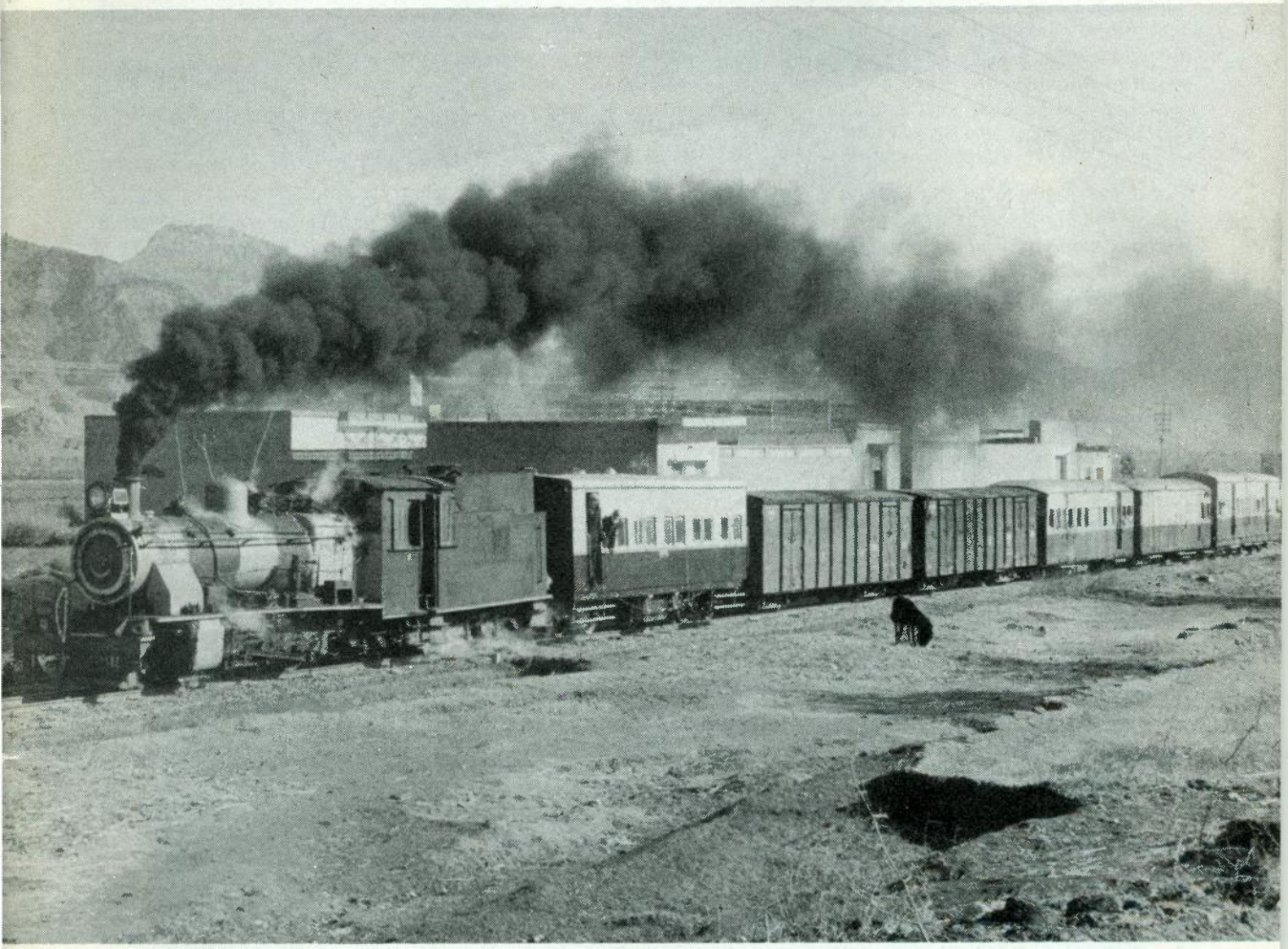
# THE NARROW GAUGE

No. 97



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 currently £6.00, due 1st April.

# THE NARROW GAUGE


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BACK NUMBER SALES : P.A. Salter, The Hole in the Wall, Bradley, Ashbourne, Derbys.
A. Neale, 7 Vinery Road, Leeds, LS4 2LB

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# CONTENTS


**No. 97 AUTUMN 1982**




*cover: Running three hours late, ZB 2-6-2 no. 208 lays down a plume of oil smoke to mark its passage with the daily train from Kohat to Thal in Pakistan.* *(D. Trevor Rowe)*

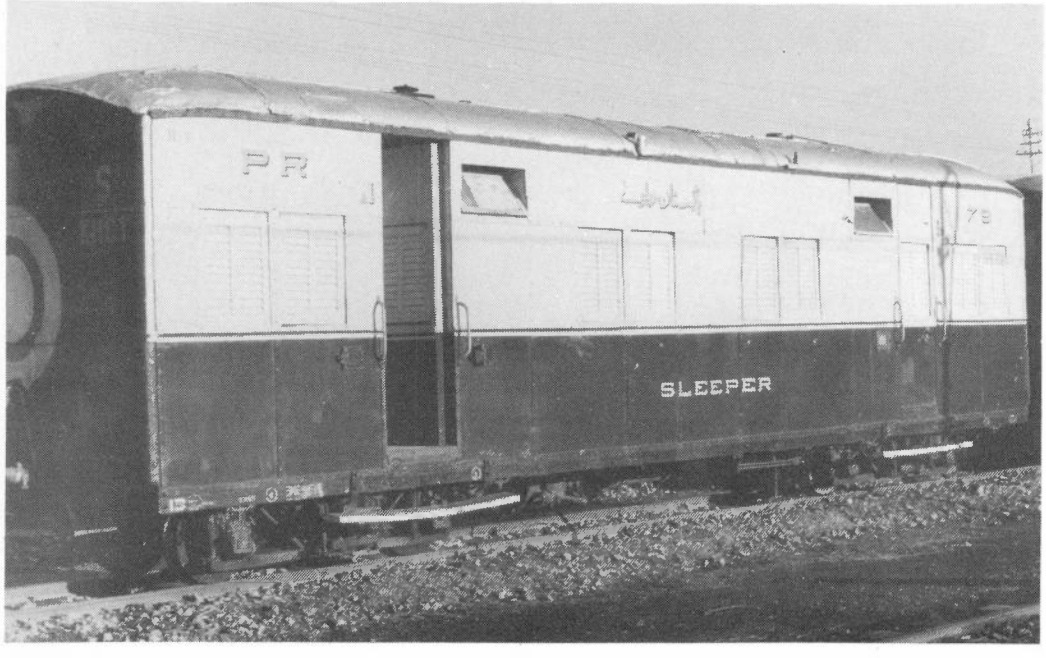
# ON THE 2FT 6IN GAUGE IN PAKISTAN

D. Trevor Rowe

The attractions of the sub-metric gauges in India are well publicised, but less is heard of the 2ft 6in gauge lines of Pakistan, all operated by the State Railways. It is true that the motive power consists of standard types which are also to be found in India, but none-the-less they are well worth a visit, which will no doubt also include the broad gauge 4-4-0s and 0-6-0s, the former certainly no longer to be found in India.

The three existing narrow gauge lines are all towards the north of the country, two being quite close together and within relatively easy reach of Peshawar, which any enthusiast will wish to visit for the famous Khyber Pass passenger working, on Fridays only. From Peshawar it takes about an hour and a half by road to Kohat, from where a 2ft 6in gauge line extends 100 km. up into the mountains to terminate at Thal. When built in 1902/3 this railway was somewhat longer, but the section from Khushalgarh to Kohat was converted to broad gauge in 1908. The crossing of the river Indus at Khushalgarh was originally by aerial ropeway (for freight only, one imagines) but after an accident in 1903 a ferry was used until a bridge was built and the broad gauge constructed in 1908.

There is quite an extensive depot at Kohat, with a large array of passenger stock for a line which boasts only one daily train, due to leave at 07.00 and return from Thal at 13.00. There is even a sleeping car, presumably not used for the daylight journey of only five hours duration! The locomotive depot has an allocation of seven ZB 2-6-2 tender engines, some of which are derelict, and the staff are sometimes hard pressed to find one in good enough condition to work the train. On my visit to the line in January 1982 No 208 was in steam, but long delays ensued because the fuel oil was frozen and as soon as this had been rectified, probably by the rising sun as much as by human effort, a mechanical fault developed causing the locomotive to return to the depot for attention. Departure was finally about 10.00, by which time conditions for photography had considerably improved. The railway is within reach of the road for most of the route and offers considerable scope for




*The incongruous Pakistan Railways "Sleeper" at Kohat.* *(D. Trevor Rowe)*

photography, climbing up around the mountainside to reach Thal, where the line continues beyond the station into the military fort, still very much in use. Thal is a wonderful place for local colour and characters, and a stroll along the main street should not be missed.

Not so far away geographically, or by minor roads, but quite an awkward journey if travelling by rail, is the system based on Mari Indus. The first section, of 142 Km to Bannu was opened in 1913, and later extensions were made from Laki Marwat junction to Tank (77km) in 1916, then from Tank onwards to Khirgi (app 40km) in 1921/22. Closure of the short Manzai-Khirgi section took place about 1928 but that from Tank to Manzai survived partition and closed about 1950. These extensions had been built for purely military purposes and at first had no public services, although by 1939 a thrice-weekly passenger train ran to Manzai. Another military line was built in 1920 from Tank to Dera Isnail Khan (68km) but, oddly enough, this was of 2ft gauge and only lasted until 1928.

Until a bridge was built over the river Indus in 1931 a wagon ferry was in use between the broad gauge railway terminus at Mari Indus and Kalabagh on the other bank. This bridge is a very long, narrow structure, with the railway laid in the centre of the carriageway, which makes for interesting crossings nowadays. There is barely room to pass an overladen lorry, and appears to be no control on traffic when a train is due, while the length of the bridge makes it difficult to see from one end to the other!

This is the only system on which all three classes of 2ft 6in gauge locomotive in Pakistan can be seen together. The oldest class is the G/GS 2-8-2, built by North British and Nasmyth Wilson between 1907 and 1921. The ZB 2-6-2s came from W.G. Bagnall and Hanomag between 1927 and 1932, and the ZE 2-8-2s from Hanomag in 1930. Altogether there are around forty locomotives on the three systems, but nowadays not all are in working order. Present day passenger services from Mari Indus consist of a daily passenger working to and from Bannu and a once weekly through train from Mari Indus to and from Tank. Wednesday morning is the time to be in Mari Indus, as the Tank train leaves at 7.40 followed at 9.45 by the Bannu working. I was lucky to see two departures on another day as a freight was working out before the daily passenger but I do not know if this is a regular

*The crew take the air outside the overheated cab of 2-8-2 no. 68 hauling a freight train from Mari Indus to Bannu.* *(D. Trevor Rowe)*


*ZE class 2-8-2 no. 234 pauses at Kamarmashani with a lengthy freight train on the line from Mari Indus.* *(D. Trevor Rowe)*

occurence. The trains are not difficult to chase by road and station shots offer plenty of local colour such as camels and so on. An out-and-back journey in a day is not possible, and reliance on the trains crossing as time-tabled is not very wise because of the three trains on the line which I visited it, two broke down and it is doubtful if they reached their destinations at all that same day!

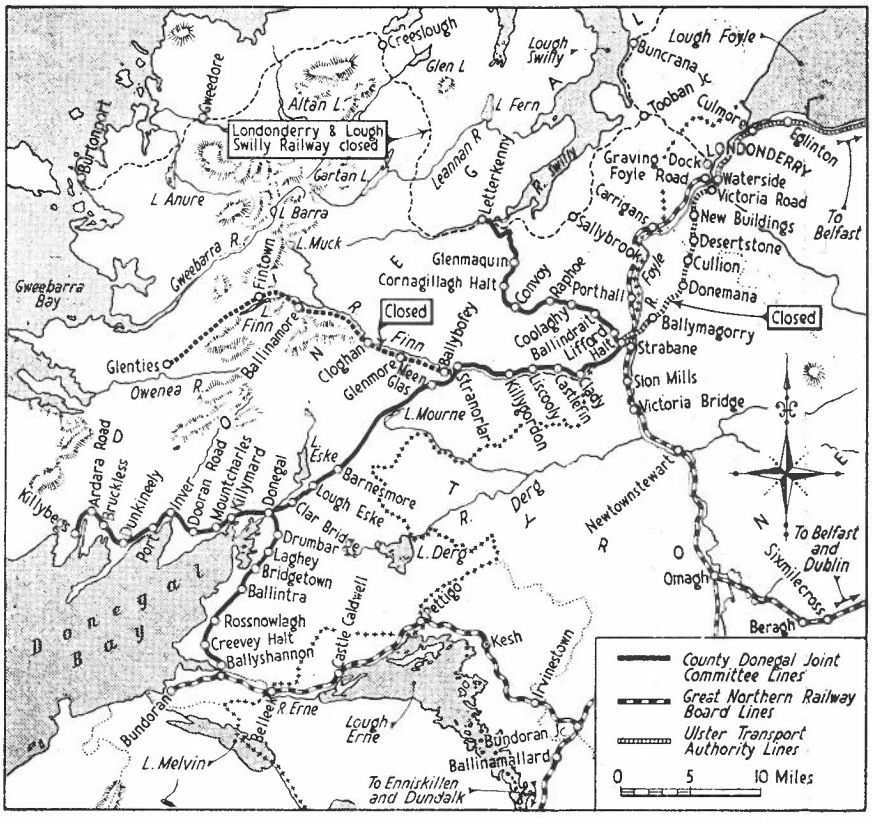
The final 2ft 6in gauge line is the longest, and extends 296km from Bostan to Zhob, formerly Fort Sandeman. Its first section was opened in 1921 and the railway completed in 1928. There is only one weekly passenger train advertised, leaving Bostan at 13.00 on Mondays and reaching Zhob at 8.35 the following morning. It then returns at 14.30 on Tuesday reaching Bostan at 10.05 on Wednesday! I have not visited this line, which is not far from Quetta.

