

THE NARROW GAUGE



1958/1

THE NARROW GAUGE

(Official Magazine of the Narrow Gauge Railway Society)

Editor:.....W.J.K. Davies,
Merton Court,
SIDCUP, Kent.

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We are very grateful to all the organisations, firms and individuals who have helped to produce this Magazine, in particular: Trains Illustrated, Railway Magazine, Cleaver Hume Press, European Railways and Mr. J.I.C. Boyd for the loan of blocks, and to the original owners of the photos for permission to reproduce them.

COVER: An O-6-2T heads a Bad Ischl train on the S.K.G.L.B.
(Block. Trains Illustrated. Photo. Dr. Ransome-Wallis).

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EDITORIAL

As this is the first issue of the Society Magazine for some time, I would like to make the position clear to members. The Magazine is at present to be published twice a year and will normally consist of 16-20 pages, as financial restrictions prevent us from doing more than this at the moment. From time to time, however, we hope, as in this issue, to add a supplement which can be cheaply reprinted with a proper cover as a Society publication and recover a portion of its initial cost by outside sales, so that members will, in effect, receive certain Society publications free.

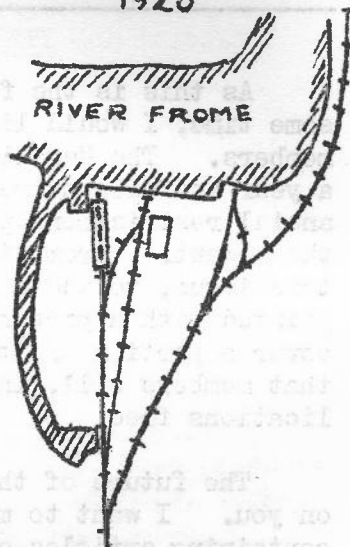
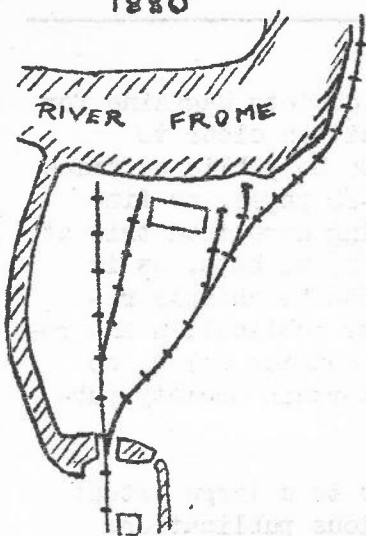
The future of the Magazine depends to a large extent on you. I want to make it into a serious publication, containing articles of both specialist and general interest, preferably on lines about which little has been published. This can only be done if members will supply the articles. I will be very grateful for any contributions, illustrated if possible, but please let us have the right sort of article. System articles on such well-known lines as the Festiniog, etc, are of no use at all. Can we not, instead, get articles on say, the 'Passenger rolling stock of the R. & E.R.' or an article on some little known aspect of narrow gauge operation?

The Magazine depends on you in another way, too. The more members we can get the better the Magazine and other aspects of the Society can become. Once the circulation passes the 200 mark we should be able to issue it quarterly and it would not take many more before we could run a printed Magazine.

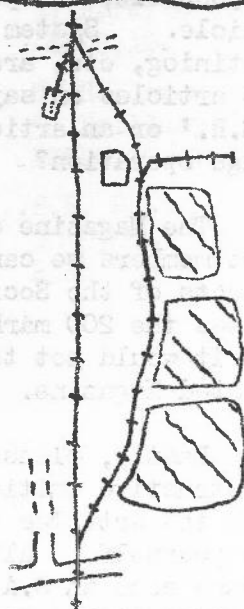
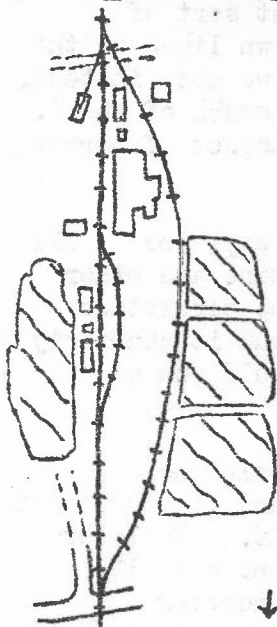
Lastly, please write and give us your opinions. Constructive criticism is always welcome...and if you do not like the articles the remedy is in your hands. Write us one yourself. All I ask is that, if you want a reply, please send an S.A.E. Society Officials are meeting incidental expenses out of their own pockets and postage is a very big item.

1880^s

WHARF

1920^s

RIDGE



↓ TO FURZEBROOK

FRESH LIGHT ON FURZEBROOK by W.J.K. Davies.

It seems to be inevitable that as soon as a railway book is published, fresh and often important information crops up almost immediately. This has happened in the case of the book just published by this Society.

The information mainly concerns the line to Wharf. While I was browsing through some old maps, searching for facts about Fayle's of Norden I discovered the track layouts which are reproduced opposite, and have been able to compile the following additional notes.

In the 1880's and 90's there was a flourishing clay works at Ridge comprising a number of processing sheds and kilns in which, presumably, finished articles were produced. A very large loop line ran through the works, flanked on either side by extensive clay-washing pans. A smaller loop branched off the through road and it is probable that there was a weigh-bridge here. There was a small loco shed, almost certainly the present one, at the North end of the works joining the "main line" by a connection facing to Wharf. The layout at Wharf at this period shows no sign of a run-round and it would appear that either trains were propelled from Ridge to Wharf or that gravity working was in operation. I would hazard a guess that "through trains from Furzebrook were gravity-worked and that local traffic was handled by an engine permanently based at Ridge - the latter at any rate being supported by the presence of an engine shed. This engine could also return the empties to Furzebrook when a sufficient number had accumulated.

By the turn of the century Ridge had decreased considerably both in size and importance, the clay works occupying a single building, while the handling facilities at Wharf had correspondingly increased with no less than three loops and a much improved wharf face. The improvements here doubtless account for the disappearance of the smaller loop at Ridge.

Ridge was not finished yet, however, and in the 1920's we find it making a comeback as a clay-washing mill with extensive washing pans in service once more. The big loop has been relaid to serve these with a straight run through

for the main line as before, but with the loop road now running in a series of gentle curves round the edge of the washing pans and at one point throwing off a short siding along the side of a pan by means of a stub point. The lay-out at Wharf now boasted one big loop instead of two of the smaller ones and the buildings had been modified - to include, among other things, a long roof over one end of the dead-end sidings.

As far as is known this was the final layout at both Ridge and Wharf, and lasted until the old line was dismantled. Tertius was stationed at Ridge during this period and from what can be gathered from local people, the line was locomotive-worked in both directions during its final years.

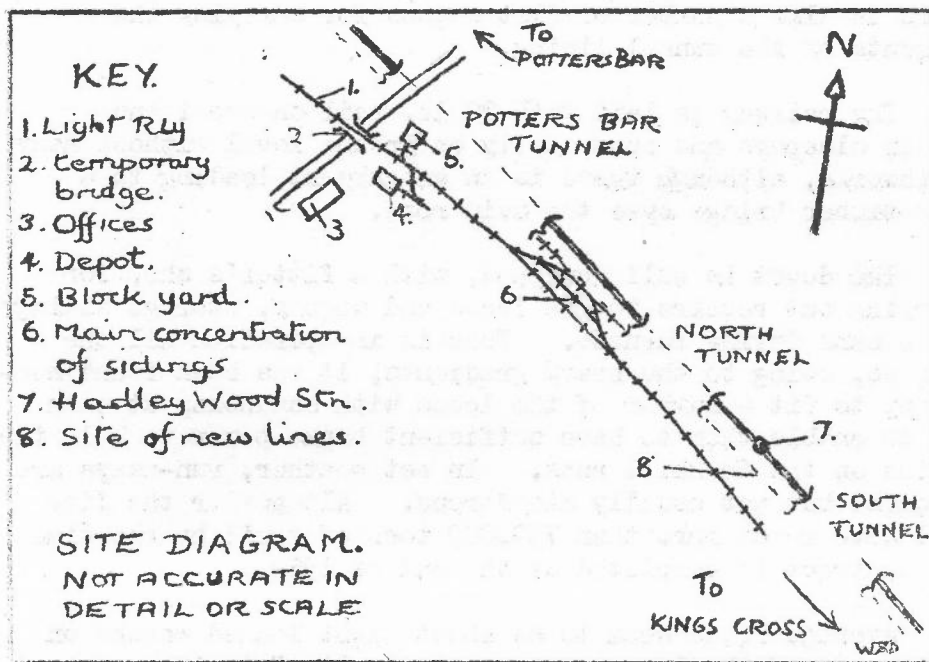
The other piece of information concerns the main line from Furzebrook to the weathering beds. It was mentioned in the Handbook that "every few hundred yards, sidings branched off to right and left" to serve old clay tips, now disused. Two of these sidings are now known to have originally served clay pits.

One led off to the North a little way above the weigh-bridge. This served a shaft-type mine (as opposed to an addit mine) about a quarter of a mile from the main line and was in use at least until the twenties. The branch, or most of it, remained in position until the line finally closed although most traces of the mine had disappeared. The branch is marked on the map in the Handbook.

