

THE RAILWAY PRESERVATION SOCIETY OF IRELAND

Slab Cualann

RAILTOUR



462 on 2.10 p.m. Market Stock Special

EX Enniscorthy at Kilcool

6.4.'57

Photo: A. Donaldson.

4th May, 1968

Souvenir 3/=

Proceeds in aid of Locomotive Fund

SLIEVE CUALANN RAILTOUR

Belfast - Dundalk

An itinerary from Belfast to Dundalk was published in our Cuchulainn and Coill Ultach souvenirs. A few of these are still available price 1 Shilling each if purchased along with the present issue.

Dundalk - Dublin

Mileposts: Down side throughout. Posts 46 and 9 are out of place.

Gradients: The line rises to MP52 mostly at 1/160 and after some undulations again from MP 46½ almost continuously to Kellystown Box (Up side) at 37.3 miles, including a short stretch at the remarkable inclination of 1/6176. The descent to MP33, into the Boyne Valley, is at 1/177 and 1/167. South of Drogheda the line falls gently through Laytown and, after minor undulations, rises from before Skerries at 1/150 to MP16 whence there is a descent at 1 in 173/163 to MP12½. The only grade of note thereafter is a climb at 1/200 to Harmonstown.

The Dublin and Belfast Junction Railway was completed between Dundalk and a station on the north bank of the Boyne in 1849. A temporary wooden viaduct was opened in 1853 to enable through trains to run for the Dublin Exhibition; the permanent structure came into use in 1855. Fears were later felt that the viaduct was deteriorating and single line working was instituted. During the 1907 Exhibition, for example, wild rumours about its supposedly unsafe condition were afoot. Belying these, however, it lasted until 1930, when the decision to renew the girders was taken. The SG3s (0-6-0) of 1921 had been confined north of Dundalk and although the S class were very hard put to it to keep time with the increasing weight of passenger trains, it was not possible to build anything heavier. The reconstruction of the Viaduct, however, made possible the Compounds and the 1932 accelerations.

At Dromin Junction, 43.6 miles, comes in the 4¾ mile Ardee branch, which lost its passenger service in 1933, but still has a considerable goods traffic. Like other minor GNR branches, it was once worked by the BT class 4-4-OTs. Goods trains worked through originally from Dundalk and latterly from Drogheda.

On the way down Kellystown bank loud electric horns at the distant signal formerly gave warning of approach to the Viaduct. An extra set, ¼ mile further out, was installed after one driver had misjudged his speed of approach. He had, however, the presence of mind not to touch the brake on the Drogheda station curve, thereby averting an almost certain derailment.

The line which comes in trailing on the Up side near MP33 is the connection to the Cement Factory further downstream.

At Drogheda we pass on to the former Dublin and Drogheda Railway (opened 1844) whose terminus is now the goods yard, situated in a cutting to the east of the modern station. In GNR days Drogheda was normally the home of the NQG class 0-6-0s. It was rare to see any of this four-engine class elsewhere.