One or two other lines of this gauge formerly existed in what is now Pakistan. Near Peshawar, Nowshera to Durgai was opened in 1901, and converted to broad gauge in 1921-2. Further south in the Jacobabad area two lines existed, Jacobabad to Kashmore, opened in 1914 and converted to broad gauge in 1956, and Larkana to Dodapur, opened 1922/23 and converted to broad gauge in 1940 when it was extended to reach Jacobabad. All of these railways were part of the North Western Railway of India until partition in 1947. For the record, the only other narrow gauge lines in Pakistan are the 2ft gauge Changa Manga Forestry Railway, recently described in *The Narrow Gauge* and the extensive metre gauge system, still entirely steam worked, based on Mirpur Kahs, near Hyderabad.

Thanks are due to Hugh Hughes for much of the historical information in this article.

# DONEGAL IN A DAY

E.K. Stretch




*Map from 1959 C.D.R.J.C. timetable (W.G.R.S. Library).*

Even a fairly rapid tour of some of the Irish railways in 1958 could hardly be undertaken without including the County Donegal Railway, especially for a narrow-gauge enthusiast. As the whole trip was to be crammed into five days, it was impossible to see everything I would have liked: on the narrow-gauge, the West Clare had to be sacrificed, because it was too difficult to reach in the time available—and after all, it had just been dieselised, so its future was fairly secure, or so I thought! On the other hand the Donegal was worth seeing, for it represented the Irish narrow-gauge at its best. Although the closure of the Ballyshannon branch had already been authorised, subject to the completion of road improvements, and rumours were circulating that the whole system would not last much longer, I doubt if anyone really thought that it would only survive for another eighteen months.

My first sight of the Donegal was its southern extremity. The previous day I had been on the Cavan & Leitrim Light Railway, (see *The Narrow Gauge,* No. 43, February 1967), and had then travelled on the evening main-line train from Dromod to Sligo, in an antique but comfortable wooden side-corridor coach sandwiched between two railcars. After spending the night in a Sligo hotel, I caught the 8.50 a.m. Great Northern Railway bus for Derry as far as Ballyshannon, passing at Bundoran the derelict Great Northern station. At Ballyshannon, there were nearly two hours to wait for the 12.00 train, but the first hour or so was pleasantly occupied in watching railcar 18 busily shunting vans and wagons, until finally it had made up its train of two or three vans, and an open wagon full of drainpipes.

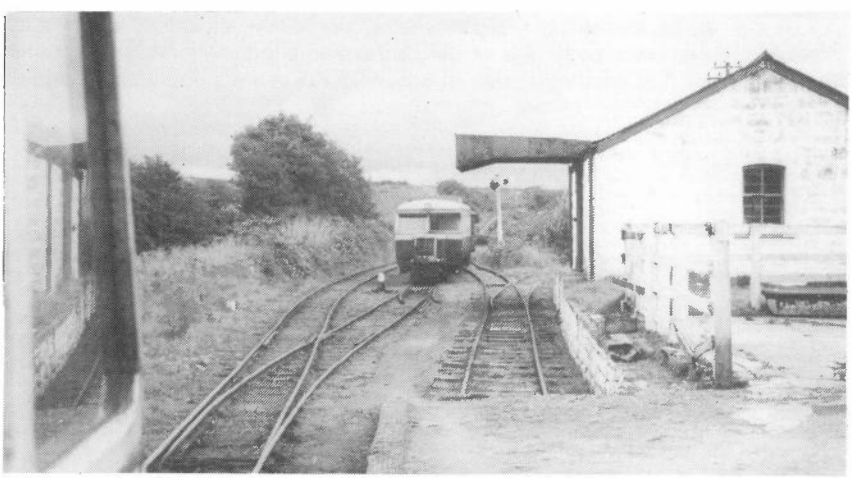
There were very few passengers from Ballyshannon, but we picked up quite a number on the way, and the railcar was fairly full by the time we reached Donegal fifty minutes later. We were held at the junction so that the railcar from Strabane to Killybegs (No. 15 with a couple of vans) could precede us into the platform. I was one of the very few passengers who transferred into it; as there was no connection in the Strabane direction, most of the rest must have been bound for shopping or business in Donegal itself. In any case, the bus which I had left at Ballyshannon provided a service to Donegal, and Stranorlar on its way to Derry via Raphoe.

Railcar 15 soon rattled off towards Killybegs. I was surprised at the rapid succession of steep gradients, mainly around 1 in 40, clearly visible from the railcar on a line which was never far from the sea; but of course it crossed various ridges (drumlins) extending towards the rather indented coastline. At one of the request stops, No. 18

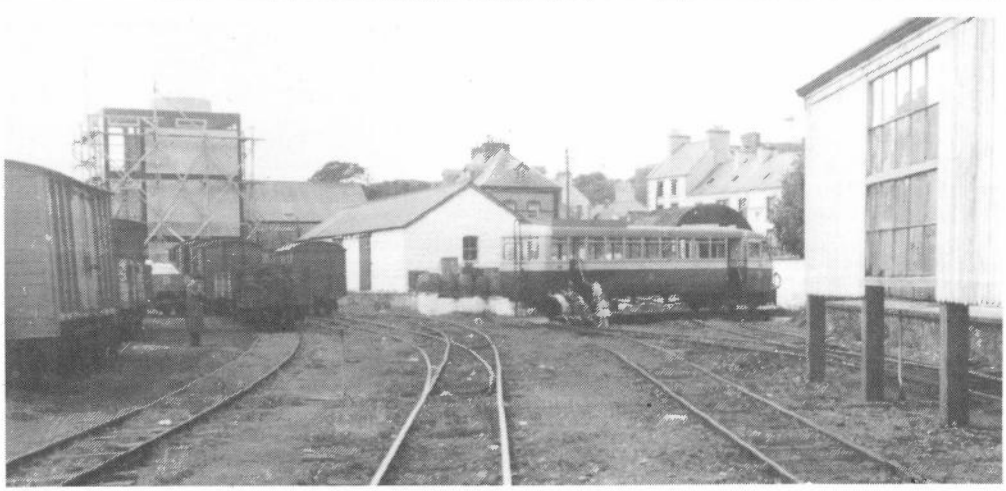
Gates, I think, the driver failed to notice a waiting passenger in time, and after a fierce brake application, had to set back some distance. At Inver, we set back yet again, this time into the siding in order to cross the approaching railcar from Killybegs.

Killybegs station, picturesquely situated right beside the sea, was all I ever saw of the town. The sidings certainly appeared busy; No. 15 dropped the vans it had brought, was turned on the turntable where it fitted with only a couple of inches to spare, (this turntable, by the way, was made from the main frame of a 4-6-0 tank engine) and then collected another van or two before returning to the platform just in time for its 2.30 p.m. departure for Strabane. On the eastward journey we again crossed at Inver, where railcar 12 had reversed into the siding to allow us to pass. There was little business at Donegal and we were soon off on the ten-mile climb up to the Barnesmore Gap. At Lough Eske we crossed the 2.20 from Strabane—a railcar and one passenger coach. I must confess that a brief period of warm sunshine combined with the soporific effect of clicking rail-joints lulled me to sleep near the top of the pass, despite the fine moorland scenery, and the next thing I remembered was the railcar clattering over the points at Stranorlar, where there was a fifteen-minute halt. I was soon brought fully awake by the sound of a steam locomotive whistle, and to my delight 2-6-4 tank DRUMBOE appeared with quite a lengthy goods train, the only steam I saw in action on the C.D.R.

There was nothing of great note along the level Finn Valley section to Strabane. The huge number of telephone



*Railcar 12, bound for Killybegs, waits in the siding at Inver until the route is clear. (E.K. Stretch)*



*The end of the line at Killybegs, showing railcar 12 being turned by the crew's young helpers. On the right is the platform and roof giving shelter from the winds off Donegal Bay. (M. Swift)*

wires on the poles alongside the line were a surprise at first, but the occasional plate bearing "P & T" in Gaelic lettering revealed that these belonged not to the railway but to the Department of Posts and Telegraphs. At Clady, the Republic of Ireland Customs showed little interest, and when we arrived at Strabane on time at 5.23 p.m., the U.K. Customs were even less interested. In fact no Customs officer was to be seen at all. The railcar had drawn up beyond the wooden barrier on the platform that constituted the Customs post, and after a few minutes the driver, remarking that the officer must have gone for his tea, opened the gate and let all his passengers through.

I was pleased to discover that the hotel at which I had booked was only a few minutes' walk from the station, which gave me time to return quickly to catch the 6.00 p.m. to Letterkenny and back, and thus complete my coverage of the Donegal. I doubt if anyone in the outside world, apart from railway enthusiasts, had ever heard of Strabane in those days before the present troubles, but it was quite a surprise to an innocent Englishman to note that policemen went around in pairs, with pistols in their belts.

Back at the station, there was time to photograph the odd little diesel shunter PHOENIX, which had been rebuilt from a Castelderg & Victoria Bridge Tramway geared steam locomotive, busily shunting an impressive collection of vans and wagons. I then joined one of the Donegal's newest railcars, 19, now, of course, on the Isle of Man Railway, which it has served longer than its original owner. The car was packed, but two or three passengers were spirited away by the Republic of Ireland Customs at Lifford, and did not rejoin the train! We crossed a down railcar at Raphoe, after a short wait, and so were a few minutes late into Letterkenny where we were due at 7.00 p.m. It was interesting to see that the Donegal now apparently used the former Lough Swilly Railway yard in addition to its own, by means of the connecting line between the two systems. The Lough Swilly yard, all that was left of that once extensive railway, was full of vans and wagons and obviously very busy, as was the

*A goods train from Strabane to Donegal enters Stranorlar behind 2-6-4T No. 5 DRUMBOE. (E.K. Stretch)*

*Railcar 19 forming the evening train the Letterkenny at Strabane. The fence on the platform is the Customs barrier. (E.K. Stretch)*

*The County Donegal station and goods yard at Letterkenny.* *(E.K. Stretch)*

*DRUMBOE simmers quietly at Castlefinn with a goods train bound for Letterkenny.* *(M. Swift)*

County Donegal's own smaller yard. The return journey, at 7.30 p.m. was uneventful, and the passengers few in number. Once again, the U.K. Customs, though actually on duty this time, showed little interest.

Next morning I caught the Great Northern's 10.25 a.m. express to Dublin: this was, of course, just a couple of months before the Great Northern, already operated by a joint board of the two gvoernments, ceased to exist and was divided between Coras Iompair Eireann and Ulster Transport Authority. Before catching this train I had time to photograph some of the quantity of steam-hauled coaching stock lying around the sidings, including the former Ballycastle, originally Ballymena & Larne boat train stock. My last sight of movement on the Donegal was the arrival of a crowded railcar No. 15, on the 7.30 a.m. from Killybegs. In a way, I had another sighting of the Donegal some six years later, when I saw, on the main road near Carrick-on-Sannon, a long way from Donegal, a lorry proudly lettered 'County Donegal Railways', and painted in the same red and cream livery as the railcars.

My general impressions of the C.D.R. were of an efficient and punctual system with an impressive level of goods traffic, and a frequency of passenger service rare in Ireland. Stations were neat and tidy and the layouts extensive, making all in all, a marked contrast to the casual shabbiness of the Cavan & Leitrim the day before. To one accustomed to the dreadful track of the French light railways, or the grass-grown irregular rails of the Isle of Man Railway a couple of years earlier, the Donegal track seemed quite good and it was difficult to believe the stories that arrears of maintenance were leading to imminent closure. But even if the Donegal had been satisfied with inferior standards, it could not have lasted much longer in any event because the anti-railway policies of the Northern Ireland Government led also to the closure of the former Great Northern line through Strabane only a few years later.

