings in *The Narrow Gauge*, *Industrial Railway Record* and *Industrial Locomotive* put Bagnalls amongst the best documented locomotive builders. I should like to correct one slight error in the locomotive list: 2037 and 2075 were not used at Garston Gas Works although they appear to have been delivered there. The following quotation from the Liverpool Gas Co minute books may be of interest:

At a meeting of the Finance Committee 28th July 1915, "resolved that a Light Railway, Steam Locomotive and other Plant necessary for transporting Coke and Ashes at Linacre Station be provided at an estimated cost of £2000 and the following Tenders have been submitted therewith:—

The Railway—Dick Kerr & Co Ltd £386.1.6d (£386.07½p)

Robert Hudson Ltd £390.0.0d

W. G. Bagnall Ltd )  
Heenan & Froude Ltd ) unable to quote

Steam Locomotive—W.G. Bagnall Ltd £430.0.0d

Manning Wardle & Co Ltd £750.0.0d

The Hunslet Engine Co Ltd £855.0.0d

Peckett & Sons Ltd unable to quote

Twelve Skip Trolleys—Dick Kerr & Co Ltd

4 at £16.18.6d (£16.92½p) each £67.14.0d (£67.70p)

8 at £16.5.0d (£16.25p) each £130.0.0d

£197.14.0d (£197.70p)

Strachan & Henshaw Ltd

12 at £23.10.0d (23.50p) each £282.0.0d

Resolved that the tenders of Dick Kerr & Co Ltd £386.1.6d for the railway, W.G. Bagnall Ltd £430 for the steam locomotive and Dick Kerr & Co Ltd £197.14.0d for the Skip Trolleys be accepted".

At a Directors Meeting 12th December 1917, "the offer of W.G. Bagnall Ltd (sic) of an additional small Locomotive Engine for Linacre Works for £850 subject to the sanction and control of the Ministry of Munitions and to other conditions as to price was accepted."

The reason for the locos being delivered to Garston is easily explained. Linacre Works (which is in Bootle) was served by a short branch about half a mile long off the Midland Railway Langton Dock line and whilst the latter plunged steeply to tunnel underneath the works the gasworks branch climbed to cross Hawthorn Road and the Leeds and Liverpool Canal by overbridges and terminate at coal drops some height above the works—an impossible place to deliver a loco. There was no such problem at Garston and presumably the loco was transported to Bootle by road.

The two locomotives at Linacre finished up at Castle Firebrick works at Ewloe, where they narrowly missed preservation. Does anyone know the date of their movement there from Bootle?

LIVERPOOL, MERSEYSIDE

JIM PEDEN

## THE WORLD'S MOST ADVANCED STEAM LOCOMOTIVE

I am pleased to report that the excellent article in NG 82 is now outdated! Steam development on Porta's principles has continued in South Africa under the direction of Mr. D. Wardale, an engineer with SAR Pretoria. The initial conversion, one class 19D 2644, was commissioned in mid-1979 and incorporated similar features to the Rio Turbio engines. Satisfactory results from 2644 led to a more advanced conversion of class 25NC 3450, which was outshopped from Salt River works, Capetown in February 1981. The work has been carried out with Porta's full cooperation, and the locomotive, designated class 26, has been named L.D. PORTA in his honour. In addition to the further development on Porta's thermodynamic principles, this machine incorporates more modern mechanical features, such as a cast steel bed and roller bearings all round, and must therefore take this title from the Rio Turbio 2-10-2's.

Tests are currently in progress between Pretoria and Witbank, and it is hoped that dynamometer car tests will be carried out in comparison with the standard class 25NC. A full technical description of the modifications is being deferred until final adjustments are completed.

SPRINGS, SOUTH AFRICA

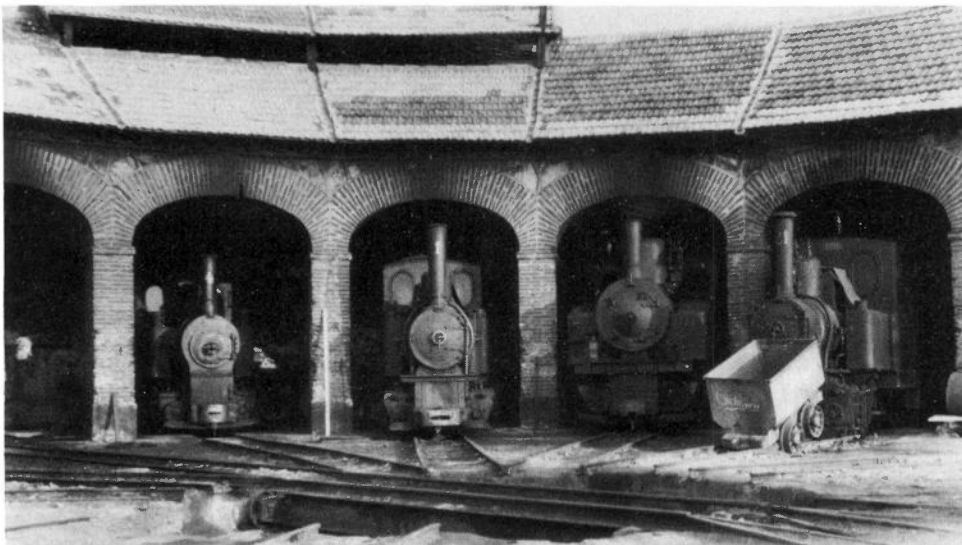
A.E. DURRANT



*3450 topping the 1 in 50 gradient at Rayton with a 760 tonne test train on 10th March 1981.  
(A.E. Durrant)*