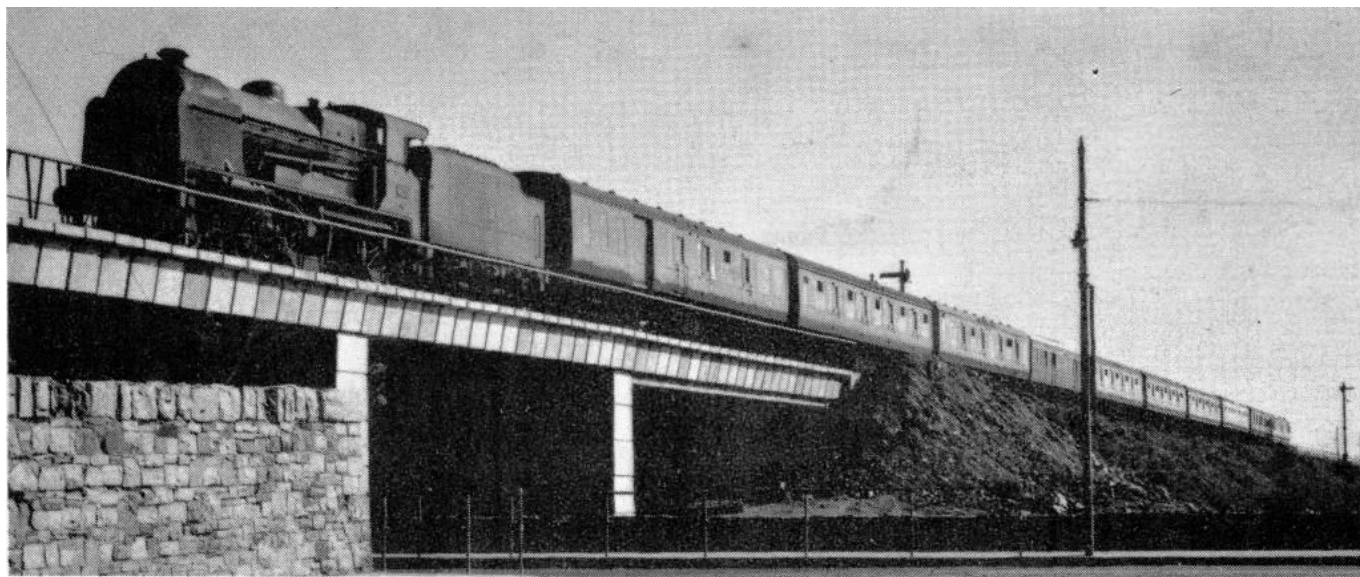
At the south end of the station comes in the Oldcastle branch, now lifted beyond Navan. It was opened by stages from 1850 to 1863 and, though originally planned by the D&BJR, was in the event worked by the D&DR. One service in 1932 was provided by a slip coach off the non-stopping 3:15pm ex-Dublin. Branch trains propelled in and out of Drogheda.

The name Droichead Átha means, appropriately enough, "the bridge across the ford".

The attractive station at Mosney serves the Holiday camp. In GNR days excursions to it from Belfast provided the rewarding spectacle of a tender-first compound on the empty carriages to and from Drogheda.

The Howth branch at 4.8 miles was opened in 1846. Double-tracked throughout, it has always been worked as a suburban service from Dublin.

The Tolka Bridge at MP $\frac{3}{4}$ replaces a structure washed away in the floods of December 1954. Some very interesting workings took place before a Bailey bridge was erected to close the breach pending the construction of the present bridge. Engines at first worked tender-first in one direction between Drogheda and Clontarf, turning at the former. One Compound - and her crew! - showed an unsuspected ability to attain 64mph tender-first. The WT made its first appearance in Dublin when No.4 was tried. Goods trains were re-routed via Clonsilla and Navan, the GNR 0-6-0s providing surprises in the loads they could take up to Liffey Junction.



209 "Foyle" on 6:40am Belfast to Claremorris Pilgrim Train crossing the new Tolka Bridge. Ambulance Coach on tail. 26th May 1957.
(A. Donaldson)

The lines we meet or pass over outside Connolly/Amiens Street are:
1) GN North Wall Branch diverging to the east at the East Wall Junction; 2) GSWR North Wall Branch and 3) MGWR North Wall branch.

When all is said and done, the most interesting feature of the GNR main line, especially south of Dundalk, has, since the turn of the century, been the running - culminating in the 1932 accelerations

which put Ireland in the "60mph club" for the first time - albeit only for the duration of one summer timetable. They also had a rejuvenating effect on Irish railways generally, which began to fight back after the depression of the late twenties.

Since much information on this running has been published, it may be as well merely to whet our reader's appetite by mentioning a few less well-known performances.

1) In 1936 the Dundalk 'Ruck' engine, QL No.24, took over a Belfast - Dublin 5 Shilling (!) excursion from 190, which had presumably run hot after an 80 down Mount Pleasant. With 260 tons, 24 took 28¾ minutes to pass Drogheda but ran thence to Dublin (31.7 miles) in 31½ minutes; speeds were 78 down Rush, 76 after Donabate and 69 at Malahide and again at Howth Junction. Coming home with 290 tons, she passed Drogheda in 33.55 after a maximum of 72 and stopped in Dundalk in 59.27.