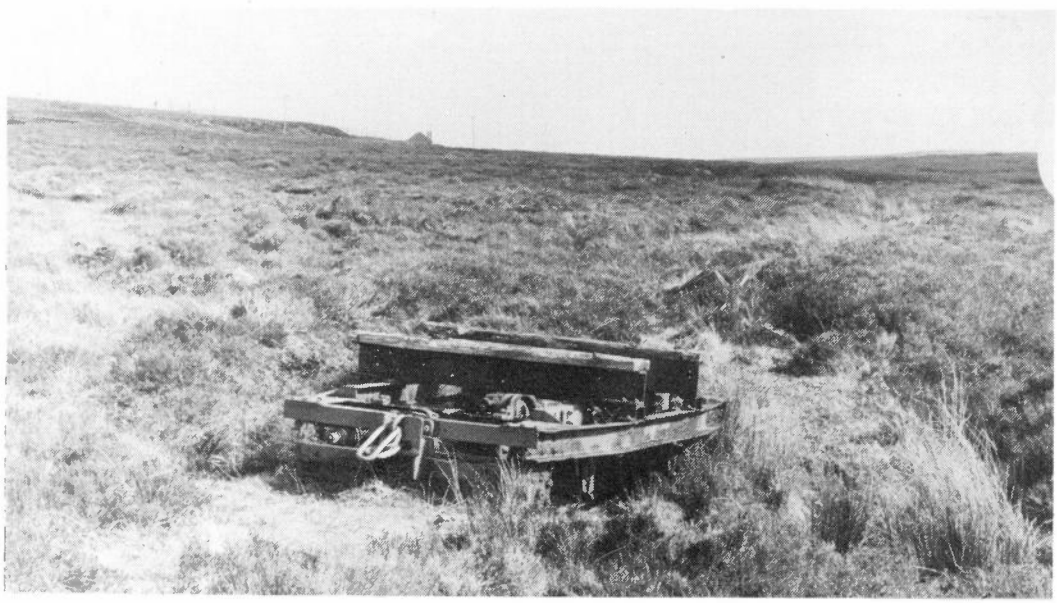
# HEBRIDEAN ADVENTURE

Ian B. Jolly

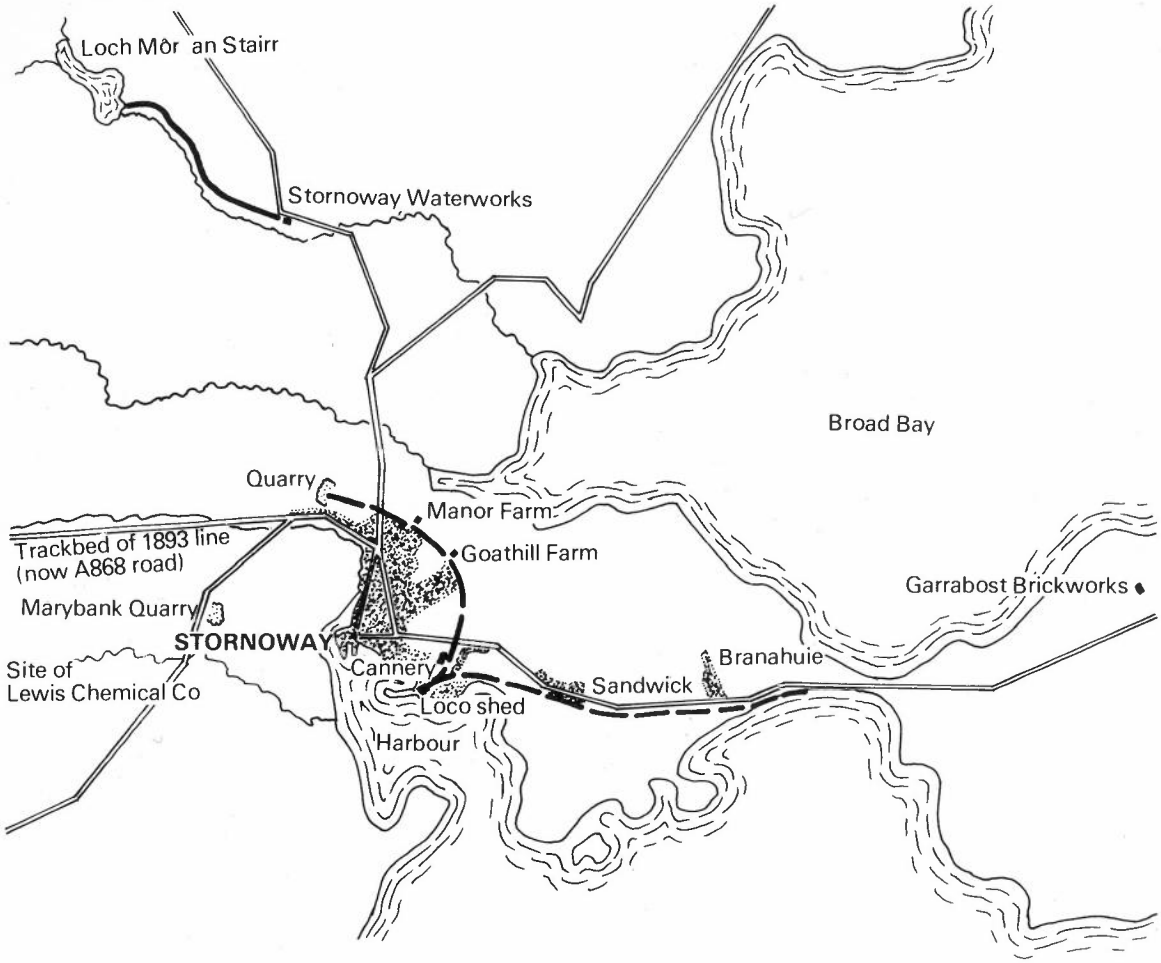
A chance remark to Brian Gent in March 1980 revealed his wish to visit New Pitsligo, some 40 miles north of Aberdeen, to see a disused Orenstein & Koppel petrol loco lying on a peatbog. I wished to visit Stornoway Waterworks to see the remains of their old Motor Rail, and we decided that the two locomotives were fairly close to each other— the odd couple of hundred miles didn't seem that far when viewed over our pints in a Hampshire pub! The trip was arranged for the Easter weekend in early April. Brian left Alton in Hampshire on the Wednesday evening and travelled to my home in North Wales. Leaving here at 10pm, we had until 9.15am the following morning for the 500 mile journey to Ullapool. With fine weather and quiet roads, by dawn we were leaving Inverness for the journey across the desolate wastes of Wester Ross to the west coast. Ullapool was still asleep when we arrived, but shortly before the boat arrived from Stornoway, it came to life. After the voyage of just over three hours, we were at last on the Isle of Lewis in the Outer Hebrides.

Our first port of call after arranging accommodation, was to the offices of COMHAIRLE NAN EILEAN (Western Isles Island Council), successor to Stornoway Town Council, and operator of the local waterworks. Here we were to meet Mr Douglas Young of the Council's Engineering Services Department, who supplied us with all the information the Council had. We were also directed to former employees who might be able to help. We then left to visit the waterworks situated some three miles north of Stornoway on either side of the A857 Barvas road. The covered reservoirs are to the east of the road, whilst the filter houses are to the west. The railway is marked on current maps as 'disused'.

Since the 1870s Stornoway's water supply had come from Loch Airigh na Lic, about two miles west of the town, but by the mid-1930s this was proving insufficient for the population of around 5000 which was swelled by four or five hundred herring drifters operating out of the port during the season. Loch Mor an Stairr, five miles north-west of the town, was chosen to augment the supply as it was free from pollution and some distance from public roads. The exit from the Loch was between peat banks some 65ft apart, and it was across this that a concrete dam, 92ft long, was constructed. Pipes led at different levels to a small valve house on the north bank of the outlet stream, and a 9inch main then connects to the filter houses beside the main road.

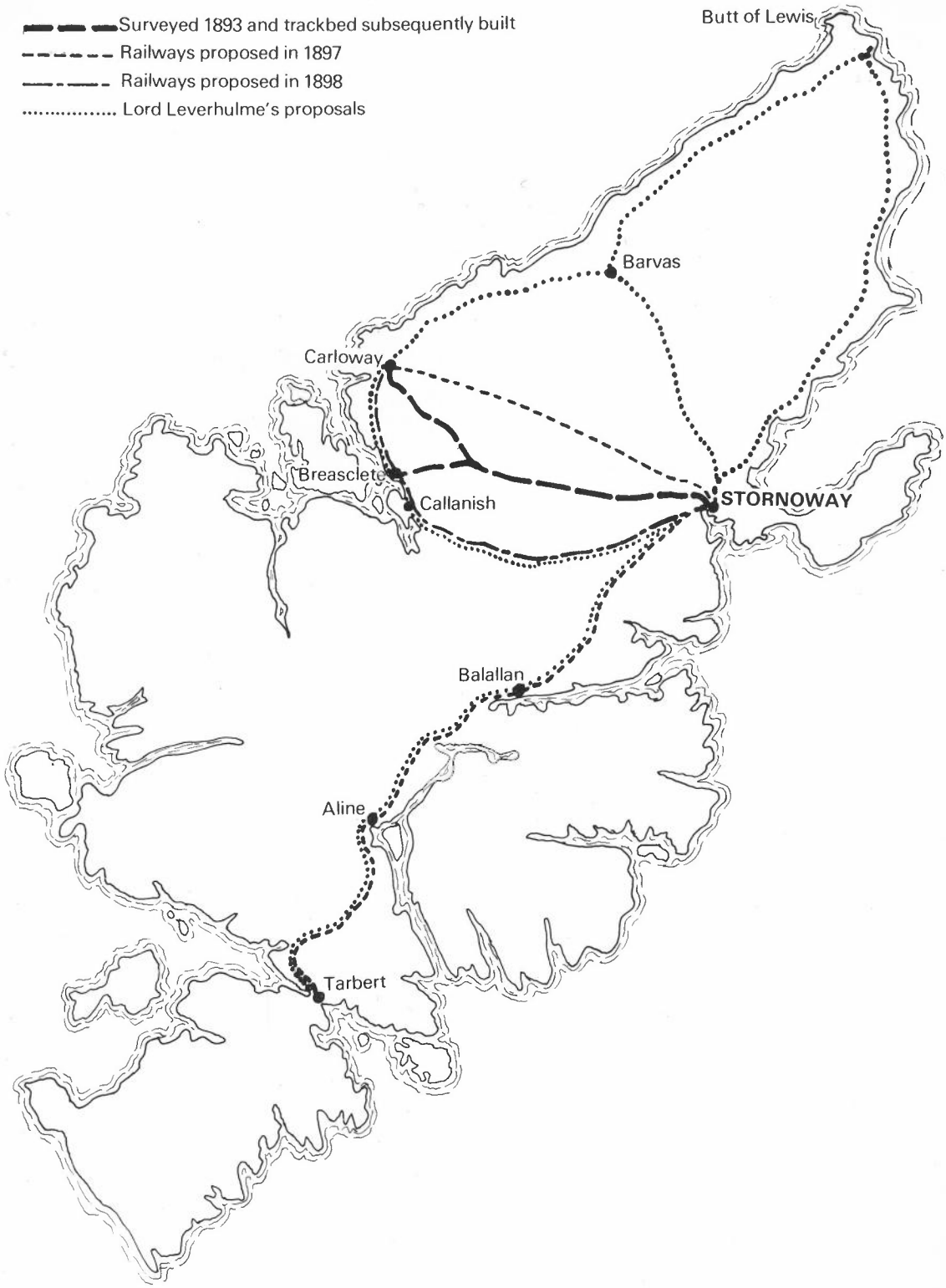


*The overgrown route of the Stornoway Waterworks line looking towards the filter house. In the foreground, the Motor Rail frame. The engine bearers have been fitted with timber baulks to carry a load.* *(Ian B. Jolly)*




The Contractor for the dam and pipeline was G. Mackay & Son, of Edinburgh, who started work on the dam in 1935. Their work was completed mid-1936 when the pipeline was connected direct to the town's mains – the filter house and covered reservoirs were completed within the next few years.

A locomotive-worked narrow gauge tramway was used by MacKay & Son to construct the dam. Rock was excavated and crushed in a small quarry east of the main road, across which it was transferred by lorry to the tramway terminus. Stone and other materials were then carried by rail to the site of the dam. The railway was left in situ and used by Stornoway Town Council for maintenance of the dam for many years. The loco, a 20 h.p. bow-framed model built by the Motor Rail & Tramcar Company of Bedford, was in use until at least 1940 when Mr Alex MacLeod, the fitter who maintained it, was called up for military service. By 1943 the engine had been removed and it had been reduced to a frame and wheels, in which form it is believed to have been in use, pushed by hand, until the early 1960's as the line's only item of rolling stock. The loco frame is now very delapidated and derailed about half a mile from the filter house. It was originally fitted with a Dorman 2JO two-cylinder petrol engine; not the later, but similar 2JOR engine. The axleboxes have 'W D 1918' cast on them, whilst the loco had been fitted with the narrow pattern of brake column. This suggests that it was built during late 1918 for the War Department Light Railways, but sold directly as Government Surplus. Motor Rail's records throw no light on its identity – the only locomotives credited to G. Mackay & Son of Edinburgh are two 40 h.p. 'protected' machines; LR3057 4wPM MR 1336/1918 and LR3088 4wPM MR 1367/1918. Both were in the service of MacKay by 21st June 1924. MR 1336 was later with Inns & Co Ltd, Moor Mill Pits, Colney St, Herts, and MR 1367 was with Thomson & Brown Bros Ltd, of Edinburgh by 16th February 1933. There is no mention of a 20 h.p. loco but MacKay was obviously no stranger to Motor Rail & Tramcar Company products.


Surveyed 1893 and trackbed subsequently built
Railways proposed in 1897
Railways proposed in 1898
Lord Leverhulme's proposals
Butt of Lewis
Barvas
Carloway
Breasclete
Callanish
STORNOWAY
Balallan
Aline
Tarbert

*above: Brian Gent follows the track towards the site of the Stornoway Waterworks loco shed. Note the point in the foreground. (Ian B. Jolly)*
*right: Remains of skip bodies and rails dumped near the filter house.*
*(Ian B. Jolly)*

Rolling stock on the line at the time of the dam construction consisted of nine one-cubic-yard skips, a mixture of side and end tippers. The derelict remains of several can be seen at the foot of the bank beneath the filter house, one being a single end tipper. The axle boxes are marked 'Du Croo & Brauns'—the Dutch firm of railway equipment suppliers.

Most of the track from the roadside terminus to just beyond the loco has been removed without authority—probably for fencing posts! However, the track layout can be traced because the turnouts have been left in place. These are rivetted to corrugated steel sleepers, whilst the remaining track is spiked to wooden sleepers or clipped to corrugated steel sleepers. The cross section of the rail varies, as does the weight—anything from 14lb to 20lb per yard. On the lengths of prefabricated track where the rails are tied accurately to gauge, three distinct gauges can be measured—2ft, 60cm (1ft 11.5/8in) and 1ft 11 ½in! The loco wheels are set to 60cm gauge. Earthworks, although evident, are slight and the track follows undulations in the land, but there is a rise of just over 25 feet from one end of the line to the other. The track terminates near the dam without so much as a buffer stop or siding. The remains of the loco and line will probably survive for many years to come, as scrapmen are unknown in the Outer Hebrides.

It is interesting to note that in a short article in *Civil Engineering,* May 1936, describing the construction of the dam, no mention is made of the railway: 'Except for the path which has been constructed in connection with the works, the only access is by walking over very rough moorland for at least half a mile. By the path which follows the outlet stream, it is about a mile and a half from the public road.' There is no evidence of a path today, the railway probably having built along its course.

We visited Stornoway Library but could find no further reference to the Waterworks, or its railway. However, with a great deal of help and study of the *Highland News, Stornoway Gazette* and other books, documents and maps some information was unearthed on other narrow gauge lines, proposed and actually built. This amplified the information in letters from Ernest A Steel (NG91) and Iain D.O. Frew (NG93).

So far as public lines are concerned, there seem to have been three main schemes. Ernest Steel mentions that the Crofter's Commission first proposed light railways in 1884. The Hebridean Light Railway Co was formed shortly afterwards to promote 130 miles of railway in Skye and Lewis, but the project was stillborn. (The gauge was not mentioned at this stage.) The book by Nigel Nicholson, *Lord of the Isles,* goes on to say (p.107): 'Lord Leverhulme revived the project (c1920), Chief Engineer B.P. Wall and Leverhulme marked out the courses. The main terminus to be Stornoway with three lines:-

1) South through Balallan to Aline with later extension to Tarbert.
2) West, then north to Callanish and Carloway and return to Stornoway via Barvas.
3) Branch north from Barvas to serve townships near the Butt of Lewis and return down the east coast through Tolsta to Stornoway.

Total track mileage to be about 100 miles. Gauge to be 3ft using WDLR rails now being sold as surplus. Lines to be steam worked but Leverhulme wanted electric working! On p.111 is a mention of McAlpine using light railways to convey materials from a quarry at foot of the hill where the War Memorial now stands.

*Highlands and Islands of Scotland* by O'Dell and Walton, (Thos Nelson & Sons) includes a map showing projected railways in 1897 and 1898, but states that with the exception of a mineral tramway used to work chromite deposits on Unst, the most northerly of the Shetlands, railways failed to reach the islands. Mention is also made of the last group of schemes promulgated during the First World War for light railways in Skye and Lewis, but records that the proposals were not implemented.