The other branch left the main line some distance nearer the beds by a facing junction and ran for a few hundred yards to an open clay pit. This was out of use by the early 1900's and by the 1920's all but a short length had been lifted, the remainder serving as a spur to a clay tip.

I hope this information may be of interest to readers. If anyone can provide any further notes we shall be very pleased to hear from them.

THE CONTRACTORS RAILWAY AT POTTERS BAR by G.R. Hatherill.



A large amount of work in connection with the British Railways modernisation programme has been carried out at Potters Bar about twelve miles from London on the old G.N. main line to the North. The work in question consists of laying down two additional tracks to provide a four-track main line and involves the boring of three new two-road tunnels and a certain amount of cutting excavation. This work has been greatly assisted by the use of what is probably one of the most extensive narrow-gauge contractors railways for many years.

Messrs. Charles Brand Ltd., have laid down many miles of 2'0" gauge railway to link the various sites and shafts and have an extensive depot and offices near the main road to London. The railway is operated entirely by Ruston and Hornsby diesel locomotives, there being no fewer than 28 of

these ranging in size from 48 h.p. down to 20 h.p. The rolling stock consists of about two hundred wagons. Most of these are standard metal side-tipping wagons of 2 cubic yd. capacity, built by Robert Hudson & Co. of Leeds, but there is also a number of flat wagons for carrying the segments of the tunnel lining.

The railway is laid with 20 lb. rail on steel and wooden sleepers and runs mostly on ground level without many earthworks, although there is an embankment leading to a long timber bridge over the main road.

The depot is well equipped, with a fitter's shop for carrying out repairs to the locos and wagons, storage sidings and a sand drying furnace. This is in operation all the time as, owing to the heavy gradients, it has been found necessary to fit a number of the locos with sandboxes at each end to enable them to have sufficient brake power to hold the trains on the downhill runs. In wet weather, run-aways are frequent but not usually disastrous. Altogether the line will have moved more than 750,000 tons of spoil by the time the contract is completed at the end of 1959.

Average loads seem to be about eight loaded wagons on most parts of the line and these "main line" trains are handled by the 48 h.p. locos. The smaller locos shunt round about the depot and marshalling yard and in the blockyard.

The map (see over) is not accurate in details as the track is often shifted. It is intended to show the general scope of the line. The system can be observed from a number of places and is well worth a visit as the opportunity to see such a large contractors railway does not often occur nowadays.

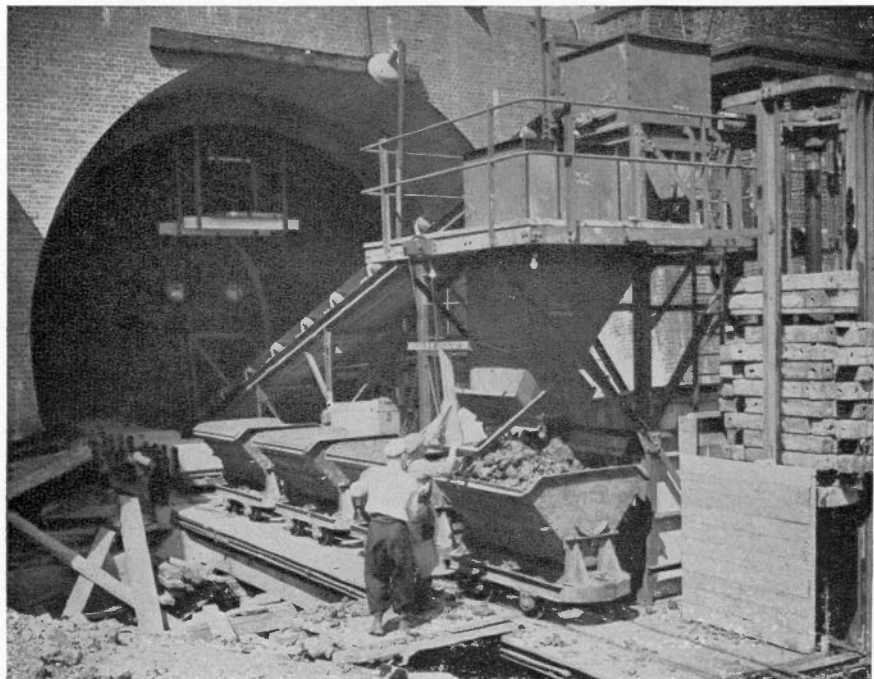
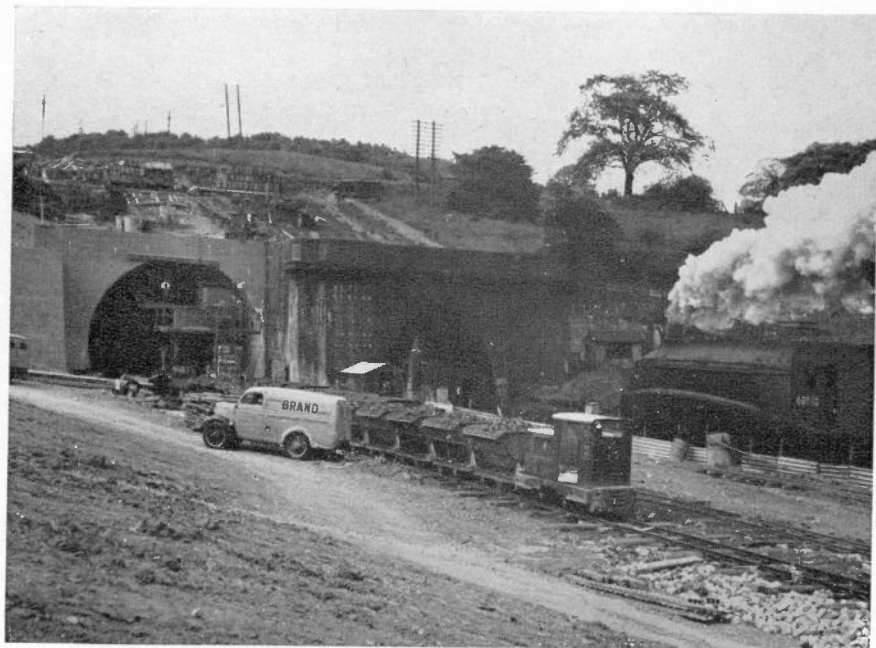
(Editor's note: Any further information on this line such as loco. list, etc. will be welcomed for publication).

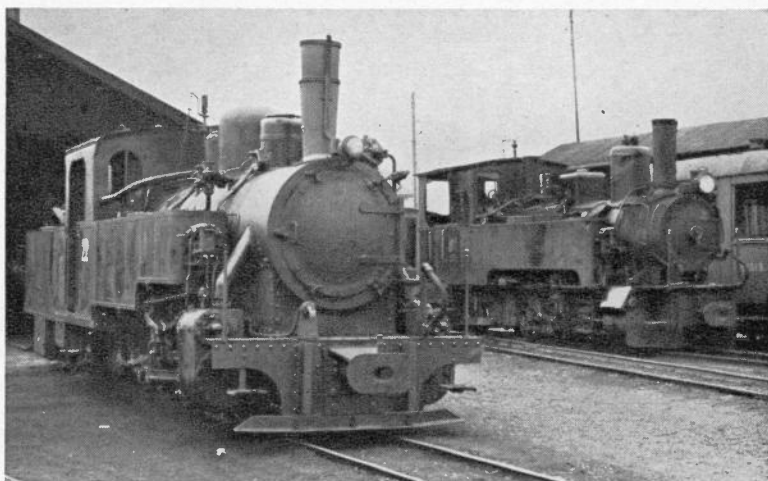
OPPOSITE TOP: A train on the light railway near the South entrance to Potters Bar Tunnel.

LOWER: Wagons being loaded.

(Blocks and photos courtesy Railway Magazine).

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THE SALZKAMMERGUTLOKALBAHN.

AN OBITUARY

Compiled by

W.J.K. Davies.

(mainly from information kindly supplied by)

- Herr Othmar Bamer -

Cover illustrations

Front.

An O-6-2T heads a Bad Ischl train in pleasant scenery at the western end of the Wolfgangsee

Opposite

Top. A train at the Salzburg terminus. Note the electric line to Lamprechtshausen (right)
Centre. Borsig-built O-10-0TT and an O-6-2T at Itzling sheds.

Lower. O-6-2T shunting in Salzburg exchange sidings.

(all blocks courtesy "Trains Illustrated" photos by Dr. P Ransome-Wallis.)

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AUTHOR'S PREFACE

When the 760 mm gauge Salzkammergutlokalbahn was closed to all traffic on October 14th, 1957, all narrow gauge enthusiasts interested in foreign lines must have felt a sense of loss. For the S.K.G.L.B. was not "just another narrow gauge railway", it was something out of the ordinary and was held in deep affection by all who knew it. Its main line was efficient but had its own endearing characteristics in the variety of its motive power and rolling stock, while the Mondsee branch was famous the world over as the home of "the railcar", a gloriously inefficient machine with a long and once illustrious past.

I thought it opportune, therefore, to provide at least some record of such a line. It will have to serve as a memorial too, for even as I write, news has come through that the project to re-institute a passenger service between St. Wolfgang and Bad Ischl has fallen through, and the whole line is to be dismantled.