2) In 1938 renewed class S No.173 "Galteemore", with 10 bogies on the 5:40pm Up, ran from Drogheda to Dublin in 30½ minutes start to stop. On an earlier stage speed had reached 85 down Mount Pleasant and maxima of 90mph were not unknown with this engine. In those days one was bitterly disappointed if a run over the GNR main line in either direction failed to produce a good "80".

3) Compared with exploits like these, the post-war "Enterprise", though laudable, seemed somewhat pedestrian. Still, as drivers made a fetish of keeping exact passing times, a check late in the journey necessitated hard running if time was to be kept. Such an occasion produced a run in 1949 in the course of which VS No.206 with 220 tons on the 10:30am Up, having passed Drogheda within seconds of the 100 minute allowance, suffered a PW check to 18mph - after Gormanston. The engine then accelerated from 31½ at Balbriggan to 62 at Skerries, fell to 55 mph up the bank and maintained the upper seventies all the way to Killester, except for a brief fall to 65 up Raheny; maximum was 81½ after Rush.

4) While the Bailey bridge was in use, most trains simply had 4 minutes added to their times, but the Enterprise was accelerated from Howth Junction northwards by this amount, to keep overall times unaltered. Timers would not have worried had the permanent bridge never been completed. So, on one occasion in 1955, No.210 with 6 bogies on the 5:30pm, after taking 12.16 to Howth Junction because of the slack, ran the 17.2 miles thence to MP22 in 16.35. A PW check to 21mph followed, but the engine accelerated to 48 up Kellystown and reeled off the distance front Post 39 to Post 52 in 10 minutes 55 seconds. 80mph was achieved twice, the maximum being 81½. As usual running was more restrained over the northern section, but net time to Belfast was 126½ minutes.

5) Around Christmas 1959 the 8:15am Up and the 2:45 return were worked by steam to diesel times. Newrymen, renowned for their brilliant work on stopping trains, found their itching fingers on the regulator of a mainline express engine. One example may serve to illustrate what

resulted. VS No.208 with 315 tons ran from Drogheda to Dublin in 32.17, reminding one of the 1930s. Speed rose to 67 after Laytown, was maintained at 65-66½ to Skerries and fell only to 57 at MP16. There was a maximum of 77 down Rush and the minimum up Raheny was 59. Even time was achieved, by MP8, 23.7 miles from the start.

D.S.E.R.

Mileposts: Down side to Shanganagh Junction (11.8 miles) from zero at Pearse/Westland Row; thence on Up side from zero at Harcourt Street (Shanganagh Junction being at 10.5 miles) Posts 2½ 4¼, 5, 7 and 8½ however are on the Up side (8½ is in Dalkey tunnel) and 17 on the Down side (on Greystones platform).

Gradients: The most important are: a rise from MP6 to 8½, the steepest portion being at 1/90 about MP8; a fall to MP10½ steepening to 1/84 around MP9½. After Killiney the line climbs at 1/151 to join the Harcourt Street route at the Junction whence it falls at 1/117 most of the way to Bray. The hardest part of the ascent to Bray Head is at 1/90 around MP12½. There is a descent at 1/82 through the last tunnel (about MP15½). Greystones is reached after a short rise at 1/100 and from it the line falls, partly at 1/95 down to the level stretch which extends all the way to Wicklow Goods. From Wicklow Junction the line rises to the present passenger station, partly at 1/100.

From Connolly to Pearse Station (1 mile) we travel over the City of Dublin Junction Railways, opened in 1890/1 to connect the DSER with the other Dublin railways. It cost so much to build that certain fares over it are based on counting its length as 4½ miles.

On to Dunleary Crossing (about MP5½) we are using our oldest railway - the Dublin and Kingstown, opened in 1834. It was laid to 4'8½" gauge and illuminated throughout by gaslight, like a public road. Original stations were at Booterstown, Williamstown and Blackrock. The stone building at the first-mentioned is part of the original station and consequently the oldest railway building in Ireland. The site of Williamstown is marked by a Martello tower and footbridge near MP3¾.