Despite the publication of this apparently authoritative information I am not sure that it is absolutely accurate. When in Stornoway I was shown a diagram: 'Trial Sections Stornoway to Carloway' dated April 1890, and also a very long survey by Alex MacDonald—Engineer, dated 1st June 1893, for a line to Stornoway to Breasclete and Carloway. The trackbed of this line was constructed and, for the first two or three miles out of Stornoway now forms the A858 road, while the rest of the route is an unclassified road to Breasclete. There was no indication on this survey, (which was discovered in a dustbin in Edinburgh and not associated with a collection of papers as far as is known), as to whom MacDonald served as engineer. Obviously the early schemes were not quite stillborn.

The schemes reportedly planned during the First World War did, I believe, come a year or two later. There was a meeting at Staffin, in the north-east of Skye, in April 1919 when representations were made to the Secretary of State, Ministry of Transport and the Highland Reconstruction Committee: 'It is felt that all the difficulties of transport can be overcome by a system of Light Railways running on the east side of the Island'. There was a similar meeting at Uig, also on Skye, in September 1920 when representations were made to the Ministry of Transport for a light railway connecting Uig to Kyleakin via Portree. Both these meetings were reported in the local press at the time. In the *Highland News,* 17 May 1919, Lord Leverhulme is quoted as saying that the new harbour at Stornoway should come before the light railway.

However, a 3ft gauge steam operated line was in use at this time at Stornoway, and many traces can still be seen. First reference appears in the *Highland News,* 15/5/1919, when a letter to the Council is reported as having been received from Sir Robert MacAlpine & Son 'intimating that they wish to lay a light railway from Manor Farm to Goathill Road. It will be necessary to cross public roads at 3 different places. Sir Robert MacAlpine wish to erect gates and fences—the committee agreed to grant permission'. In June 1919, MacAlpine applied for permission to lay a 1in watermain at Manor Farm to supply water to engines—Agreed, charge to be £5 per annum'. The railway was still in use in May 1920 as Major Bostock, Resident Engineer of the Lewis & Harris Welfare Development Company, requested permission to lay and use for transport of materials, level crossings with 3ft gauge rails across public roads (i) by the Established Church Manse, (ii) near Battery Park, Stornoway Crossings were already in use at Manor Farm and Goathill.

The line was some five miles long and was used for the construction of Leverhulme's Cannery, from where it ran northwards past Goathill and Manor Farm (Coulregrein), where there was a watering point, to the Town Council's Dormitory Quarry beneath the War Memorial. This line ran around the then outskirts of the town and much has been built over. Another line ran south from the cannery to the locomotive shed (also now built over). From here another line ran eastwards across the field to Sandwick, then for 2½/3 miles beside the A866 to the beach at Branahuie. The evenly graded trackbed is very distinct alongside the undulating road on this section. A shallow cutting can also be seen on the northern line. John Murdo MacIver, a recently retired employee of the Western Isles Island Council kindly showed us around the remains of these lines. John remembered as a youngster watching the little steam locos and sneaking rides on the wagons whilst no-one was watching. At least two steam locos were used on the contract by MacAlpines, one of the drivers being a Mr Mould from Great Yarmouth—his son still lives locally.

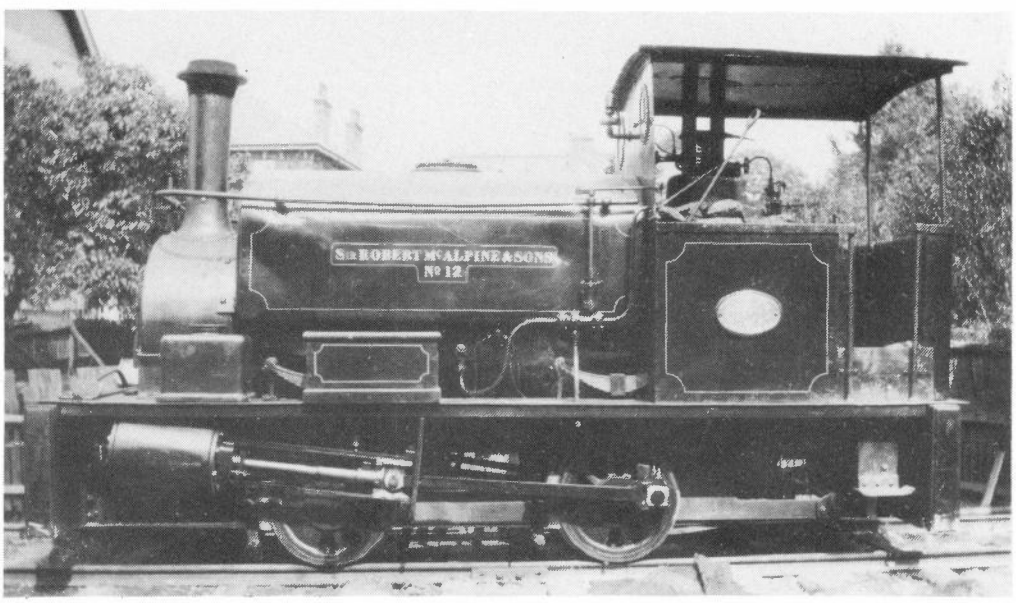
The cannery was completed in late 1921 or early 1922, and at the end of May, 1922 *Contract Journal* carried an

advertisement: 'For sale—railway track and plant inc. two 3ft gauge locos Hudswell Clarke 9 × 15, built 1901 and 1913, and 59 wagons 3ft gauge, 34 wagons 2ft gauge—plant will be handed over to purchasers FAS (free aboard ship) Glasgow—Lewis & Harris Welfare & Development Co., Bebington, Nr. Birkenhead'. Only two locomotives fit this description: Hudswell Clarke 597/1901 was delivered new to the Newcastle & Gateshead Water Co, and was later used by McAlpine on the Motherwell Corporation Culter Waterworks contract between 1903 and 1906. Its later history is not known for certain. The later machine, Hudswell Clarke 1037/1913, was supplied to McAlpine for work on the Pontstycil reservoir between 1913 and 1917. It was subsequently used on the Maentwrog Hydro-Electric reservoir contract, near Ffestiniog, from 1924-28, and must therefore have been retained by McAlpine.

There appear to have been three other industrial railways in Lewis. Iain D.A. Frew referred to the horse-worked system on the outskirts of Stornoway. This served the factory of the Lewis Chemical Co, promoted in the late nineteenth century to extract paraffin-oil from peat by a patent process. Garrabost Brickworks, (about 8 miles east of Stornoway) is reputed to have had a short line. The brickworks is shown on the 1852 6in map but no railway, and the 1897 edition shows the works as 'disused claypit'. We were also told of Marybank Quarry, west of Stornoway, where there was a hand worked line from the rockface about 100 yards to the crusher. The quarry was operated in the few years before the last war by William Tawse of Aberdeen.

Only a day and a half was spent on the Isle, and we concluded that a week should have been allowed! We left by the 5.30 a.m. ferry on Saturday, and sailed back to the mainland in brilliant sunshine, clear skies and snow-capped mountains on the mainland. We were soon driving to New Pitsligo, a few miles south of Fraserburgh, then on our way homewards called at the Alford Valley Railway where members Alan Sangster and James Gordon were hard at work. We were also able to walk the trackbed of the Dalmunzie Hotel Railway, the 2ft 6in 'grouse' railway lifted two years before, and so south from peatbog to peatbog eventually ending up at Carlisle.

I would like to record our thanks to Mr Douglas Young of Western Isles Island Council, Mr John Murdo MacIver and Mr Alex MacLeod, both formerly employed on the Waterworks railway, the Librarian and staff of Stornoway Library and all the other residents of Stornoway who assisted us and made our stay so enjoyable. Frank Jux provided the sale note from *Contract Journal*. Island railways appear to be a largely unexplored field. I have come across brief references in non-railway books of lines on Raasay (Skye), Mull, Easdale, Flannan Isles, Lundy and Skokholm, also a few notes in NGRS and Industrial Railway Society publications. I would be interested to receive any other details readers may have.




*Sir Robert McAlpine & Sons No. 12, one of the two Hudswell Clarke locos (1037/1913) used on the Stornoway cannery construction contract.* *(collection J.A. Peden)*

# LOCOMOTIVES AT SOUTHAM CEMENT WORKS

R.D. Darvill

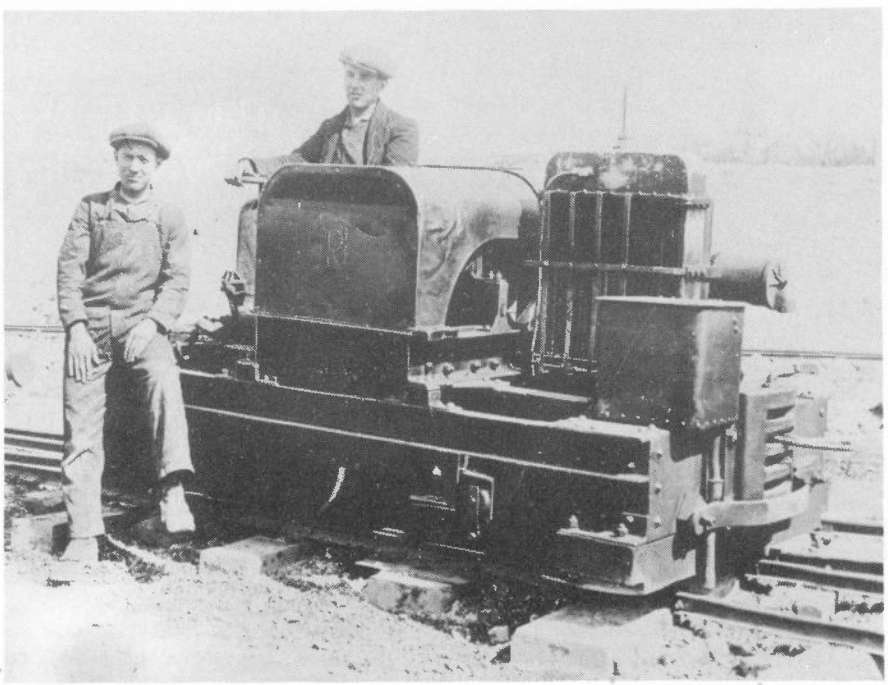
An article in my local paper *The Rugby Advertiser* recently brought to light three previously unpublished photographs—they were found in the archives of Southam Grammar School, and depict locomotives on the 1ft 11½in gauge quarry system at the Cement Works of Kaye & Co. Ltd. Southam (Rugby Portland Cement Co. Ltd. from 1934). On the reverse of one of the original photographs was a note that the loco was the 'new arrival', and a close inspection of the worksplate reveals that the works number of the loco is 1632—this was delivered new in 1924, and almost certainly all three photos were taken at the same time.

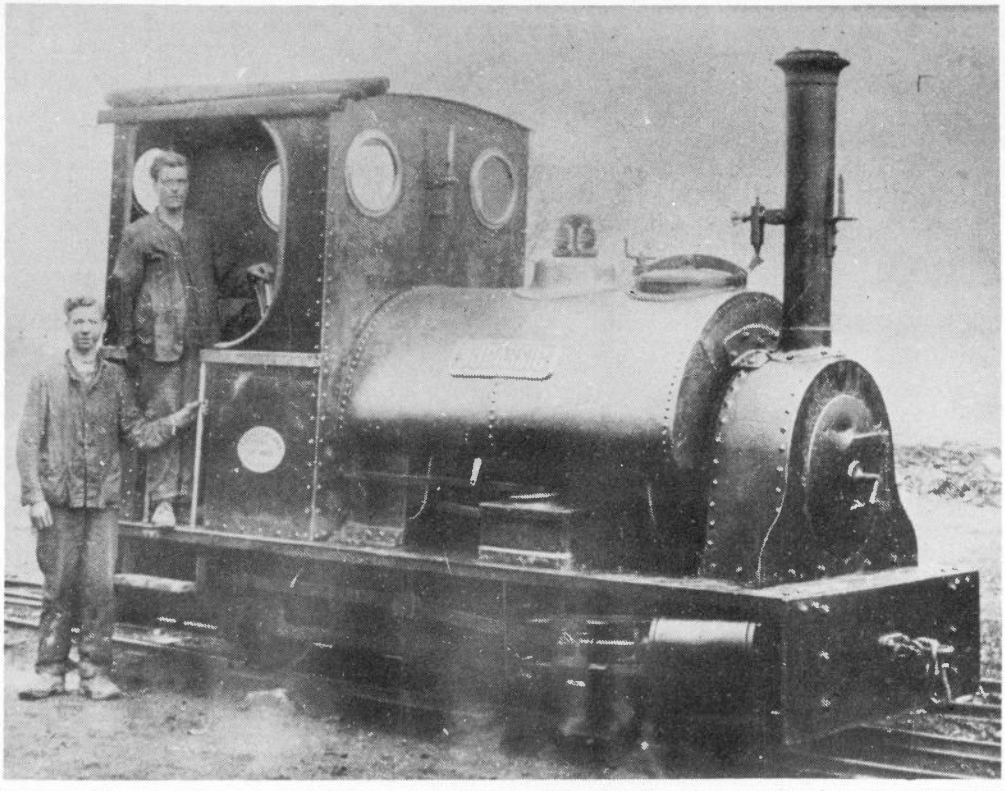
The two steam locomotives are of the JURASSIC class built by Peckett & Sons Ltd, of Bristol, and were a design specially built for Kaye's Southam Works; having 7in by 10in cylinders with a wheelbase of only 6ft 6in. Strange to relate the photographs show the first and last of the class. The first example was JURASSIC—works number 1008, which was delivered in 1903 and in fact worked at Southam until the quarry went over to road transport on the 20th October, 1956. It remained in store at the works until June 1961 when it was purchased by the Lincolnshire Coast Light Ralway, Humberston, nr. Cleethorpes, where it still remains today.