This does not pretend to be a complete history of the line, but, rather, an obituary article. Much of the information, including a copy of the song "Zwischen Salzburg and Bad Ischl", was kindly supplied by Herr Bamer of Vienna and the rest was gleaned on the N.G.R.S. Austrian tour in 1956.

I am grateful, too, to those who have helped us out in other ways - to Trains Illustrated, European Railways, The Railway Magazine, Cleaver Hume Press and Mr. J.I.C. Boyd who lent us blocks; to the owners of the original photos which are acknowledged individually in the text.

One word more. All distances in references to the railway were, of course, in kilometres. After considerable thought I have decided to leave these as they are. The main reason is that conversions to miles, unless they are to get rather tedious, must be approximate and therefore to some degree inaccurate. This could lead to even greater discrepancies later on if my figures were re-converted.

THE SALZKAMMERGUTLOKALBAHN

Chapter 1 Historical Introduction

The story of the Salzkammergutlokalbahn, usually known as the S.K.G.L.B., began on 13th January, 1890 when the "Lokalbahn A.G. München" (The Munich Light Railway Co.) was granted permission to build a narrow gauge railway between Salzburg in North West Austria and the thriving town of Bad Ischl, some forty miles to the East, together with a branch from St. Lorenz to Strasswalchen.

Work started almost simultaneously from both ends of the line and on 5th August, 1890 the first section from Bad Ischl to Strobl, 12.7 km. in length, was opened to traffic. It was followed on 28th July, 1891 by the section of main line from Salzburg to St. Lorenz (28.1 km.) and a portion of the Strasswalchen branch as far as Mondsee station (3.7 km). For some reason this was the only part of the branch to be completed, so Strasswalchen never got its expected railway.

The remaining section of the main line, though only 22.3 km long proved very difficult to construct, containing as it did no less than four tunnels and several other major engineering works. Consequently it was not completed until 20th June, 1893. The final portion, from Bad Ischl main-line station to the local station, was opened shortly afterwards on 3rd July following the completion of the last major engineering work, a bridge over the river Traun. Strange to relate it is recorded that the first through train between Salzburg and Bad Ischl did not run until exactly a year later, on 3rd July, 1894.

The Company were not content with their single narrow gauge line and in 1893 they extended their empire by opening a steam-boat service on the Wolfgangsee, connecting the S.K.G.L.B. St. Wolfgang station on the South side of the lake with the town of St. Wolfgang which lies on the North shore. In the same year they opened a steam-worked, metre

gauge rack-railway from St. Wolfgang town to the summit of the neighbouring Schafberg (1783m.)

The eighteen-nineties and the early years of this century were a boom period for the railways and the S.K.G.L.B. enjoyed a spell of tourist-aided prosperity which was only cut short by the outbreak of World War I. In common with many other railways the S.K.G.L.B. suffered from the depredations of the military, six of its locomotives, No's. 1,3,4,5,8 and 9 being commandeered by the Zentraltransportleitung (the military transport authority of the time) for service in Bosnia and Herzegovina, and No's. 1,5 and 8 "failed to return". The war also brought increased government control over all types of transport and for some years after the war the S.K.G.L.B. was operated by the State Federal Railways,(ÖBB). By 1925, however we find the old company once more back in control.

This is, perhaps, the place to mention that, prior to World War I, the S.K.G.L.B., taking its responsibilities seriously, kept a special saloon carriage for the use of the Emperor Franz Josef. The events of the war rendered the vehicle redundant and in 1924 the Company thriftily converted it into a petrol electric railcar to work the Mondsee branch.

During the depression years following 1930 the financial position of the Company, never very strong since the war, worsened rapidly. In 1931 the Schafberg line was sold to the ÖBB (which still operates it, and with steam locomotives too) and the steamboat service was sold to the Austrian Tourist Office, together with a hotel which the Company had opened at the summit of the Schafberg. Even so the position still got steadily worse. In 1935 lack of money forced the suspension of services for six months and by 1939 control of the Company had passed to the district government of Oberösterreich and Salzburg. It would appear that the local Authorities acquired control of the line to keep it alive.

World War II, and the suspension of all bus services, brought much traffic back to the railway and this was still

further increased in the later years of the war by the erection of many hospitals in the Salzkammergut, and by the evacuation to the Strobl area of a number of public institutions, together with various departments of the Vienna University and Technical High School. Traffic, however, must have been mainly of a military or semi-military nature, and it was not until 1945 that normal services could be resumed. The S.K.G.L.B. was the first railway to be re-opened after the heavy repairs necessitated by severe war damage and the inevitable deterioration of the previous few years.

Up to 1948 the railway pursued a progressive policy, and the frequency of the service was constantly increased. By 1948, however, bus competition was beginning to be felt with the advent of better roads and rail services started to decline. The S.K.G.L.B. was forced to run its own road services for local traffic, although unlike many other railways, its bus timetables were arranged to work in conjunction with the trains and not in direct competition with them. Even so, the railway services lost more and more money as ever greater numbers of people turned to road travel. By 1956 the financial position appeared hopeless, and, in the following year it was decided to close the line, the last passenger train running on 30th September, 1957 and the last goods train on 14th October.

The line did not close without protest, however. Many people realised the loss and inconvenience it would cause, especially to the tourist trade if such an attraction was no more and, among other measures, protest marches have been held in Salzburg. Dare we hope that the line is, after all, not dead but merely sleeping.

It is noticeable that, with the exception of two rail-cars, the S.K.G.L.B. has remained faithful to steam. This is not to say that other schemes have not been put forward however. Ever since the first proposal was turned down by the Royal Railway Ministry in 1912 there has been a constant stream of equally unsuccessful schemes to electrify the line and at one time there was even a proposal to dieselise the main line though this also came to nothing.

THE SALZKAMMERGUTLOKALBAHN

Chapter 2 The Route

Bad Ischl - St. Lorenz

The best place to start a description of the route is at Bad Ischl where the S.K.G.L.B. had its terminus at the OBB main line station. This was purely a passenger station for the narrow gauge line, which occupied what was in effect a bay platform on the west side of the OBB lines. The layout was typical of mixed gauge junctions in Austria, consisting of a run round loop with rail-level platforms and verandahed buildings near the dead end. After leaving the station, the line became single and ran South-westward alongside the OBB line for about a kilometre before swinging away due West to reach Bad Ischl goods yards and locomotive sheds (1.3km). The goods yard was quite a small one. The line then turned Northwards for a short distance, to reach the little halt of Kaltenbach (2.1km). It now swung sharply west again and at 2.7km. from Bad Ischl, entered a tunnel a little less than three quarters of a kilometre in length. The next station was another little halt, Pfandl, (4.8km) and there was then an uninterrupted run to the halt at Ascham (7.1km) which was closely followed by Wacht (8.0km). Shortly afterwards appeared the first signs of the S.K.G.L.B.'s lifeblood - a siding to a saw mill (8.4km), and a little later the railway ran into the first real station since leaving Bad Ischl. This was Aigen-Vogelhub (9.1km) which boasted a passing loop and a siding. Weissenbach bei Strobl station followed at 10.8km with a siding to another saw mill and the line then ran on for another two kilometres to enter the fairly important passing station of Strobl (12.7km).

From here, the railway ran along the southern shore of the Wolfgangsee, through pleasant, often wooded, countryside to reach St. Wolfgang (S.K.G.L.B.) station. This was so termed only by the S.K.G.L.B. for St. Wolfgang town lies