*This view clearly shows the extended smokebox with two chimneys, one either side of the feedwater heater, the longer valve chests with the exhaust steam pipe to the feed water heater, and the pulley on the trailing axle to drive a compressor for air sanding. The livery is bright red with aluminium lining.  
(A.E. Durrant)*

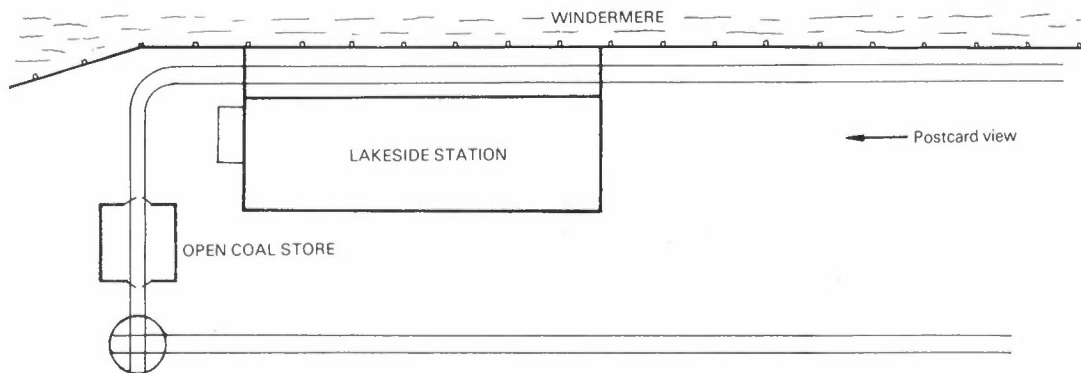


### **SURVIVORS AT UTRILLAS**

This article in NG 90 was most interesting because I visited the shed on April 8th, 1961 and took this photograph. I was under the impression that the 60 cm gauge system was derelict even then—certainly it was not in use on the working day I was there. However, there was obviously some subsequent movement because the locomotives are now in different positions.

HORLEY, SUSSEX

D. TREVOR ROWE



### **A WAGON AT WINDERMERE**

The narrow gauge railway at Lakeside, Windermere, illustrated in NG 89 was indeed used to bring coal to the lake steamers until the early 1950s when both SWIFT and TERN were converted to diesel power. The former originally had a compound engine, the latter simple expansion locomotive pattern cylinders—one for each propellor shaft. The sketch shows the track layout from memory. So far as I can recall the gauge was 2ft and the rolling stock comprised three tubs.

LONDON NW1

H.I. EADIE

### **VISIT TO THE MARLAND LIGHT RAILWAY**

I only knew the North Devon Clay Co Ltd's system during its final decade, when diesels provided the motive power, so was especially pleased to read Mr Shepherd's account of a visit in steam'days.

The reference to the remains of a loco is interesting, but I would hazard a guess that it was a portable engine or 'locomobile' that was used for haulage in the mines until electricity was introduced in 1936. The siding leading



to the shed would have been to take coal in. Whilst the Lewin PETER remained for a few years as a stationary boiler I have no knowledge of other engines doing so.

Regarding the transfer of the Fletcher Jennings' water tanks to tenders my information is that these locos did not work on the 'main-line' to Torrington, and the weight reduction was to suit the track around the mines.

A small correction regarding the North Devon & Cornwall Junction Light Railway, the standard gauge line that supplanted the Torrington & Marland Railway. This was built by a separate company of the same name, not by the Southern Railway. The whole thing was proposed and engineered by Colonel Stephens, no less, and worked by the SR from completion until 1948 when the line became part of BR.

Readers may have been interested in the reference to the goods depot at Bury Moor. A condition for building this private railway was that it should convey local traffic and about 10% of the goods were public. I am hoping my history of this little known Devon narrow gauge line will be in print during 1981.

RHIWBINA, CARDIFF

M.J. MESSENGER

### LLYN COWLYD TRAMWAY

If I may amplify the comment by Colin Pealling in NG 90, I saw EIGIAU in service at Bethesda on 15th September, 1953, but on my next visit, on 5th September, 1955, it was standing immediately ahead of STANHOPE on the derelict line near the workshops.

MAIDSTONE, KENT

ARTHUR G. WELLS

The two photographs on page 28 of NG 90 were probably taken shortly after the completion of the railway in 1917 and before construction work commenced on the present Cowlyd dam. The dam just visible behind and to the right of the locomotive chimney is the original one constructed by the Water Board. The occasion would be the ceremony of cutting the first sod for the new dam, performed by the chairman of the Water Board and attended by members of the Board and representatives of the Aluminium Corporation.