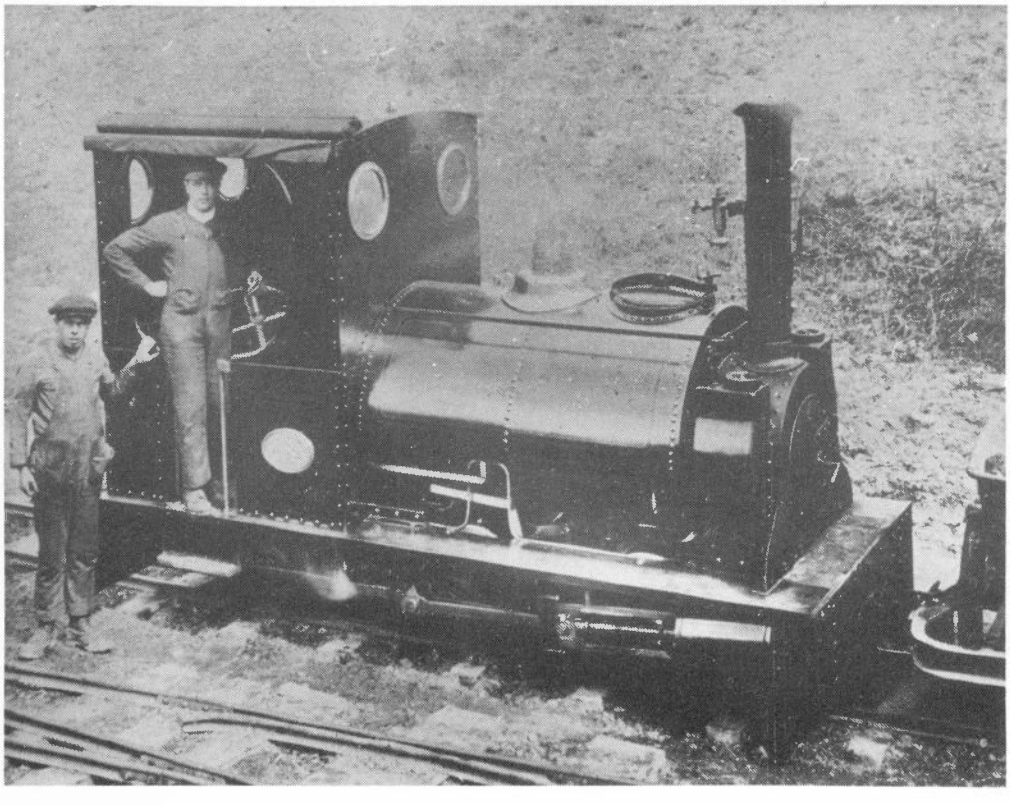
The last of this class was delivered in 1923—works number 1632, and as can be seen from the photograph it is still in ex-works condition. One interesting point is the movement of the sand boxes from the running plate to the side of the smoke box, but apart from that very little alteration was made to the original design. Peckett 1632 did not carry a name for many years, but in 1943 after another member of this class was scrapped (P 1216/09) its name LIASSIC was transferred to it. This also worked at Southam until superseded by road transport, then, in June 1959 it was purchased by C.H. Lamb, of Bromsgrove; and in July 1959 was exported to Canada.

The final photograph shows an early post-war design of 20 h.p. Motor Rail locomotive, and, if as suspected the photo was taken about 1923, the loco is almost certainly Motor Rail 1908 which was delivered new to Southam on 9th March 1920. It was fitted with a 20 h.p. Dorman petrol engine (number 8685), weighed 3 tons 16 cwts in full working order and according to Motor Rail records was built to 24in gauge. The official gauge at Southam was 23½in, but I would imagine the difference of ½in would soon be taken up if the trackwork was of the normal quarry standard. Originally costing £700, the loco was consigned by rail to Southam & Long Itchington Station, and again survived until the end of the quarry system. However, it was scrapped soon after.

My thanks must go to David Knapp of Southam Grammar School for the supply of the original photographs.







# MORE RAILS OF THE RIVERBANK

**Morris F. Portsmouth**

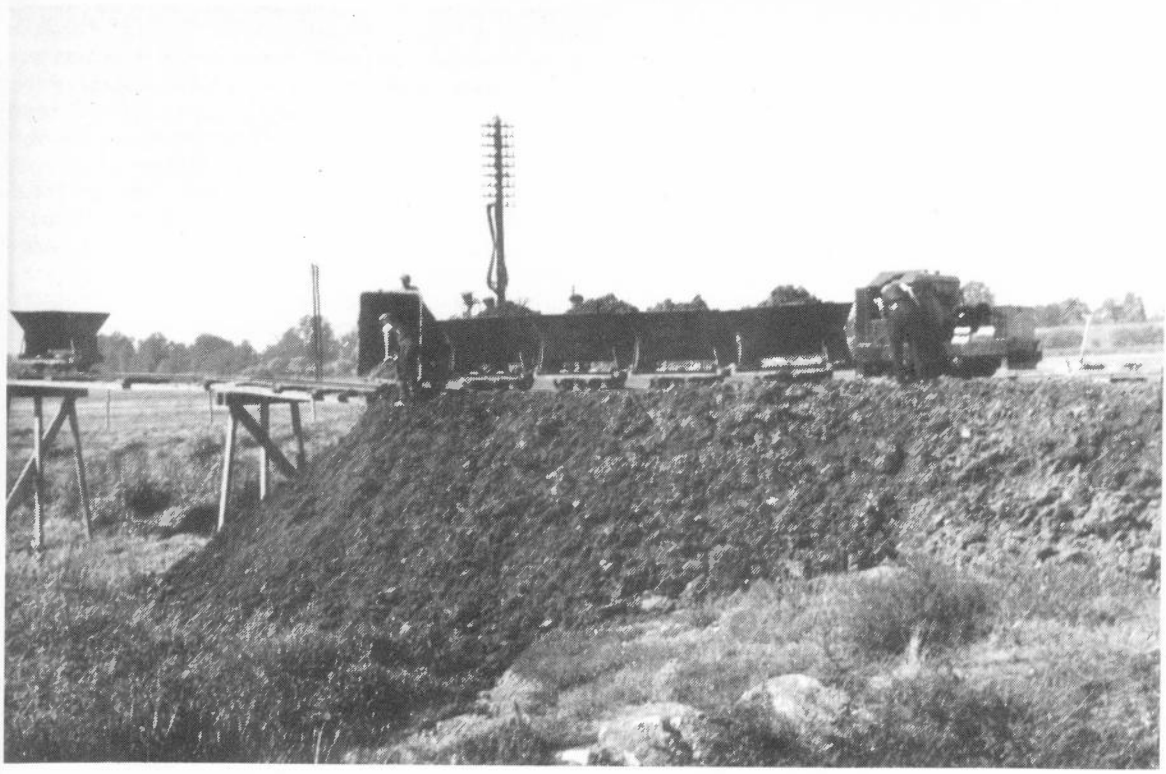
It is a fact that no sooner has an article been committed to print than material which would have enhanced the original text is unearthed. Most of these photographs predate those accompanying my original article in NG90, and are thus of special interest.

Below is a scene of work in progress at Llandrinio in 1934, before the River Severn Catchment Board bought its first locomotive. A relatively modern dragline excavator is being used, and some spoil is deposited on the lorry in the background. However, four tip wagons are being loaded to be hauled away by a horse—perhaps hired from a local farmer.

The top picture on the opposite page is of poor quality, but shows back-filling on the old channel of the River Tern at Duncot in February 1935. This too, was before the Board's first locomotive arrived, but the tip wagons are hauled by a Motor Rail 'Simplex' locomotive, presumably on hire.

The lower picture, again not perfectly sharp, illustrates the use of a temporary trestle (of flimsy proportions) to serve as a head-shunt for empty wagons when forming embankments. A Ruston locomotive is in charge of the train.

Andrew Neale has mentioned that the Ruston (170191/1934) recorded as purchased from C. Jones Ltd was delivered new to the Bletchingley Sand Pits, near Redhill, Surrey of Town Farm Sand Pits Ltd (later Ham River Grit Co. Ltd.) It was sold by this company at an unknown date. He suggests that the seller was actually T.C. Jones Ltd, Wood Lane, London, plant dealers and a subsidiary of George Cohen, who handled a number of locomotives during the last war.

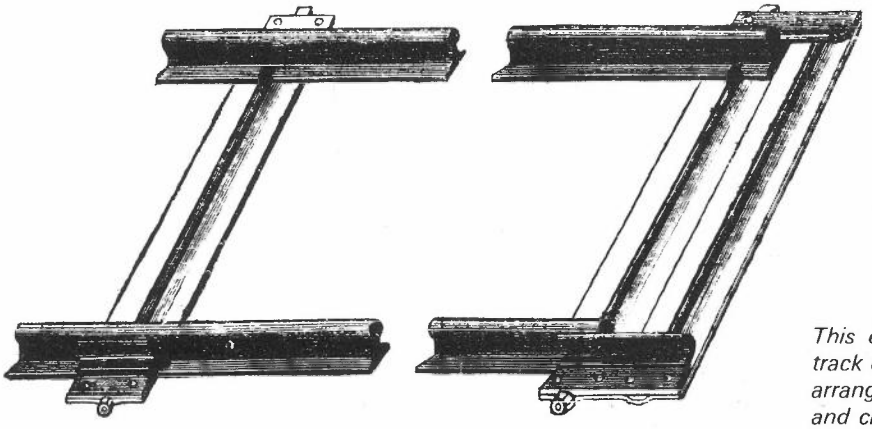


# PORTABLE RAILWAYS— JOHN FOWLER'S IMPROVEMENTS

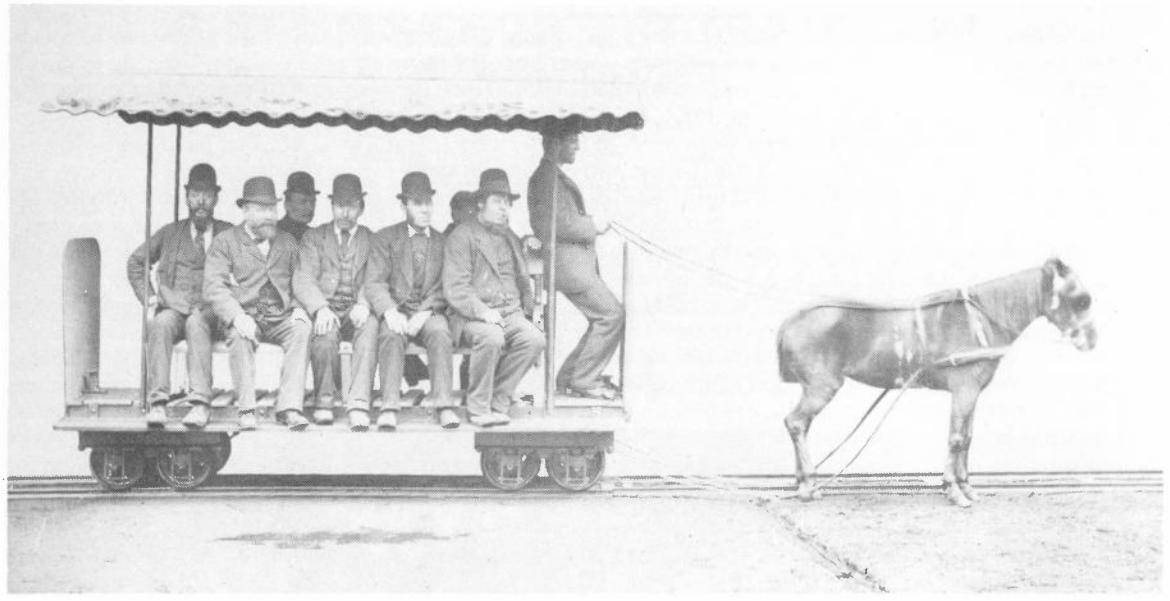
*Iron* was one of the leading technical journals of the mid-Victorian era, and featured developments in rail transport prominently. Reporters from *Iron* seem to have delighted in the unusual, and its columns are a fruitful source of information, always interesting, and often amusing. This item—unearthed by Ken Plant—is simply factual but further demonstrates John Fowler & Co's enterprise in agricultural mechanisation.

Paul Decauville, keenly interested in agriculture, became an early customer for Fowler's steam ploughs and later took out a licence to manufacture certain implements at his Petit-Bourg works. He had exhibited his portable railway at the Smithfield Show in 1877 and the following year John Fowler & Co obtained a licence to supply Decauville railways from the Steam Plough Works, Leeds. Alfred Greig, son of David Greig whose world tour was described in NG 92, was given charge of the new railway department, improved Decauville's system, and was granted patent No. 1189 in 1879. The new system was demonstrated in July 1879, at Stafford House, the London home of the Duke of Sutherland, well known for his keen interest in narrow gauge railways and agriculture, and of course a close friend of Fowler's management.

It was these trials that *Iron* reported: "During the afternoons of Wednesday and Thursday last a series of experiments were made with a light portable railway in the gardens of Stafford House by permission of the Duke of Sutherland. The system is that of M. Decauville which has been improved in many of its details by Messrs. John Fowler & Co., of Leeds. One of the most important items in the management of large agricultural undertakings is the cost and facility of transport. During harvest time, especially when dealing with heavy crops, it becomes more and more essential to secure ready means for carrying large quantities for short distances at the cheapest possible rate, and to save animal and manual labour as much as possible. This is especially the case in connection with steam cultivation, which has provided the farmer with the means of dispensing with animal labour as regards the heaviest work hitherto performed by horses or cattle. This consideration chiefly induced Messrs. John Fowler & Co. to take up and further develop the Decauville system. The success of portable railways depends, (1) On the weight of all the pieces, including waggons, being kept within such a limit that each piece can be removed by men without the aid of any mechanical appliance. (2) On each piece being complete in itself without any loose bolts, or spikes, or fishplates. The portable railway is based upon the principle of distributing loads upon a great number of axles. The goods to be carried are in most cases distributed in portions of 5cwt to 10 cwt on each small waggon with two axles. If the load to be carried cannot be distributed, it is put on two waggons with a swivelling fork, each waggon having two or more axles. The most important advantage of this new railway is that the rails are rigidly fastened to the sleepers and joint-plates, thus the line can be laid down anywhere, taken away, and re-laid with great expedition and without the employment of skilled labour. It is constructed in different lengths, according to the weight of rail used. Steel rails, 10lb, 14lb, and 18lb per lineal yard, are made especially for this system. Iron rails have been found not to answer, from their bending under the action of a load when laid on uneven ground. The *16in and 20in gauge railways are the most rigid, and the most portable. A couple of men, by placing themselves between the rails can carry a length, the weight of which does not exceed



*This engraving of the track clearly shows the arrangement of chairs and clutch bolt fastening.*



*Steam Plough Works staff demonstrate a knifeboard coach for use on the new portable railway. This picture was taken at Leeds, probably around 1879, and shows rolling marks on the rails "Barrow Steel Co. 1878 (?) 430 John Fowler & Co".*
*(Museum of English Rural Life, Reading, courtesy J.M. Kimber)*

1 ½ cwt. The 24in gauge railway is more difficult to carry, and is only adopted for very cumbersome merchandise, where width is required, or in places where they rarely have to be taken up.