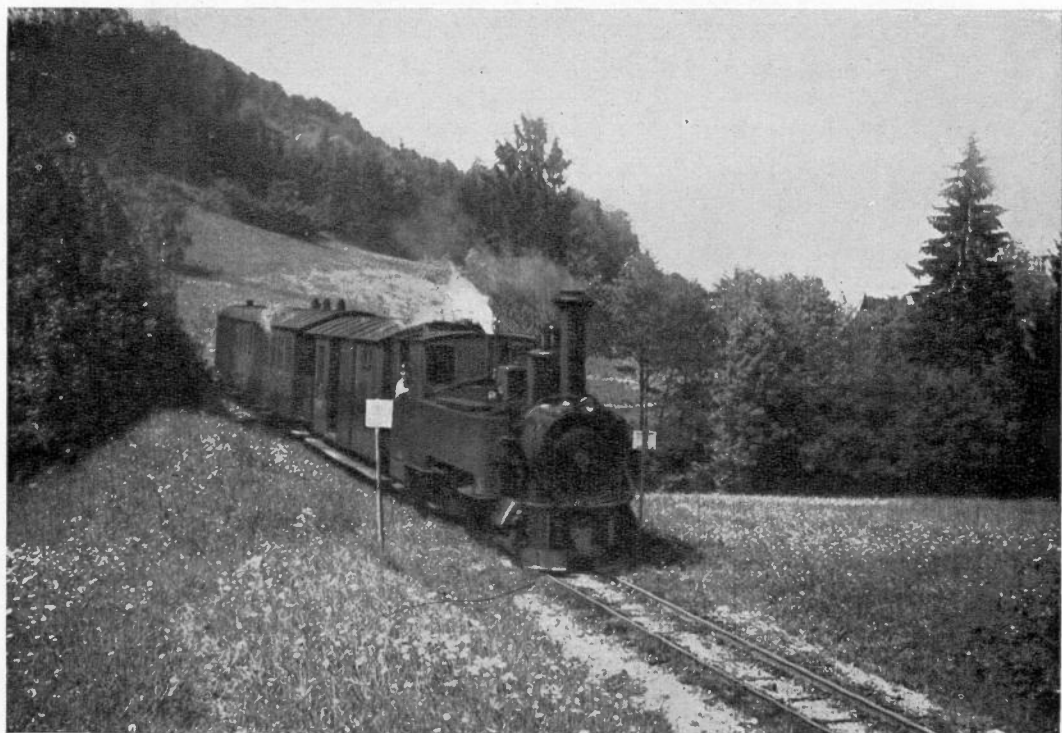
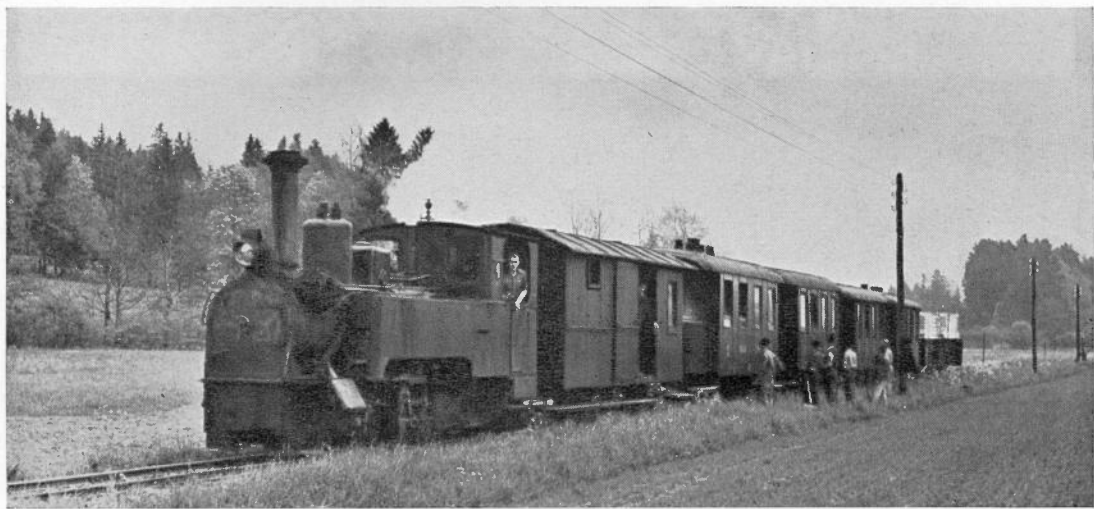
on the other side of the lake and the nearest the S.K.G.L.B. got was a siding to the pier from which a small steam-boat plied across the lake. This, too, was a passing station and, in the last years of the line, the main one.

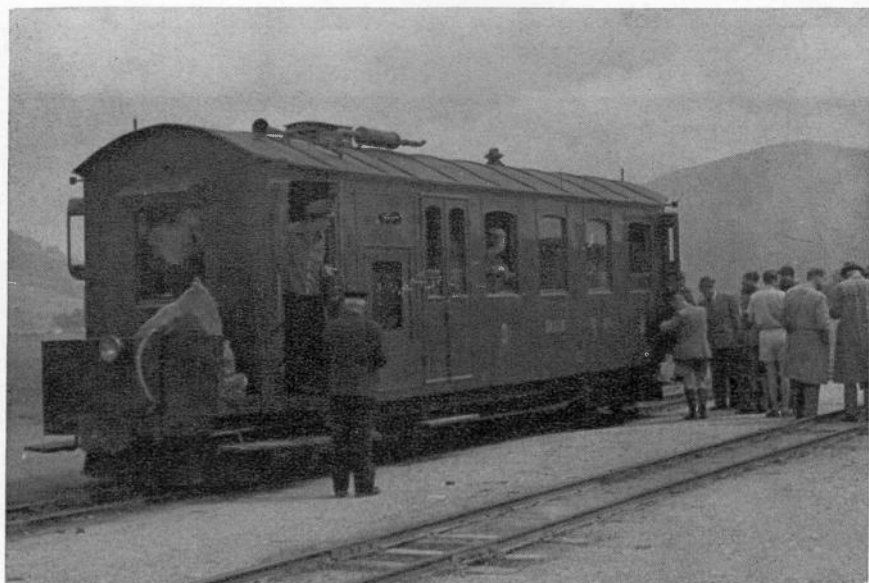
One kilometre further on was the lakeside halt of Zinkenbach with a saw mill siding, and in the next four kilometres there were two further halts, Gschwandt (20.6km) and Lueg (22.1km) St. Gilgen with its loop and small locomotive shed was reached at 24.5km. The line swung sharply North-East here and just under two km. further on was the halt of Billroth. At Aich (27.6km), classed as a halt but boasting a loop, the railway finally left the Wolfgangsee and ran on to reach the halt at Hüttenstein before plunging into the Hüttenstein tunnel 442 metres long. Shortly after emerging from the far end of this it came to Scharfling station (30.4km) where it turned North-West and entered the short, but important, Scharfling tunnel (100 metres in length and 580 metres above sea level) to burrow through the mountain between the Wolfgangsee and Mondsee, before descending rapidly to meet the latter at Plomberg (32.7km). At this point the line is 485 metres above sea level.

The railway and the road ran right alongside each other here for about 200 metres on a narrow ledge above the southern shore of the lake, and then the railway swung away to enter Plomberg station. Two km. further on there was a saw mill siding and shortly afterwards, having left the lake some way away on its right, the line entered St. Lorenz station, one of the most important intermediate stations on the railway. There is a loop and sidings here, and the Mondsee branch curves off to the right by a facing connection. The branch trains have their own bay road on the East side of the station. Here, too, were watering and coaling facilities for the locomotives.

TOP. O-6-2T No.4 with a Salzburg-bound train near Thalgau. (block courtesy "Trains Illustrated" Photo Dr. Ransome-Wallis)

LOWER. An O-62T hustles a Salzburg train along between St. Lorenz and Salzburg. (Block and photo - Cleaver-Hume Press.)





The Mondsee Branch. (3.7km)

This branch, the only constructed portion of the proposed line to Strasswalchen, became the best known portion of the S.K.G.L.B. in later years because of its unique motive power, the famous railcar. This did not appear until the twenties, however, and the branch was designed for steam working. It curved away from the open lands around St. Lorenz to run Northwards along fairly level ground to Leitnerbratlkeller halt (1.0km). Here it once more joined the Western shore of the Mondsee, which it followed closely past Schwarzinden (2.1km) to Mondsee, a small branch line terminus which nevertheless contained a refreshment room of sorts and a small locomotive shed for the branch engine.