EIGIAU was certainly named by 1921. One explanation given to me for the choice of name was that Eigiau was the Aluminium Corporation's own reservoir, whereas the Cowlyd reservoir remained in the ownership of the Water Board, although the Aluminium Corporation built the later dam and undertook to maintain it.

Finally the number of steel wagons supplied to the line was six—not four as stated in the original article, or five as in the subsequent letter. All were transferred to Llanberis.

OLD COLWYN, CLWYD

PHILIP HINDLEY

### PROPOSED RAILWAYS IN THE HEBRIDES

In the book *Lord of the Isles* by Nigel Nicolson (Weidenfeld & Nicolson, London, 1960) is a reference to the first proposal, by the Crofters' Commission in 1884, for a railway on the Isle of Lewis. The Hebrides Light Railway Co was formed to lay down 130 miles of 3ft gauge track in Skye and Lewis, but the project was abandoned. The scheme was revised again by Lord Leverhulme in 1920 and he marked the route that he required on a map. Three routes were to be followed: (1) Stornoway—Balallan—Aline—Tarbert. (2) Stornoway—Callanish—Carloway—Barvas—Stornoway. (3) a branch from Barvas northward to a group of small townships near the Butt of Lewis and to return down the east coast via Tolsta back to Stornoway. With the failure of Leverhulme's other grandiose schemes for the Islands the whole scheme was again abandoned, but in 1953 I was shown part of a cutting where work had been started. Can anyone comment further on these proposals?

TEIGNMOUTH, DEVON

ERNEST A. STEEL

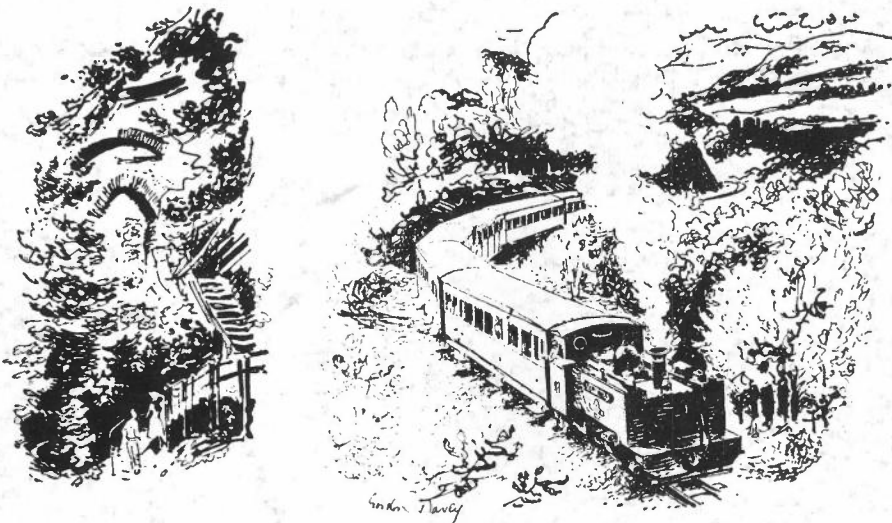
### 9" GAUGE MINIATURE RAILWAYS

In the booklet *Light & Miniature Railway Locomotives of Great Britain* a railway at Drusilla's Tea Cottage, at Berwick near Eastbourne was listed as having a gauge of 9in, and "... one steam loco, details unknown ...". The same description was repeated in *A.B.C. of Miniature Railways*, published by Ian Allan Ltd in 1960. Can any reader confirm that this really was a 9in gauge line, and not a misprint for the more usual 9½in gauge? Alternatively, has anyone got information on the locomotive mentioned, or, better still, a photograph?

The 9in gauge is an unusual one, and I know of only one line in private hands. This formerly had a 0-4-4 tank locomotive whose origin I would like to trace. Although I am wondering if this could have come from Drusilla's Tea Cottage, I simply do not know, so any help would be greatly appreciated.

MAIDSTONE, KENT

ARTHUR G. WELLS



# See the **Rheidol Valley**

No visit to Aberystwyth is complete without an excursion to Devil's Bridge. British Railways' only narrow-gauge passenger trains enable you to enjoy twelve miles of the most magnificent scenery from Aberystwyth to Devil's Bridge.

The waterfalls, immortalised by Wordsworth, have to be seen to be believed.

**DO NOT MISS THIS TRIP.**

## **Return Fare 6/-**

**BY ANY TRAIN — SECOND CLASS ONLY**

**20th May to 9th September 1961**

Children under three years of age free; Three and under fourteen years of age half fare. Tickets valid outward and return on date of issue.

**WESTERN REGION**

*Twenty years ago the Western Region of B.R. produced this leaflet to advertise the Vale of Rheidol line. The service was then one afternoon train on weekdays between 20th May and 8th July, three trains a day (two on Saturdays) from 10th July to 2nd September, and two a day from 4th to 9th September. Only one train ran on Sundays from 16th July to 3rd September. During the peak season in July and August an evening train ran on Wednesdays only, leaving Aberystwyth at 5.15 p.m. returning from Devil's Bridge at 7.10p.m.*

*(N.G.R.S. Library)*