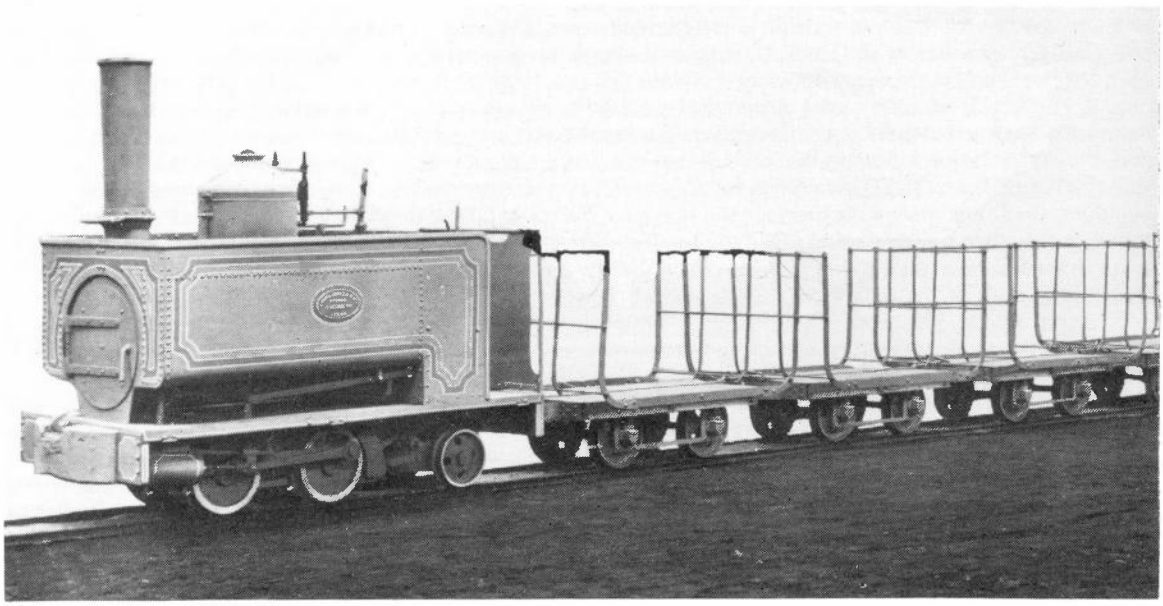
"The rails are fastened to sleepers or ties, between 3ft and 4ft apart, made of corrugated steel; the corrugation in the sleepers prevents their bending when trodden upon, and at the same time permits the line to lie close to the ground. Great solidity and stability are thus obtained, the line bearing on the ground the whole length of the rail bottom as well as on the cross-pieces; it does not sink even when the ground is too wet for horses to pass over it. Each rail is secured to the sleeper thus: a steel chair is riveted to the sleeper, this chair fitting over the flange and against the outside of the rail, while a hooked bolt is passed through the corrugation of the sleeper, under the rails, the hook holding the inside flange of the rail, and pressing it firmly against the chair. This fastening allows of the rails and sleepers of a line for shipment being sent separately, thus effecting a considerable saving in freight. On arrival at their destination, the rails have merely to be laid upon the sleepers against the chairs, and the bolts tightened up, care being taken to keep the ends square. Each section of line is provided at one end with a corrugated sleeper and a chair, 4in of which project beyond the end of the rails, and the joint is made by slipping the ends of the next section of rail under the chair on this projecting sleeper, which holds it firmly in position. It may also be further secured by a similar bolt to that used to fasten the intermediate sleepers. In addition to the straight portions of these portable railways being made in readily transportable pieces, standard sections of curves of various radii are also provided, and are made to connect in the same manner as the straight parts of the lines. Standard forms of level crossings, switches, turntables, &c., and all the other necessary parts of a permanent way are constructed on the same system. Special waggons for use on this railway have been designed to suit different classes of merchandise or produce. All waggons are constructed of iron, with steel axles, and are of strong and simple design. To obviate the difficulty which is always experienced in preventing waggons of a narrow gauge leaving the track when unevenly laid, there is a special arrangement of springs. The play which they allow the axles permits of all the wheels resting on the rails at the same time, however uneven the line may be, and thus renders it impossible for the waggons to run off the line.

*Although given in the report as 16in, closely approximating to the 400 mm gauge of Decauville's early equipment, Fowler portable railways were usually described as 18in, 20in or 24in gauge. This may therefore be an error for 18in.

"The railway is perfectly portable, since it can be taken up and laid down without the help of any tool whatever. To give an idea of the facility of these operations where frequent removals are necessary—that is to say, in clearing land of beetroot or sugar cane, &c.—it is stated that four men can take up 400 yards of railway and relay them 30 yards further on in less than an hour. It is also urged as an additional recommendation to the new railway, that it is not merely suitable for being worked by steam power on a level, but that on steep inclines, or when steam-power is not readily attainable, horses and camels can easily supply the necessary motive power. It is stated that on such a line a camel could haul a load of about 5 tons, whereas it can only carry about 350 lb. The railway is meant not only for agricultural, but also for military purposes, and in India especially it is supposed it will be particularly useful. The experiments made successfully demonstrated the above points. Heavy weights were easily drawn over the line by a small locomotive, and also by a donkey, illustrating its applicability for agricultural purposes. Its usefulness as an auxiliary in military operations was fully proved on the second day by the transport of a 40-pounder Armstrong breech-loading gun over the line on two small carriages, with its limber packed up on a third. In the course of the experiments a breakdown occured with the gun which, with its carriage, weighed 3½ tons. As the little waggon which supported the gun immediately under the axle of its carriage was only calculated to carry 1½ tons, this contingency was not to be wondered at. The broken waggon, however, was quickly removed, the gun raised on to another, and the experiments proceeded with to the end. Several Government officials, military officers, and the representatives of foreign Governments, were present during the trials, which proved as satisfactory as they were interesting.

"The portable railways above described are adapted for use either as tramways or—in the case of the heavier patterns—as locomotive worked lines. For use under the latter circumstances special types of locomotives are constructed, these being of moderate weight and adapted for traversing sharp curves.

"In cases where the lines are really portable and laid down for a temporary purpose, animal haulage is no doubt most suitable, and will be most commonly employed, but special circumstances sometimes arise which render the employment of locomotives advisable on even strictly portable lines. Such an instance will be the case where a tract of country which is unhealthy for horses or other animals has to be traversed, or where the difficulties in procuring a supply of fodder are greater than those of obtaining fuel. The various advantages of the systems, both in an agricultural and a military point of view, were fully demonstrated at the Stafford House trials, and indicated to the authorities present the value of the invention."



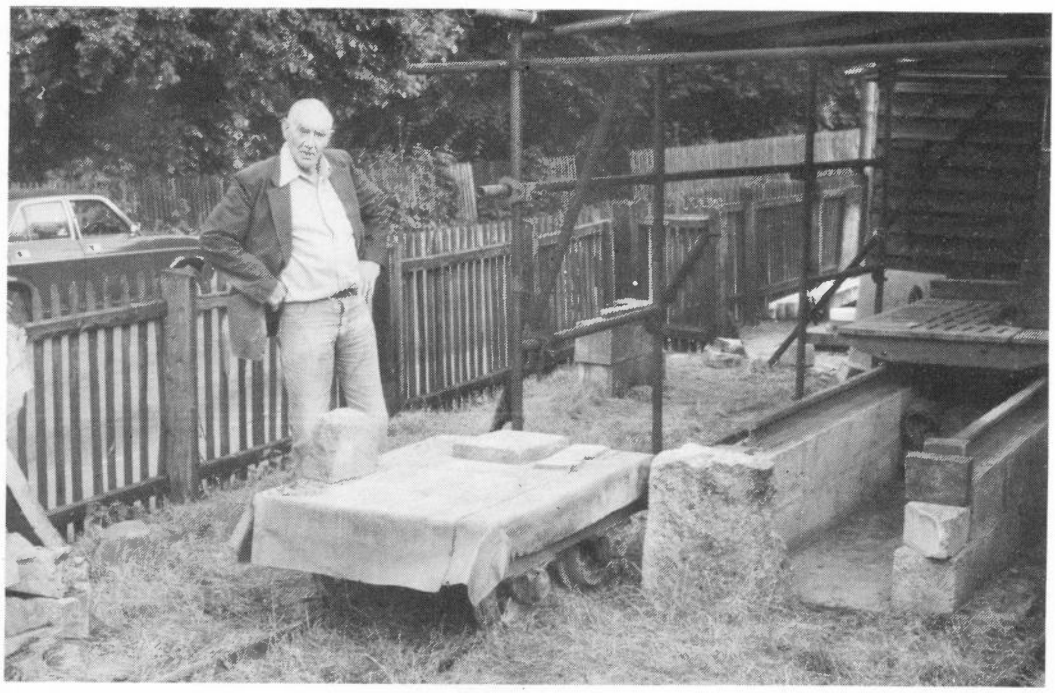
*This tiny 20in gauge 0-4-2T, John Fowler 3688/1879, pictured with a train of light cane trucks, may have been the locomotive demonstrated at Stafford House.*
*(Museum of English Rural Life, Reading, courtesy J.M. Kimber)*

# BRITAIN'S SHORTEST TRAMWAY?

**ADRIAN J. BOOTH**

Whilst searching the back streets of Buckingham in August 1979, looking for a real ale pub in the *Good Beer Guide* I stumbled upon what is possibly the shortest narrow gauge tramway in use in Britain today. This 2ft gauge line is operated by L Redshaw & Son, Masons & Sculptors, and is approximately 12ft in length. A Hudson skip frame with a flat platform on top is the sole item of rolling stock, and is used to transfer marble slabs and other stonework to and from a cutting machine. Another, shorter, parallel length of unconnected track, which has no rolling stock is alongside, and there is also a disused turntable. The proprietor was suitably amazed that anyone should express interest in his little railway, but was able to recall only that he obtained the skip frame and the track from a quarry near Stroud, about five years ago.

Perhaps readers would care to suggest other candidates for the title of Britain's shortest tramway.



*The works proprietor stands alongside his tramway's only item of rolling stock on 3rd August 1979.* *(A.J. Booth)*

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"The different levels of the Brewery are all connected by a narrow-gauge railway, which covers a distance of some eight miles, and over which small locomotives convey the raw materials and other goods to the various parts of the premises as required. The ascent from the middle level to the upper level is made by a special tunnel constructed on the corkscrew principle, as adopted in the case of the St. Gotthard railway. The gradient in the Brewery is 1 in 39 with a rise of 25 feet, and two circles are traversed without going beyond the area occupied by the Company. *(Extract from the 1931 edition of the official guide to Guinness' Dublin brewery.)*

The little narrow-gauge Rye and Camber line opened in 1899 has recently been extended by Mr. H.F. Stephens to Camber Sands. *("The Locomotive Magazine", March 15th 1909).*

# RAILWAYS OF SOUTH GEORGIA

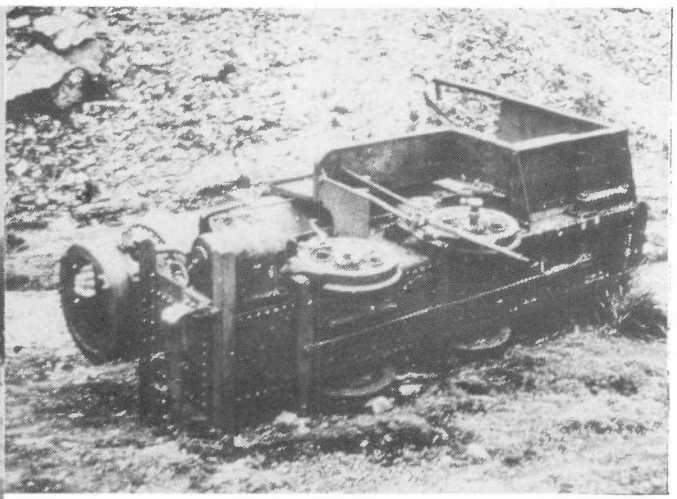
R.A. Smith

In 1904 Grytviken became the first whaling station to be established in South Georgia, by the Compañia Argentina de Pesca, headed by C A Larsen, a Norwegian. Other stations followed so rapidly that by 1912 seven were in operation. In these early days the whales were brought to the shore base for cutting up and processing. Huge quantities of coal were needed to drive the steam saws and boilers used in these operations, so to move this coal and other materials narrow-gauge railways or tramways were laid at most of these stations.

The remains of a steam locomotive can still be found at Ocean Harbour (formerly called New Fortune Bay) which was operated by Ocean A/S of Larvik, Norway, between 1909-20. The engine is lying on its side and has been extensively cannibilised. Unfortunately, no manufacturers plate is visible. At Husvik, which closed in 1961, extensive track still remains, together with a building looking much like an engine shed. At other stations the lines were mostly handworked:

"On returning to King Edward Cove (the administrative settlement near Grytviken) we had to transfer our personal effects, stores and food supplies, plus a considerable amount of anthracite. Our task was made somewhat easier by a miniature railway track running from the jetty to serve each of the buildings on the settlement, the rolling stock consisting of two bogies propelled by manpower or, as in this case, womanpower. Though both our old and new coal sheds lay close to the line, it still proved hard work, as each bag had to be manhandled from the shed onto the bogey and the bogey pushed the length of the settlement—part of the way up an incline. George and I shifted four tons in two afternoons". (*Antarctic Housewife,* Nan Brown, Hutchinson, 1951.)