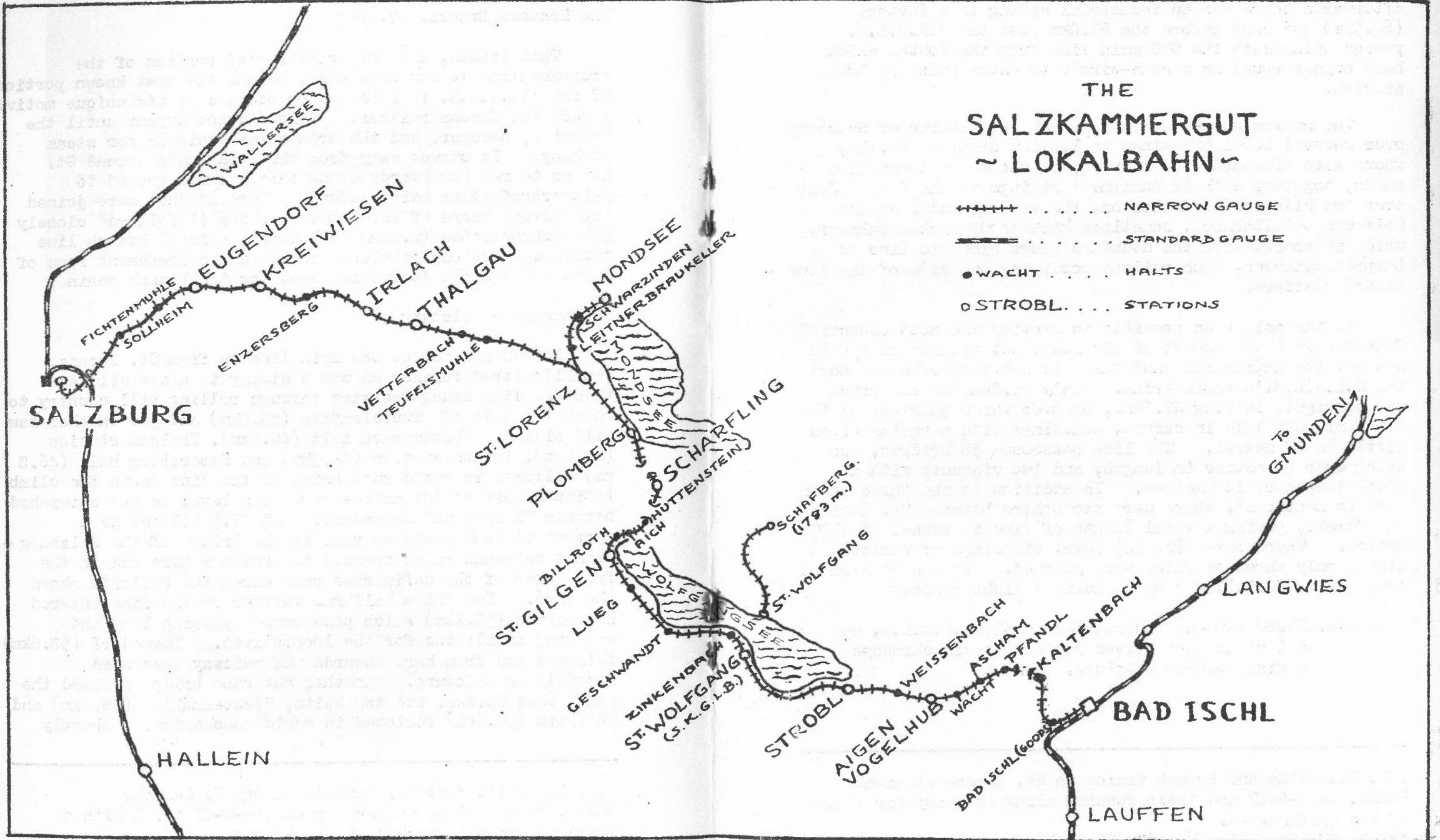
St. Lorenz - Salzburg

Let us now follow the main line on from St. Lorenz. Two kilometres further on was a siding to a saw mill and then the line swung westward through rolling hill country to reach the halt of Teufelsmühle (39.0km) and yet another saw mill siding. Vetterbach halt (40.9km), Thalgau station (42.6km), Irlach station (44.9km) and Enzersberg halt (46.3 km) followed in rapid succession as the line began the climb to its summit of 631 metres above sea level on the watershed between Thalgau and Eugendorf. At 47.5 kilometres a portent of doom could be seen in the bridge of the Salzburg - Vienna autobahn which crossed the railway here and in the fresh scar of the unfinished road along the hillside above the line. Two and a half km. further on the line entered Kreiwiesen (50.1km) which possessed a passing loop and watering facilities for the locomotives. Eugendorf (53.6km) followed and from here onwards the railway descended steadily to Salzburg. Another autobahn bridge crossed the railway at 55.4km. and two halts, Fichtennühle (56.4km) and Söllheim (58.8km) followed in rapid succession. Shortly

TOP. The Railcar at St. Lorenz. (photo F. Church)
LOWER. Steam on the Mondsee branch! O-6-OT No.30 with a train of 4-wheel coaches at St. Lorenz.
(block Rly. Magazine. Photo Mr. Nelson.)

THE SALZKAMMERGUT ~ LOKALBAHN ~

- +++++ NARROW GAUGE
- STANDARD GAUGE
- WACHT HALTS
- STROBL STATIONS



afterwards there was an industrial siding to a factory (60.5km) and just before the 61.0km post the S.K.G.L.B. passed underneath the OBB main line from the South, which here swings round in a semi-circle to enter Salzburg OBB station.

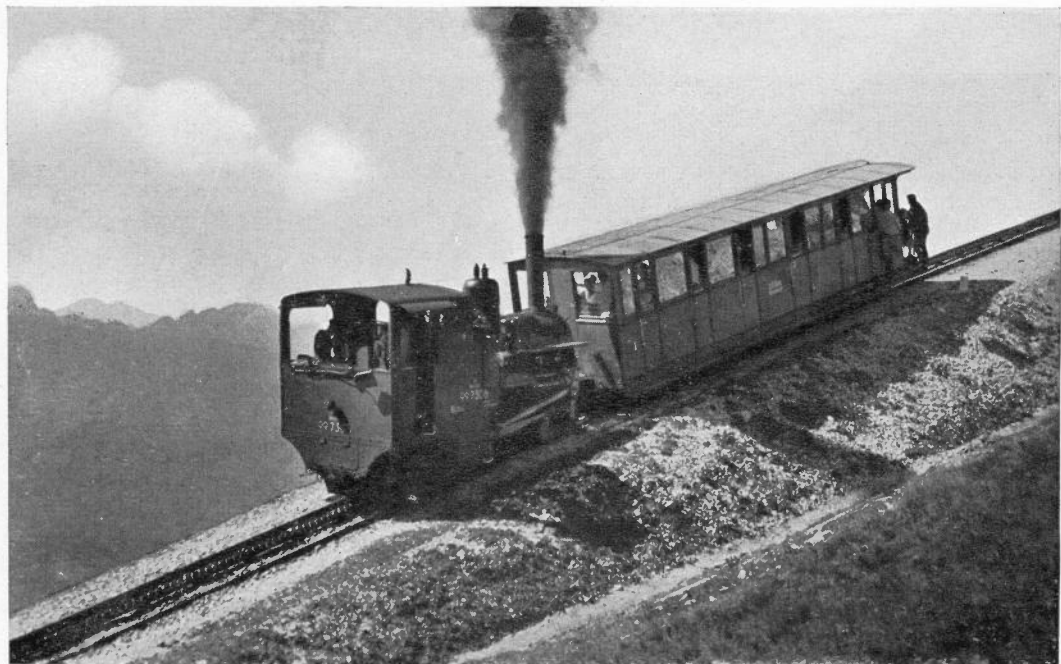
The narrow gauge now ran through the suburbs of Salzburg over several level crossings to Itzling station (61.4km) where were situated the main repair shops and locomotive sheds, together with transshipment sidings to the OBB. Just over two kilometres further on, the railway ended at the Salzburg Lokalbahn, sometimes known as the Ischlerbahnhof, which it shared with the standard gauge electric line to Lamprechtshausen, each railway occupying one side of the long island platform.

It has only been possible to mention the most essential features in this account of the route but the reader should not get the impression that there is not much of note about the S.K.G.L.B.'s engineering. Only 15.5km. of the track was straight, leaving 47.6km., or over three quarters of the total mileage laid in curves, sometimes with a radius of as little as 50 metres. The line possessed 58 bridges, two being over 30 metres in length, and two viaducts with a total length of 140 metres. In addition to the three major tunnels mentioned, there were two others between St. Lorenz and Strobl, giving a total length of line in tunnel of 1307 metres. There were also 435 level crossings of various kinds, only three of which were guarded. It can be seen that the S.K.G.L.B. was by no means a light railway!

Footnote. There were no turntables on the S.K.G.L.B. and all steam locomotives ran with their chimneys facing towards Salzburg.

TOP. Main line and branch trains in St. Lorenz station.
LOWER. An O-6-2T and train running along the southern shore of the Wolfgangsee.
(block "Trains Illustrated". Photo Dr. P. Ransome-Wallis.)





THE SALZKAMMERGUTLOKALBAHN

Chapter 3 Locomotives

The widely varied locomotive stock of the S.K.G.L.B. in its later years was one of its main attractions for the railway enthusiast, containing as it then did, examples of four, six, eight and ten coupled engines by eight different makers. This latter-day picture, however, tends to give a false impression of the railway and to increase its "Colonel Stephens" atmosphere. The original locomotive stock of the line was, in fact, of two standard patterns and all of these were bought new from the same maker, Krauss Linz, the motive power department being very well equipped for its job.

The first two locomotives were 0-4-0T's built in 1890 for the opening of the line. No details are available, although No.2 survived until 1952. These were the only two of their kind, the future patterns being set by No's. 3,4,5, which arrived from Krauss in the same year. These were handsome and efficient 0-6-2T's of what has come to be regarded as the 'standard' Austrian narrow gauge pattern, with tall chimneys, single domes mounted just behind these, a square sandbox between dome and cab, and outside cylinders and valve gear with sloping valve chests. They were followed between 1891 and 1906 by seven similar engines. This class was responsible for working almost all main line passenger trains and many goods ones right up to the end of the line's life. There is not much of the "light railway" atmosphere about these engines and to see and hear one of them hustling a heavy train of four-wheelers over the not always gentle gradients of the S.K.G.L.B. is very impressive. The nearest comparison in this country is our own Vale of

TOP. Train on the OBB Schafberg rack line, once owned by the S.K.G.L.B. (block and photo: Cleaver Hume Press Ltd.)

LOWER. Train preparing to leave Bad Ischl with 0-6-2T No.7. (block "Trains Illustrated". Photo: Dr. P. Ransome-Wallis).

Rheidol engines.

From this point on, however, the published locomotive list gets very involved, with unexplained gaps in the numbering. It would appear, however, that the locomotives already mentioned worked the line unaided until the early 1920's, despite the depredations of the First World War, when five of them were requisitioned by the military....and three failed to return.

Only two other locomotives appear to have been bought new, No.20 an 0-8-0 tender-tank from Krauss in 1923 and No. 40, an 0-8-0 diesel which came from Deutz of Cologne in 1942. No. 19 in the list is, however, given as a 1944 vintage 0-8-OTT and this may have replaced an earlier engine of the same number. (possibly similar to No.20).

One further locomotive was obtained before World War II, being No.21, an 0-10-OTT built by Krauss-Maffei in 1916 and bought second-hand in 1927. All other locomotives arrived during, or just after, the war, presumably having been brought in to help cope with the greatly increased traffic. The most notable of these were two 0-6-OT's, No's. 30 and 31 "acquired" during 1943, one of which, No.30, rejoiced in the nickname of the "Fiery Elias". This locomotive sometimes worked the Mondsee branch when the railcar was off for repairs, and was to be seen semi-derelict by the line-side at Itzling until the railway closed.