The sidings seen on the Up side after Landsdowne Road are used for RDS shows at Ballsbridge.

A word about place names: Booterstown is Baile an bhóthair - Road town, i.e. a stopping point on Slighe Cualann, one of the trunk routes of ancient Ireland. Dún Laoghaire is the Fort of Laoghaire, a High King of the 5th century AD. Dunleary is a cartographer's attempt to represent the sound of the foregoing. The port was called Kingstown from 1821 to 1921.

In 1837 the line was extended across the old Dunleary harbour to the terminal part of the present station (Down side) which was roofed till the 1930s; some local trains terminated in it right into the sixties. The line through Dún Laoghaire was only doubled in 1957, the available space being utilised with considerable ingenuity. The branch to the Pier just south of Dún Laoghaire was opened in 1859.

The Atmospheric Railway, opened in 1844 to 4'8½" gauge, started from a short platform underneath the present, upper entrance hall at Dún Laoghaire and ran to Barnhill Road Bridge, near Dalkey, mostly following the same route as the present line. However just short of MP7¾ a trace of its roadbed, here separate, can be seen, coming in on the Down side trailing to a catchpoint. It may perhaps be claimed that we travel over the only section of line in the world that can boast of having used four types of motive power. The railway from Dalkey to Bray was opened in 1854 and thence to Wicklow the following year; when also the Atmospheric was realigned and relaid to the national gauge. The D&K was similarly regauged soon afterwards.

As we leave Dalkey tunnel (MP8½) a superb view of Killiney bay bursts upon us with, in the distance, the cone of our eponymous Slieve Cualann - now, alas, commonly called the Sugar Loaf. Cuala was the ancient name for the whole area.



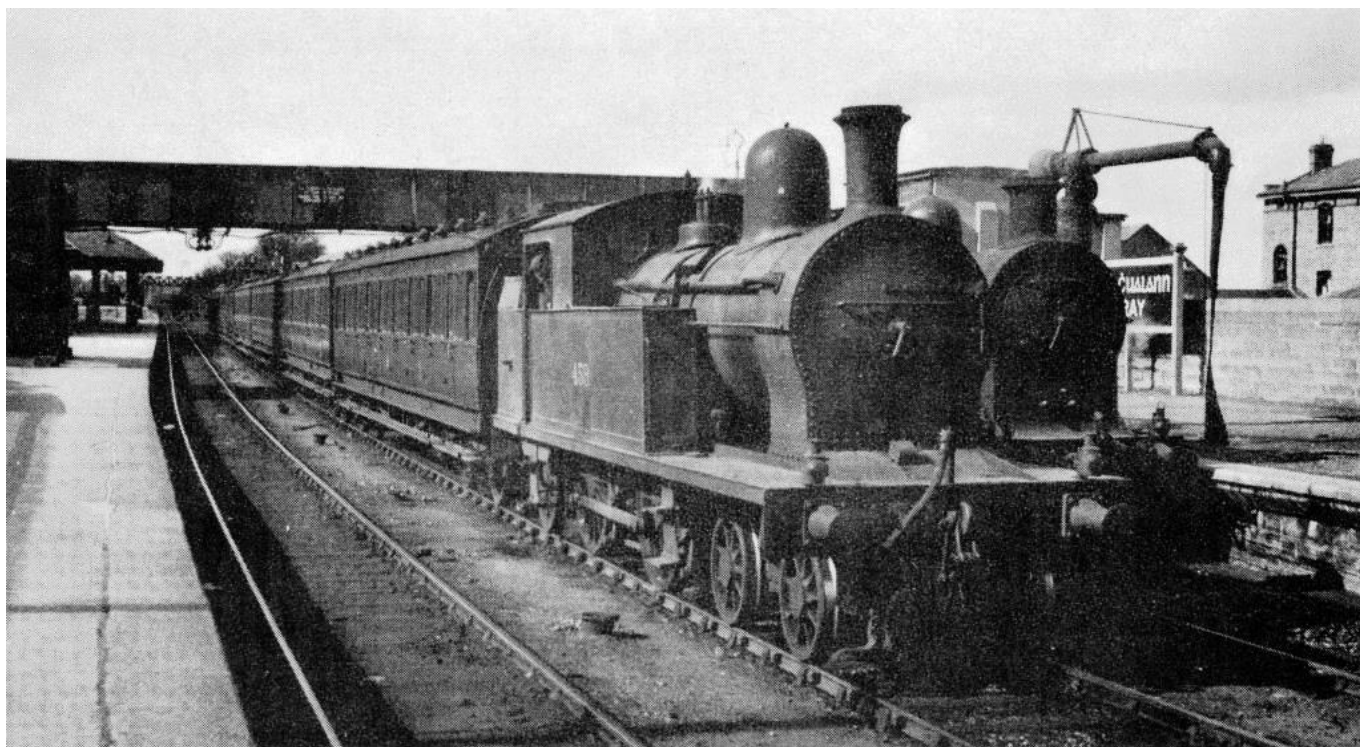
D4 No.339 on Amiens Street to Bray train at Shanganagh Junction on 4th May 1957. (A. Donaldson)