These railways were important because of the poor state of the polar ground—the hard frost of the winter season, giving way to a summer morass:



*Remains of the 0-4-0 well tank at Ocean Harbour, 1982. The design of the wheels and cylinders suggest a Krauss product.* *(R.K. Headland)*

*The mountainous nature of South Georgia is evident in the view of Grytviken in the early 1950s. The church stands out at the back of the whale flensing 'plan' over which passes the railway for delivering coal.*

*'Main Street' of Leith Harbour in the boom days of the early 1950s. Notice the trolley in the left background. The height of the pipe trestle would seem to preclude the use of all but the smallest locomotive.*

"There is a narrow gauge railway, such as one finds in coal-mines, leading up from the jetty in amongst the huddled jumble of factory buildings, oil tanks and tin sheds of which this permanent British settlement seems to consist. There is no road, footpath, or other track for the passage of men, so I step gingerly from sleeper to sleeper on this rickety railtrack which must have carried many millions of pounds worth of material over the years, and must have carried as much food and other necessaries with the hungry post-war British housewife's shopping basket as any track of its size in the world. But I am careful not to miss my step on the sleepers, for if I do so I shall not land on the solid earth my ship weary legs are craving, but more probably into a knee-deep pool of grey sludge, the composition of which I would not dare to describe to my reader in case his lunch or supper should be imminent... The friendly bogie-line I am following suddenly grovels into a rusty shed, and I can only proceed by wading through a morass of grey sludge, noticing as I do so that strings of bubbles come up where my sea-boots disturb it. Being of a scientific disposition, I stir up one puddle with one of the many odd bits of iron lying around, and set a match to the huge glug of bubbles that emerges. It ignites, and burns with a ghostly blue flame." (*Of Whales and Men,* R.B. Robertson, Macmillan, 1956).

At the time this description of the squalor of Leith Harbour was written in 1951, the celebrated 'Ground nuts' scheme had failed and Christian Salvesen's operations in South Georgia were reckoned to be the greatest single source of edible oils in the Empire. The pattern of whaling changed shortly afterwards from shore based to pelagic, in which a fleet of catchers, corvettes and buoyboats, operated from a mother factory ship, onto which the captured whales could be dragged through the stern to be processed. The stations were used for shelter and maintenance of the ships by various British, Norwegian and, latterly, Japanese, companies until dwindling returns and conservation measures led to the final closure in 1966. Christian Salvesen now hold the lease of the sites and remains at Grytviken, Stromness, Husvik and Leith.

It is now history that the landing of Argentinian scrapmen in March 1982 led to Argentina invading South Georgia and the Falkland Islands, of which South Georgia is a Dependency. During the battle to invade Grytviken, the civilian scientific population of the British Antarctic Survey took refuge in the church. Eventually they were taken prisoner and held in trying circumstances for 15 days before being taken to Uruguay and repatriated to Britain. My principal informant for these notes, and the provider of the locomotive photograph, R K Headland, was one of these prisoners. Happily, I am able to report he is now back in the area, to survey the unfortunate damage caused to shore bases and scientific records by the invaders.

# A SPANISH ENIGMA

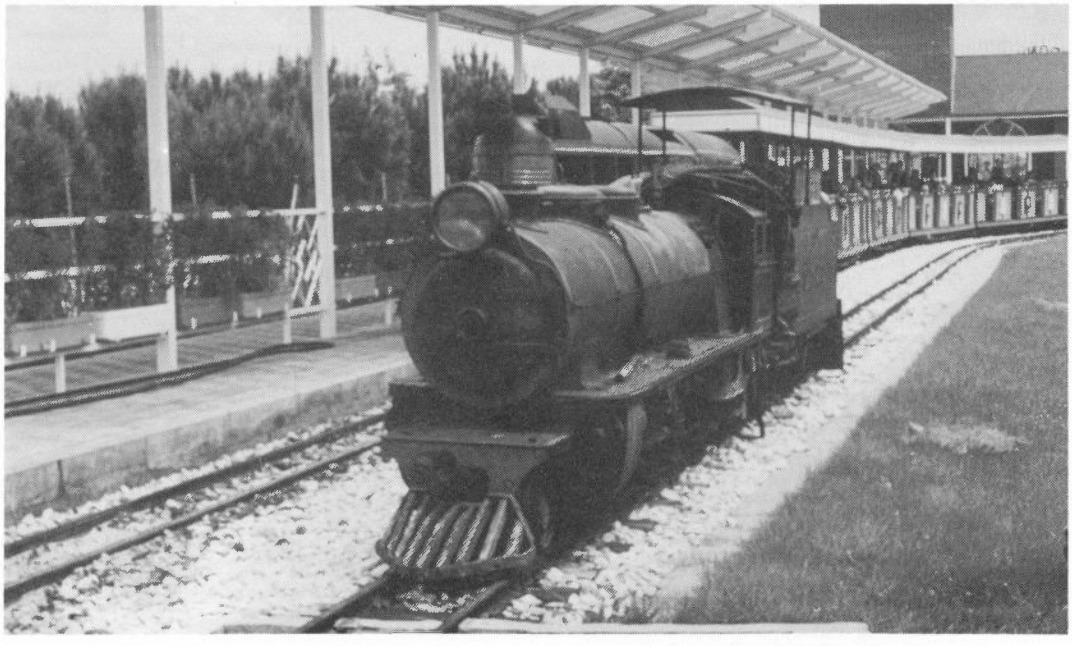
Ron Cox

The mystery surrounding four 381 mm (15in) gauge Pacific type locomotives supplied to Spain by Lokomotivfabrik Krauss & Co, Munich has aroused the curiosity of myself and other enthusiasts for a number of years. This short article aims to collate such information as I have gathered, in the hope that readers may be able to add to it.

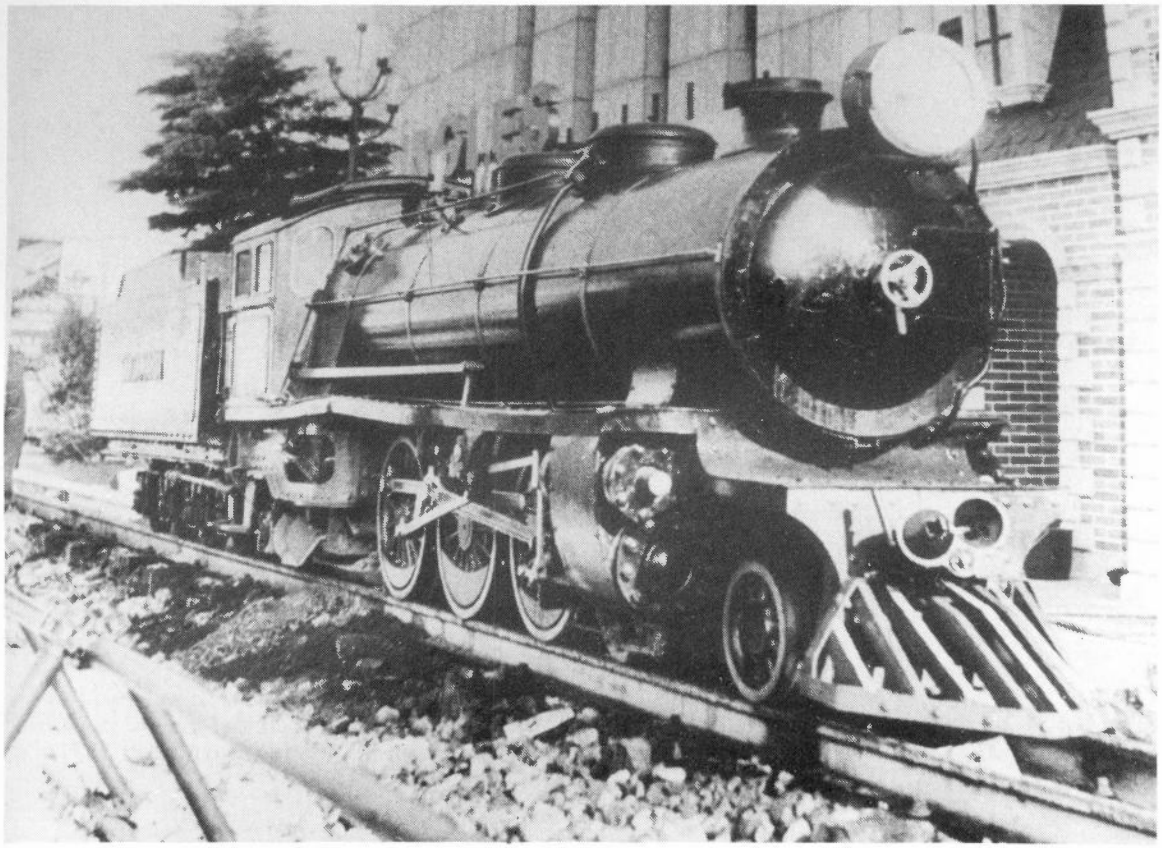
These locomotives were of the lightweight 4-6-2 design, similar to others delivered to a number of miniature railways in Europe. They carried Krauss works numbers 8455, 8456, 8457 and 8473, all of 1929, and were designated model number K 3/6 by the manufacturer. In all, eleven locomotives of this pattern were produced, and examples can still be seen in operation on the Liliputbahn, Vienna, and the Pioneer Railways at Dresden and Liepzig.However, those supplied to Spain proved the most intriguing, since for many years they simply disappeared!

According to the builder's list the first three were supplied to the German company Allgemeine Elektricitats-Gesellschaft (A.E.G.), Seville, the main contractor for the Ibero-American Exhibition, held at Seville in 1929. The last one would seem to have been an extra order. One of the attractions at the exhibition was a 381 mm gauge railway, and it was on this that the locomotives worked. The exhibition remained open throughout the summer of 1929, but the railway and fairground sections were left on site after the exhibition closed, and operated again each year until the late summer of 1933. At that time the local authority required the owners to invest considerable sums in safety equipment following a number of injuries to patrons, and one unfortunate facility. The owners were not prepared to make this investment, and as a result the remaining rides were closed in October 1933. The railway was removed and placed in store.

Thirty-three years later, in 1966, the land originally occupied by the exhibition was earmarked for redevelopment as a high density housing area. During the preparatory work on site the stored locomotives, rolling stock and track were found, and removed to new locations. However, the locomotives were known only by the names NINA, PINTA, SANTA MARIA and SEVILLA carried on the tender, and the fact that virtually all the working parts had been interchanged rendered positive identification of each one virtually impossible.



*SANTA MARIA in store at Casa de Campo, Madrid. In the background the internal combustion locomotive stands at the platform with a loaded train.* *(John R. Batts)*



*SANTA MARIA on display outside the El Corte Ingles store.* *(John Bennett)*

So far as I can tell, their subsequent disposal was as follows: NINA and one carriage were displayed on a short length of track in a children's playground adjacent to the Maria Luisa Park, Seville. On the 11th December 1980, they were removed to the R.E.N.F.E. locomotive depot in the suburb of San Jeronimo where, it was anticipated, the locomotive would be restored to working order. Since that time there has been no further news of its condition or whereabouts.

The other three, with the remaining rolling stock and track were removed to the Parque de Atraccions, Casa de Campo, Madrid to form a new railway established in the early 1970s. Of PINTA and SEVILLA little now remains, for they were cannibalised to provide one serviceable locomotive which was later rebuilt into an internal-combustion-powered machine of quite hideous aspect. This hybrid remains in service at Casa de Campo. SANTA MARIA fared slightly better, and was observed working in virtually original condition in 1975. In 1979 it was sold to the Barcelona department store chain 'El Corte Ingles', and was at one time exhibited, in steam, outside one of their stores.

So this is all the information I have. If any reader can add to it, or advise the present location of NINA and SANTA MARIA, I would be delighted to hear from them. I should perhaps mention the 381 mm gauge line at the Omentager Amusement Park, Barcelona, where two 4-6-2 locomotives built by La Maquinista Terrestre y Marítima S.A., of similar appearance to the Krauss machines, are in operation. There could otherwise be some confusion between the two types.

I would like to thank John R. Batts and John Bennett for their considerable assistance in the preparation of this article.

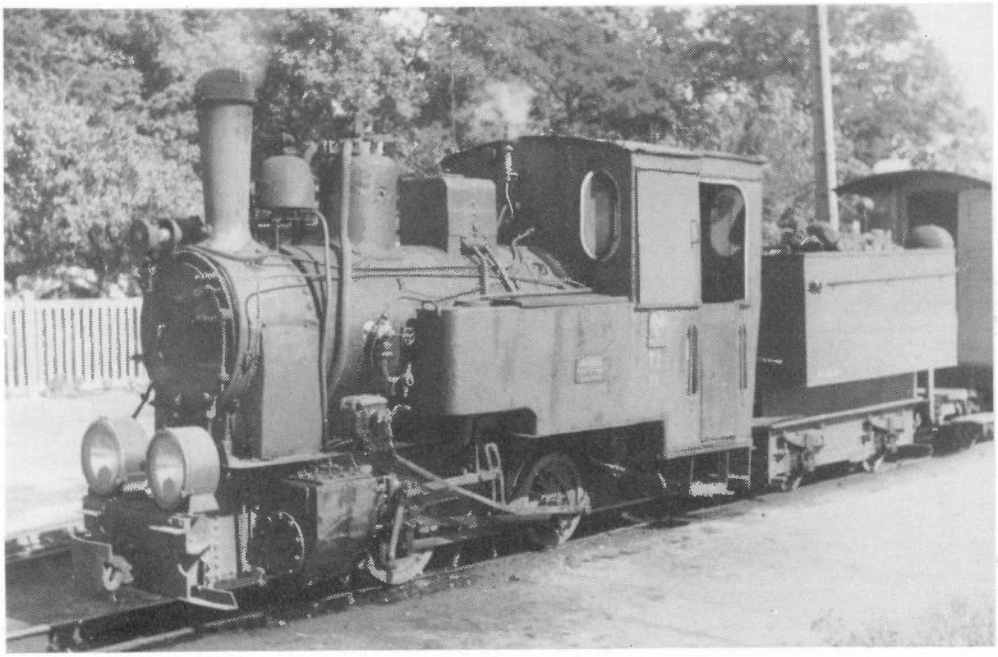
# PRESERVATION IN POLAND

The article on Poland's Working Museum in NG 92 was overtaken by events and the following additional information will bring the picture up to date.