The steam locomotives were painted black and, at any rate in the later years, did not show any trace of lining. They were kept spotlessly clean in true narrow gauge tradition.

The Railcars

There were also two petrol electric railcars. Little data is available about one, a 1935 vintage Austro-Daimler machine which was taken out of service at the end of World War II, but the other, numbered 672 (presumably in the coaching stock) was probably the most famous - or notorious

item of narrow gauge stock on the continent. It started life in 1894 as the private saloon of the Emperor Franz Josef, and when World War I rendered it redundant in this role other uses had to be found for it. In 1924 it disappeared into Itzling works to be rebuilt and emerge in a new guise. Reading from front to back, it now comprised; a buffer beam and small balcony on which luggage, sacks and other bulky and awkward articles were piled; a minute driving cab; a large luggage compartment containing a very small petrol engine and a very big electric power plant - a combination which did much to give the railcar its notoriety; a passenger saloon comprising rather more than half the length of the car and furnished with a spartan simplicity in nicotine-coloured wood; a driving cubicle; and an end balcony for entrance and exit.

The railcar lived up to its reputation, too. During the 1956 N.G.R.S. tour of Austrian narrow gauge lines, the author was standing peacefully on St. Lorenz station, contemplating the main line train taking on water, when a low buzzing became apparent. So gradually did this increase, that it was not until five minutes later, when it had grown into a rattling roar, reminiscent of a demented mowing machine, that he put two and two together and realised that this must be The Railcar. Even so several more minutes passed before it ground round the bend, filling the air with its clamour, and jerked to a stop beside the main line train....and silence descended once more. And even when, after a slow, important sounding ramble along the branch, it deposited us at Mondsee, it refused to behave like any normal railcar and wait in the station until the next train was due, but displayed its individuality by promptly retiring to the engine shed some way down the line.

THE SALZKAMMERGUTLOKALBAHN

No.	Type	Builder	Builder's No.	Date
1	O-4-OT	Krauss Linz	2324	1890
2	O-4-OT	" "	2325	1890
3	O-6-2T	" "	2340	1890
4	O-6-2T	" "	2341	1890
5	O-6-2T	" "	2342	1890
6	O-6-2T	" "	2511	1891
7	O-6-2T	" "	2751	1892
8	O-6-2T	" "	2752	1892
9	O-6-2T	" "	2821	1893
10	O-6-2T	" "	2822	1893
11	O-6-2T	" "	3034	1894
12	O-6-2T	" "	5513	1906
19	O-8-OTT	Franco-Belge	2855	1944
20	O-8-OTT	Krauss Linz	1335	1923
21	O-10-OTT	Krauss-Maffei	3965	1916
22	O-10-OTT	Borsig	14806	1939
30	O-6-OT	M.B.A.	13573	1940
31	O-6-OT	M.B.A.	13574	1940
32	O-6-OT	CMDK	2187	1944
33	O-6-OT	Henschel	25342	1942
40	O-8-OD	Deutz/Cologne	36613	1942
672	Bo-Bo	S.K.G.L.B.	-	1924
-	Bo-2	Austro-Daimler	-	1933

No's 1,3,4,8,9, lent to military in 1914-18 war.

No.5 may have been lent as well but this is not certain.

No's. 19,22,32,33, were on loan for some time before purchase
 OBB bought them from USTC (German Heeresfeldbahn type).

LOCOMOTIVE LIST

Remarks	Fate
Missing since 1914-18 war. Left in "Galizien" (Sagewurk Czudyn)	
Similar type No.1	Scrapped 1954
To Military. Returned 1920.	Preserved
As No.3.	Scrapped 1958
Missing since 1914-18 war.	Left in Yugoslavia
Scrapped after accident at Scharfling	Date of accident
Boiler used in repair shop, Itzling	1948
Sold to Styria Government Railways after closure.	1957/8
Missing since 1914-18 war.(Mori-Arco-Riva?)	Unknown
Military returned 1920.	Preserved
	Scrapped 1958
Sold to Styria Government Railways after closure.	1957/8
Rebuilt in 1937) Sold to Styria Government Railways	
Bunker & Longer W'Base) after closure.	1957/8
Bought from the OBB 1946 as 699 = KDL 113. Sold to Styria	
Government Railways in 1955. Now class 699.01	
Arrived on S.K.G.L.B. 1925	Scrapped 1958
Built for Holzverkohlung Konstanz. Bought by S.K.G.L.B. in	
1928	Scrapped 1955
Bought from OBB in 1945	Scrapped 1958
(Acquired 1942 Source unknown.	Scrapped 1958
(nicknamed "The Fiery Elias"	
Acquired 1942 Source unknown.	Scrapped 1958
Bought from OBB (R798) in 1945	Scrapped 1955

History as for No.32.

200 h.p. Bought new. Sold to Styria Government Railways
after closure. 1957/8

Rebuilt as petrol electric railcar from the private saloon
of Emperor Franz Josef for Mondsee branch use. Presumably
scrapped after closure 1958. Built Weiter 1894, Salcnwg 51 to
S.K.G.L.B. 1928.

Petrol railcar (1A) (A1) TBCa/s. Delivered 1935. Since 1939 in
use by Styrian Government Railways as trailer.

All stock, except those shown otherwise is being scrapped
at two firms: Fa. Schwandtner, Salzburg; Fa. Hainisch, Linz.

THE SALZKAMMERGUTLOKALBAHN

Chapter 4 Coaches

Most of the coaches on the S.K.G.L.B. were four wheeled and were of two main patterns. The most common were centre-gangway saloon coaches with transverse seats and end balconies but there were also some side corridor coaches with compartments. They differed considerably in exterior appearance. Most had modern looking domed roofs similar to those on continental main-line stock, but some had sharply curved roofs with transverse ribs and there were one or two wider than the rest with curly roofs, reminiscent of the old Festiniog brake vans.

There were also a number of modern-looking bogie coaches which were divided into two saloons with centre gangways and vestibuled entrances. Nine of these have been sold to the Styrian Government Railways.

The interiors of the coaches were finished in varnished wood and the exteriors were painted a drab green which faded with exposure to a pleasant turquoise colour.

Coaching Stock List at Closure.

4-w centre-gangway coaches with end balconies.

102, 104, 151, 156, 351, 353, 356-9, 363, 501, 503, 507-9, 551-3, 556, 558-566, 568-572, 574.

4-w side corridor compartment coaches.

152, 158.

Bogie coaches with closed end balconies.

652-660.

All coaches are to be scrapped, with the exception of two which are being preserved (4-w) and the nine sold to the Styria Government Railways.

THE SALZKAMMERGUTLOKALBAHN

Chapter 5 Goods Vehicles

The goods rolling stock consisted mainly of four-wheeled vehicles of various types. Firstly there were three types of van which worked in passenger trains. The most numerous were luggage/brake vans with a single large sliding door on each side. These varied in details. At least one was attached to every passenger train. There were also three mail vans of somewhat similar design and a solitary luggage/mail van of vaguely British appearance which had two pairs of outward-opening doors on each side. (Believed to be the first vehicle in the photo of the train at Bad Ischl).

The rest of the goods stock was made up of vans, several varieties of open wagons - high and low sided, and flat trucks - and a few tank wagons of which only two were in use at the closure.

All vans were green, and open wagons brown with black underframes and white lettering.

Van and Wagon Stock List at closure.

Luggage/brake vans 751, 755, 757, 759, 761, 763, 765.

Luggage/mail vans DF851

Mail vans F 952, 954, 956.

Goods vans Gw 1101-1103, 1105-1111, 1305-1312.

Gwd 1201-1203, 1301-1303. Gmds 1381.

Open wagons Pwr 2101-2102, 2302-3, 2401.

Prd 3151, 3351-3, 3451-4. Nwr 4101-3, 4301.

Kw 5001-4, 5101-2, 5104-8, 5155, 5201, 5301-2.

K 6109, 6151, 6153-9, 6161, 6164-9.

P 6451, 7004-5, 7101-4, 8001-2.

Swr 8101-5.

Sr 9051, 9151.

Tank wagons Ra 1. R 2.

27 assorted vehicles sold to Styria Government Rlys. Others scrapped.

"ZWISCHEN SALZBURG UND BAD ISCHL"

(All verses and refrain preceded by "Sch..sch..sch....")