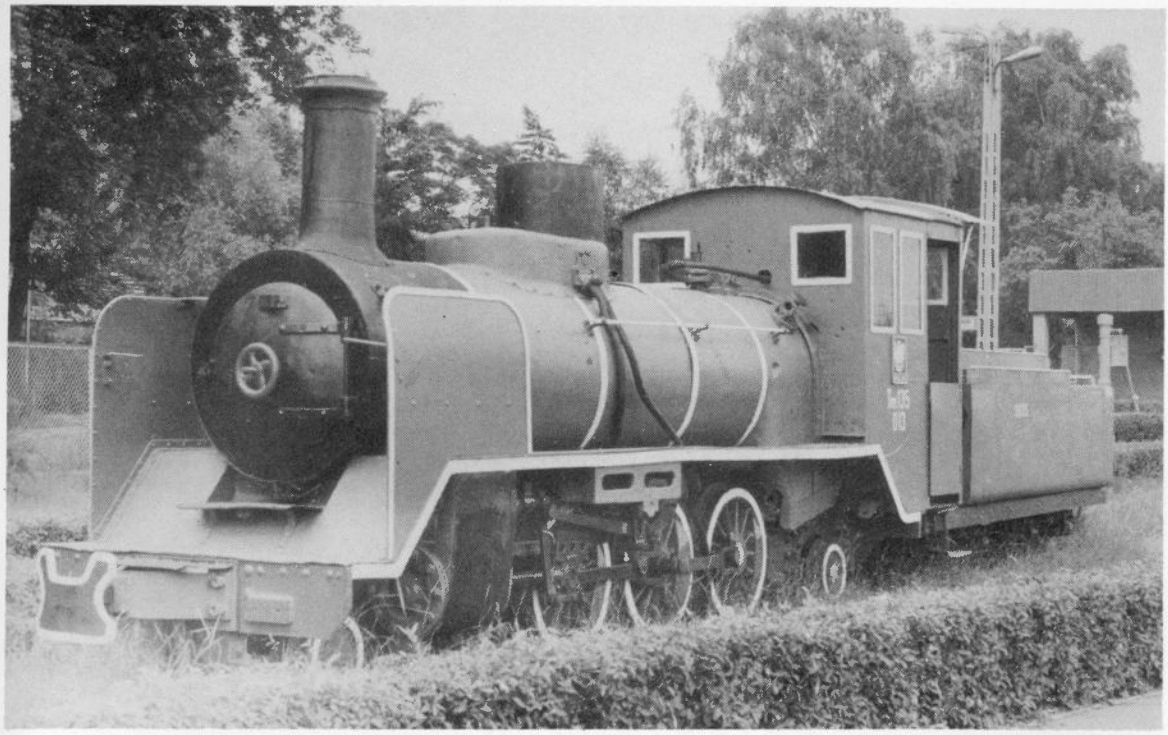
Piotr Staszewski, of Lublin in Poland visited Wenecja in June and August 1981, and reports several changes. The train at the museum platform was headed by an 0-8-0 tank Tx26-422, and other locomotives have been added to the collection: T2-8344 an 0-4-0 tender tank by LOWA, Babelsberg (No.16028/1950); T49-114 an 0-4-0 tank by Pierwsza Fabryka Lokomotyv w Polsce, Chrzanów (No.1910/1949); Tx6-502 0-8-0 tender tank by Oberschlesian Lokomotivwerke A.G., Krenau O.S. (No.8/1944). This was the German title of the present Crzanów works and town. The 4-6-2 tender locomotive from the Chełmica sugar factory is also restored and on display as PKP 135.013. D. Trevor Rowe wonders if it was ever in service with the Polish State Railways before arriving at Chełmica. Px27-755 and Tyb5-471, a German Heeresfeldbahn 0-8-0 (Henschel 15111/1917), are in store at Znin awaiting repair and repainting.

Two new passenger coaches were added to the tourist train in the summer of 1981. Steam locomotives in use were 0-4-0 tender tanks T2-71 and Tx4-564. The 0-4-0 diesel Ldl-3 has been joined by a much larger machine, Lyd2-51, an 0-6-0 built in 1977 by the 23rd August Works, Bucharest, and carrying 'Made in Romania' on its builders plate.

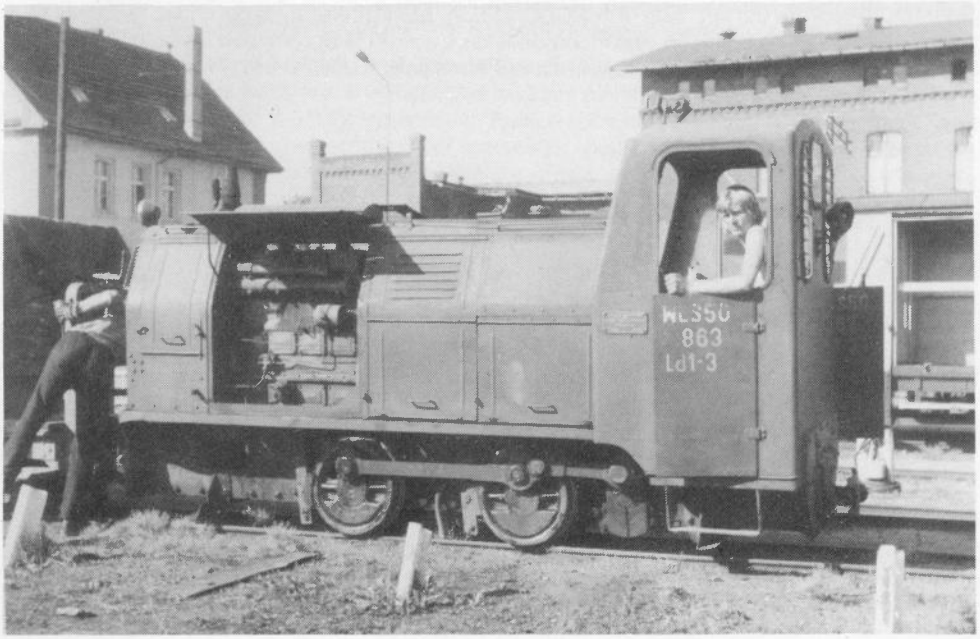
Keith Stretch says it is not correct to state that the Zniner Kleinbahn (to give the correct full title, Kleinbahnen des Kreises Znin) came under the PKP (Polish State Railways) in 1919. It is true that the area passed to Poland then, but in common with most other minor railways, the Znin system remained under local administration—now Polish, of course: the 1930 timetable gives the title of the undertaking as "Zarzad Zninskich Kolei Powiatowych". When the area was forcibly re-incorporated into Germany in 1939, the original title was resumed, but about 1943 many place-names were thoroughly Germanised and Znin became Dietfurt; about the same time a regional organisation, "Gaubahnen des Warthelandes", took over the Kleinbahn together with many others. When Poland re-possessed the area in 1945, all railways were nationalised, and it was then that the PKP took over responsibility for the Zniner Kleinbahn. At its maximum extent, from about 1911, the system totalled 70.7 km of route.



*T2-71 on the museum train.* *(P. Staszewski)*

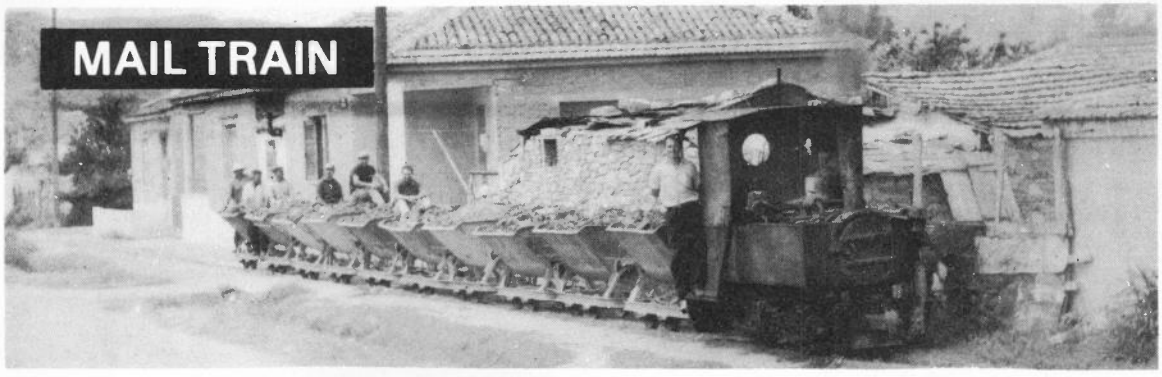


*Originally built by Nivelles in Belgium (No.2179/1935) for the Brussels Colonial Exhibition, this 60 cm gauge 4-6-2 is now on display at Wenecja.* *(D. Trevor Rowe)*




*The driver of Ldl-3, and the open engine compartment on the locomotive indicate a very warm summer.* *(P. Staszewski)*

# MAIL TRAIN



## AUSTRALIAN BUILT CANEFIELD LOCOMOTIVES

In my article in NG 94, captions to photographs on p.22 and p.24 referred to "Plane Tree Mill". The correct name is Plane Creek Mill.

Since the article was written, I have received information indicating that Commonwealth Engineering built their first diesel-hydraulic locomotive for the canefields in 1957 rather than in 1958. The number of Model A diesel-mechanical locomotives supplied should thus be adjusted to 32, while the correct number of diesel-hydraulics should be 33.

Readers may be interested to know that six new E.M. Baldwin B-B diesel-hydraulic locomotives have been delivered to sugar mills in the period from June 1981 to June 1982, and that a further four are believed to be on order for delivery during the remainder of 1982.

TARINGA, QUEENSLAND — JOHN BROWNING

## UNDERGROUND ELECTRIFICATION

This photograph shows, on the left, two of the GEC, U.S.A. built locomotives described by Iain D.O. Frew in his letter in NG 92. By way of comparison, the locomotive on the right is Greenwood & Batley 1746/1941, standing outside the Irthlingborough ironstone mines of Richard Thomas & Baldwins Ltd, in June 1958.

LIVERPOOL, MERSEYSIDE — JIM PEDEN

## COBTREE ZOO RAILWAY

In answer to the letter in NG 93 I was taken to Cobtree Zoo as a child – I thought it was before 1937, the opening date given by Ian Briscoe – and the railway I recall (though I was only 9 or 10 years old) was less than 2ft gauge. The loco was petrol driven, with the outline of a vaguely G.W.R. pattern outside frame 4-4-0 somewhat similar to that at Chessington Zoo, illustrated in *ABC of Miniature Railways*.

WEYMOUTH, DORSET — PAT HENSHAW

## BALDWIN 4-6-0s, and PORTER LOCOMOTIVES

To comment on Rodney Weaver's letter in NG 93, the Porter records now in the National Museum in Ottawa belonged to the late Andrew Merrilees of Toronto, a dealer in railroad materials and equipment. I went to Kingston to see the Porter records after Davenport closed down and sold the plans, records and goodwill of both Porter and Davenport to Canadian Locomotive Company. The man at Kingston, whose name I don't recall, allowed me to see copies of what I already had but told me that the actual Porter records were kept for Merilees and I couldn't see them. The H.K. Porter Company still exists and are said to have copies of their records stored in a cave near Pittsburgh. Andrew Merrilees visited me here about five years ago and confirmed that he had much of the Porter records.

I'm afraid that Rodney Weaver's suggestion that Porter built for Baldwin is incorrect. In 1960 I made at least 35 visits to the Baldwin Locomotive Works at Eddystone, Pa. to copy the Whitcomb records for the Railway & Locomotive Historical Society. After that I was allowed to go through the Baldwin Locomotive Registers and Order Books – all originals. Perhaps British members are not aware that the Eddystone plant was opened just before WWI, but the older plant at Broad and Spring Garden Streets in Philadelphia continued in production until 1928. This plant was cramped and, when possible, small locos were built there, and larger locos at Eddystone. The works was geared to mass production but it wasn't until 1916 that it became really busy, and space at Eddystone was originally used for munitions, before reverting to locos. The order books show nothing of any military loco orders being sublet in 1916-18. On rare occasions when this was done, for example the Whitcomb 65 ton diesel electrics built in WWII, these received Whitcomb works numbers and were classed as an Extra Order (XO) by Baldwin. Baldwin owned Whitcomb at that time.

It may interest readers to know that all locos built for the British War Department were paid for in gold and were not ordered by the War Department, but by "His Britannic Majesty", which seemed odd to an American.

The U.S. Army did not buy any 4-6-0T's for their lines in France, but 2-6-2T similar to those built by Alco-Cooke for the WDLR. Usually a fee was paid for the use of other builders plans, but maybe not in this case, being wartime. It was already known that the 4-6-0T's in service in France sometimes left the track when running bunker first. A fair number of the 4-6-0T's appear in the BLW records as resold. Many were also used for several years after the War clearing surplus material from the front line areas, and to help reconstruct the devastated parts of France and Belgium. Many were probably worn out doing just that.

DONIPHAN, MO., U.S.A. — M.H. GOLDSMITH

## LOCOS AT PEN-Y-BRYN SLATE QUARRY, NANTLLE

I recently referred to documents in the Record Office at Hawarden, Flints, which geographically belong elsewhere. One such was a sale catalogue for the above quarry, which throws doubt on the entry on page F24 of *Industrial & Independent Locomotives & Railways of North Wales,* and my own recent book on North Caernarvonshire. Reference in the foregoing to a locomotive JAMES STEWART would probably be JAMES DEW, described in the catalogue as: 'A capital locomotive engine in good condition' lying at Dew's Quarry' (this would be a pit among the connurbation), but about which we are given no more. Also in the sale, lying in the Pen-y-Bryn Sawing Shed was RHYMNEY: 'a double cylinder of 6in diameter...' which of course was duly sold to Pen-yr-Orsedd. The sales list also gives details of wagons and track available and the sale date of 24th August 1891 also casts doubt on the dates given on p.F24. Incidentally, the *Mining Journal* advertises a sale here on 24th November 1888. There was a 'Herbert's Quarry' nearby.

The Bodleian Library owns a number of sale catalogues, prospectuses etc. of this period; it is therefore almost impossible to cover every likely source.

MALVERN, WORCS. — JAMES I.C. BOYD

No. 96 ISSUE.

THE

# COUNTY DONEGAL RAILWAYS

(JOINT COMMITTEE).

# WORKING TIME TABLE

(For use of Committee's Staff only)

AS

## From SUNDAY, 4th SEPTEMBER, 1955,

until further notice.

**M—Rail Car Service.** **S—Steam Train.**

No Special Train, Engine or Motor must be allowed to run over the Line without authority from the Manager's Office, and before any such Special is despatched, the Station Masters concerned must see that complete arrangements are made for its safe working, and that of any other Train or Trains which it may have to precede, cross or follow. Station Masters must see that the E.T.S. arrangements and signalling of Trains are carried out, and that a copy of the Special Train Notice is sent to gatekeepers under their supervision.

**REMEMBER !**

It is well for each Member of this Railway to bear in mind that goodwill based upon years of conscientious effort may be entirely destroyed by a moment's carelessness or indifference toward a customer.