1. Und jetzt schaun Sie sich das ein-mal an:
Ja was Kommerlt denn da? Ei-ne Bahn!
Nur paar Wagerln, a Lo-ko-mo-tiv,
Aber je-den be-gei-stert der Pffiff:

Refr. Zwi-schen Salzburg und Bad I-schl
Pfeift a lie-be klei-ne Ei-sen-bahn,
Raucht ein bi-bl, pfaucht ein bi-bl
Und dann taucht sie wie-der an.
Zwischen Salzburg und Bad Ischl
Fahrt man in dem grü-nen Wald hin-ein,
Pflückt vom Al-men-rausch ein Bü-schl
Und dann steigtman wie-der ein.
Ja, der ei-ne hat's leicht und der an-de-re schwer,
Schau, das Lo-ko-mo-ti-verl, das Plagf sich so sehr!
Und so man-chem in Zug geht es da durch den Sinn:
Ja auch ich mu mein Anhängerl ziehn.
Zwischen Salzburg und Bad Ischl
Fahrt a lie-be klei-ne Ei-sen-bahn,
Ra-stet bi- l, reent ein bi- l,
Bis sie nimmer wei-ter kann. (twice)

2. So was G~~ut~~ut -li-ches gibt es noch heut'
In der nar-ri-schen, da-mi-schen Zeit;
Ja, da lacht dir ein je-der gleich zu,
Und am End' singst das Lied auch du:
3. Doch ein-mal kommt die Endsta-ti-on,
Vielleicht träumt dir gar ein-mal da-von,
Von der ur-al-ten Lo-ko-mo-tiv,
Als wenn sie wie zum Ab-schied noch rief:

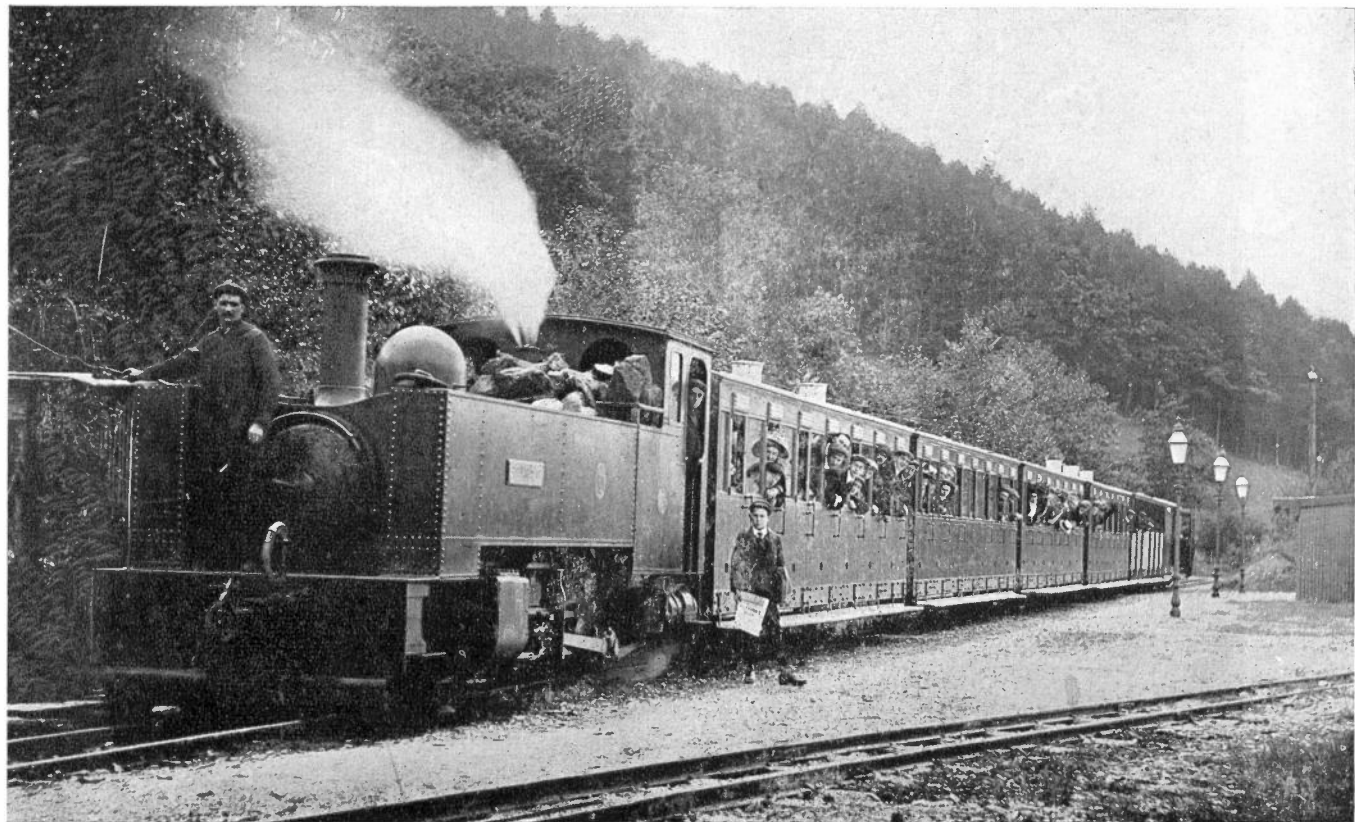
TOP. Left. 0-6-OT

Right. 0-6-2T

LOWER. Protest march through Salzburg after the closure.

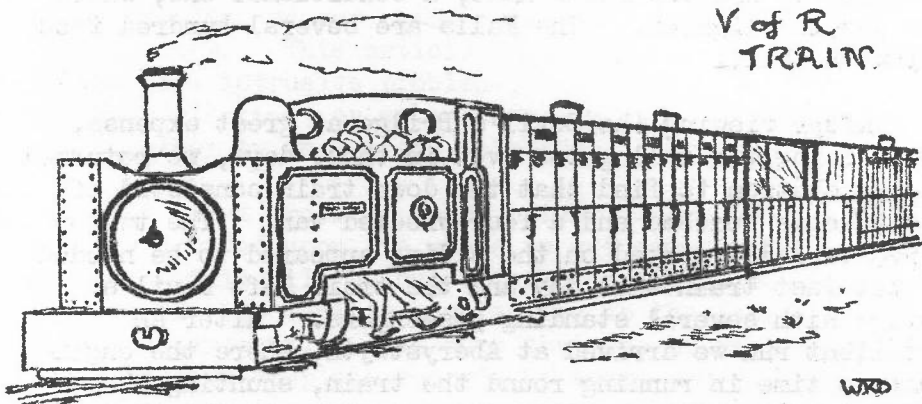
(blocks courtesy European Railways. Photos by J.E. Coates).





JOURNEYS ON THE NARROW GAUGE by A.E. Rimmer.

No.1. The Vale of Rheidol light railway (1'11½" gauge).



The Vale of Rheidol is one of the finest examples of the narrow gauge railway in use now, being maintained in first class condition and with the double advantage of having a superb route and of possessing one terminus at a busy seaside resort.

My trip over the line in 1934 was made behind G.W.R. No. 1213 (now No.9), one of the original Davies and Metcalfe locos. She was hauling four closed compartment coaches and two open observation cars. The saloon coaches which are used now had not then been built and consequently the open coaches were far more popular as the others gave a rather restricted view. The journey itself, as is usual on this line, was uneventful. Water was taken at Aberffwrdd and, of course, cameras were much in evidence. I always remember the well kept stations on the line - at Aberffwrdd the slogan "The Best Way - G.W.R." appeared on the bank beside the down platform. The train arrived and departed from the line next to the booking office at Devil's Bridge as it was the second afternoon train (2.30 p.m. from Aberystwyth) and the last.

FACING PAGE: Train at Nantyrnen in 1903 with compartment coaches. Block and photo courtesy J.I.C. Boyd.

As always the scenery on the line was superb. The whole of the Rheidol Valley came into view from the train as it rounded the long succession of reverse curves before reaching Devil's Bridge terminus. I remember the train stopping at Rheidol Falls halt, a conditional one, where two people alighted. The Falls are several hundred feet below the halt.

After viewing the Devil's Bridge at great expense, there being two toll gates even in those days, we returned to the station to find that the down train consisted of eight bogie coaches and a four-wheeled van. The two or three vehicles parked on the siding appeared to be needed on the last train that day and the train left Devil's Bridge with several standing passengers. After an excellent run we arrived at Aberystwyth, where the engine lost no time in running round the train, shunting the extra coaches onto a siding and returning to the shed.

VALE OF RHEIDOL BRANCH - TIME-TABLE 1958

24th May - 13th September.

	WEEKDAYS			SUNDAYS		
		A	B	A	E	C
ABERYSTWYTH	10.0	1SX45	2.0	2.30	5.45	2.15
LLANBADARN	10.7	1SX52	2.7	2.37	5.52	2.22
DEVIL'S BRIDGE arr.	11.0	2SX45	3.0	3.30	6.45	3.15

	WEEKDAYS			SUNDAYS		
			D	A	E	C
DEVIL'S BRIDGE dep.	11.45		4.00	5.50	8.00	4.30
LLANBADARN dep.	12.39		4.54	6.45	8.55	5.24
ABERYSTWYTH arr.	12.45		5.00	6.50	9.00	5.30

- A - commences 14th July. B - will not run after 12th July.
 C - runs Sundays 25th May and 20th July to 7th September.
 D - will not run on Saturdays after 12th July.
 E - runs Tuesdays, Wednesdays & Thursdays commencing 15th July.
 SX - Saturdays excepted.

SOME PROBLEMS OF NARROW GAUGE MODELLING by D.A. Boreham.

It would be true to say that most railway modellers come up against problems sooner or later: it would be equally true to say that modellers of narrow gauge railways meet these problems sooner rather than later and that there are more of them. This article, while hoping to discuss a few of the more intrusive problems, does not claim to be in any way authoritative or exhaustive - it is just a few notes got together by an average modeller.

The first problem, which arises before even a prototype is decided upon, is where to get information and photographs. This will be but briefly mentioned here since members of this Society have access to the library and reference department. I am sure that the Librarian would not claim to have complete records of every narrow gauge line that ever existed, so, on the principle that every little helps, may I urge modellers in possession of reliable drawings and/or photos to let the Librarian have copies of them if they have not already done so. (I would like to back up Mr. Boreham's request. If we can collect information it will benefit everyone and we can publish it in permanent form as explained elsewhere in this issue - Ed.).

Our next problem is one of gauge. This is really two problems, the actual gauge to be used, and the gauge-scale relationship - and may I say here that the multiplicity of gauges is a problem all of its own when exhibitions crop up. Unlike our standard gauge colleagues, whose exhibits can nearly all be accommodated on two or three gauges of track, depending on the scale used, narrow gauge - exhibition organisers have to cope with what seems to be dozens of different combinations of scale and gauge.

For the standard gauge modeller the question of gauge should not arise. Their gauge is the equivalent of $4'8\frac{1}{2}"$ (what an odd standard!), in whatever scale they happen to be modelling. In 3.5 mm scale this works out very close to 16.5 mm, and if the 4 mm scale modellers - the vast majority - wish to use 16.5 mm to represent standard gauge in their scale, this proves nothing except that they are all narrow gauge modellers unaware, poor things; and TT3 is even worse

in this respect than 00. So the problem for us is:- How far are we to insist on a correct scale-gauge ratio, and how far are we to compromise?

One solution to this problem is to take a standard track such a 0-gauge track - 32 mm - and build a scale round it. This is undoubtedly how 16 mm scale, using 0-gauge track to represent 2ft. gauge, came into being. Models, including some of the most exquisitely detailed ones I have ever seen have been built in this scale by a number of modellers and it is an ideal size for garden layouts.

This solution is excellent if one is starting from scratch but what if one already possesses a standard gauge line and wishes to add a feeder? Then one must either compromise, choosing a commercial track and model prototypes which do not offend the gauge-scale ratio too violently, or choose one's prototypes first and then fit the gauge to suit, irrespective of whether one's friend's models can run on it or not. This is the course I personally favour. What one should not do is, for example, to run 3ft. gauge prototypes in 7 mm scale on 16.5 mm track. I have seen this done. It looks horrible! Yet the same track, when used in conjunction with 2'3" prototypes in the same scale could scarcely look more realistic.

I would say that, while some latitude with the gauge/scale is at times necessary, it should be kept to a minimum in the interests of accuracy. It is better to undergauge slightly rather than to overgauge, in accordance with BRMSB recommendations, since wheels and coupling rods tend to be overscale anyway. The table overleaf shows what can be made of commercially produced tracks.

The table is not exhaustive, neither does it imply that other gauges should not be used. In fact both 14 mm (7 mm scale) and 8 mm (4 mm scale) are in use. These while non-standard in the commercial sense are right for 2ft gauge models in the scales to which they refer. One needs to be strong-minded to use them, however, for there is little outside help available.

TRACK	NAME	SCALE	PROTOTYPES	REMARKS
32mm	O gauge	16mm	2ft gauge	For garden use 100% accurate.
"	"	10mm	Metre.	1.3mm under.
7/8"	S gauge	7mm	3ft gauge	1.225mm over.
"	"	"	Metre.	.237mm "
18mm	EM gauge	3/8"	2ft gauge	1mm under.
"	"	7mm	2'6" gauge	.5mm over.
16.5mm	OO gauge	7mm	2'3" gauge	.75mm over.
12mm	TT gauge	4mm	3ft gauge	100% accurate
"	"	"	Metre.	1.125mm under.
"	"	3/16"	2'6" gauge	Very slightly under
9.5mm	OOO "	"	2ft gauge	100% accurate.

Another problem which we share with other modellers, is the decision as to what motive power to use, (electricity, steam, clockwork or good old string). I should have thought that the 8mm/16mm combination would have been ideal for high pressure steam although, so far as I know, this does not seem to have been attempted. What I have seen in this scale are some beautiful Vale of Rheidol models, electrically driven on the 2-rail system with two Bond's O gauge mechanisms per loco. From that it is not difficult to deduce that if it is possible to produce satisfactory 2-rail working in this size, there can be no excuse for anything but 2-rail, other than the overhead system, in the smaller scales.

(If sufficient people are interest in modelling articles we will continue this series in the next issue).

PUBLICATIONS (cont. from page 14).

The Society, as you can see, would like to promote research and is prepared to publish the results at its own expense, but we cannot do much without the active help of members. There is no cause for delay for even if a programme of research can be organised now it will not show results for some time. We need your co-operation. Please let the Hon. Publications Officer know if you are prepared in any way to help, (and please enclose an s.a.e. for the reply).

PUBLICATIONS.

Members may like to know that, following the A.G.M., we have decided to press ahead with research into certain narrow gauge lines and the publication of our findings. We intend to publish four types of books.

1. Handbooks on industrial and other private railways in this country. No.1. (Pike, Fayle's - Furzebrook) is already out and No.2. (Harrogate Gas Works) is almost ready for publication. Others are in various stages of preparation, including: Pike, Fayle's - Norden; Bowaters Lloyd, Sittingbourne; Sand Hutton Lt.Rly; and municipal lines in the Leeds and Harrogate area. There are, however, many other lines requiring attention. If YOU are willing to do research into any N.G. line (e.g. Penrhyn, Torrington and Marland, etc) and either send your findings to the Reference department, or, preferably, write the history up yourself, please let the Hon. Publications Officer know. The Society is willing to publish such histories at its own expense.

2. A series of booklets on the locos and rolling stock of N.G. lines, each one giving accurate drawings, photos and data of all the stock of one particular line. Here again we need your help to fill up the gaps. If you have any reliable drawings please let the Hon. Publications Officer have a list of them.

3. A series of booklets rather on the lines of Kidner's Lt. Rly. Handbooks but more detailed, giving brief details of a group of interesting lines in a particular area. They are designed for the "tourist" and we shall have to rely on you to produce details of lines near your homes.

4. Booklets of general interest, generally as reprints of magazine articles and concentrating on foreign lines. Anyone like to do a nice long article on, say, The Brienzer Rothornbahn? Or the Hummlinger? Or the Chemins de Fer de Provence? Or.....?

BOOK REVIEWS

Tal-y-llyn Railway Guide (1958 Edition) 32pp. map. 12 photo. pages.

This year's guide has been re-written to bring it up to date and to provide more general information for those who use the railway. This is especially noticeable in the section dealing with the route and the walks which can be taken from various points on it. The guide is written in a pleasant, easy to read, style and starts with a general introduction on the railway and the work of the Preservation Society. This is followed by the description of the route and a section headed "Facts for Railway Enthusiasts" which deals with the locomotives and rolling stock and includes the latest information on these. The photographs are of the usual high quality which one associates with this booklet but the selection might, in our opinion, have been more representative- three of the twelve deal with the derelict No.1 while No.2 is not shown at all and the Museum is only represented by a close-up of a slate wagon. These, however, are personal views and there is no doubt that this year's guide is, as always, excellent value for the money.

Festiniog Railway Guide (1958 Edition) 32pp map. coloured cover. 20 photos. Obtainable at 1/10d post free from the Festiniog Railway Co. Harbour Station, Portmadoc.

This year's guide is a very neat production with a pleasant cover consisting of a true colour photo of Taliesin and a train on a slate embankment. The main body of the book comprises a well-written historical summary, together with details of progress in rehabilitating the line and a description of that part of the route which has been reopened. The locomotives and rolling stock are dealt with in tabulated form and the 1958 timetable is included at the back.

The photographs show a good cross-section of the line's activities but the quality of some is not up to the standard one expects from these guides. Several are not quite sharp and there is a tendency to include shots which show only half a train. Despite these minor faults, however, this booklet is well worth the money.

The Tralee and Dingle Railway by P.B. Whitehouse, London Locomotive Publishing Co., Craven House, Hampton Court, Surrey. 5 $\frac{1}{8}$ " x 7 $\frac{1}{4}$ ", 76pp. Illustrated - Price 6/-d.

All narrow gauge enthusiasts, especially those interested in Irish lines, will welcome this history of the Tralee and Dingle Railway. The book is well up to the high standard already set by this author and comprises a fairly detailed history, together with interesting extracts from the company's minute books and a long appendix containing much factual information of the type that tends to get boring if included in the main story but which is invaluable for reference purposes. This includes locomotive and rolling stock lists giving details of disposal, extracts from the working timetable for 1935, and a list of stations with their distances, together with details of speed restrictions.

There are maps showing the route of the line and the layouts at the main stations and four excellent drawings by A.J. Powell of Locos Nos. 2, 4, 7 and Coach No.3. The main illustration material consists of photographs and sketches scattered throughout the book. If we have any quarrel with the production it is that these photographs are rather poorly reproduced - the whole book seems to be printed on some form of lithoplate.

VON SALZBURG NACH BAD ISCHL - Ein Nachruf auf die Salzkammergut-lokalbahn (SKGLB). Josef Otto Slezak, Wien 19, Boschstrasse 1/22/9. 20pp. 15cm x 20cm. Illustrated, paper covers. Austrian Schillings 12.--, or D-Mark 2.--.

This is a well-produced publication dealing with the SKGLB from its inception until closure in 1957. Printed in German (modern type) with eight interesting photographs, also a route map and stock list, it is recommended to all who are interested in the SKGLB.