At MP10¾ can be seen diverging the original (single) roadbed, abandoned owing to coastal erosion. It reappears near MP12, whence it ran parallel to, but separate from, the present double road to a point just short of Bray station. In 1915 the new double track from Killiney to Shanganagh (which thus became a junction) was opened. Shanganagh, by the way, is properly Séanganach, the place hiving with ants, and should be accented on the first syllable, with the 'ng' pronounced as in "long".

At Bray (Brí Chualann - the Hill of Cuala, i.e. Bray Head) there was no platform on the Down side till 1926. Near MP13 we pass on the Down side, the short disused platform, of Bray Head station.

Thereafter, on the Down side, can be seen three distinct locations where, in 1917, the line was diverted inland, two of them involving tunnels. The second of these is 1,100 yards long. The original route was engineered by I.K. Brunel.

About MP16¾ on the Down side was Jubilee siding, site of the DSE creosoting plant, but latterly used for storing old coaches. Between Greystones and Wicklow the line is laid just above the strand, protected from the sea by concrete blocks chained together. The danger spot in an easterly gale was formerly Ballygannon (MP17¾), but more recently it has been between MP18¼ and MP18¾ and at Breaches Bridge about three miles further on.



G3 No.459 (ex-DSER No.54 "Duke of Leinster") at Bray, in green livery, ca. 1950. (S.V. Kennedy)

From Newcastle, where most of the sidings are buried under drifting sand, the line was once double to Wicklow, but was singled by the GSR. Newcastle takes its name from a fortress built there to protect the (English) Pale from raids by the O'Tooles and O'Byrnes.

Till 1875 there was a station at Killoughter (MP25½). The building (Up side) still bears the name on the northern gable.

Wicklow Goods was the original passenger terminus of the Dublin and Wicklow Railway. The signal cabin, buildings and hotel of the passenger terminal can still be distinguished. It continued in use for at least 20 years after the extension to Rathdrum in 1861 and "Sea Breeze" trains used it in 1939.

Wicklow is a Scandinavian settlement, its name meaning "inlet".

Some notes on train working: In 1922, in answer to tramway competition, the DSER introduced a remarkable fixed-interval timetable, whereby the stops which a given train made were determined

by the number of minutes past the hour at which it left its starting point. The consequent ease of memorising the timetable, coupled with a frequent service and cheap fares, made the scheme a complete success, especially as keen operating by the staff ensured punctuality. The GSR tried a similar experiment with improved rolling stock in 1928, but its punctuality suffered because the single road through Dún Laoghaire was apparently forgotten. The DSER had circumvented this by arranging for trains to cross more than a section away on either side.

Before World War II the first Down and last Up Wexford trains used Westland Row. Suburban engines worked these trains in both directions between Dublin and Bray, while Bray shed supplied the motive power on to Wexford. Similarly the Wexford engine on the first Up (to Harcourt Street) was detached at Bray, to be turned for the 10:00am Down. The second Up train worked through to Harcourt Street with one engine, which sometimes filled in the time before its return on the 6:45pm by running light to Bray and working up a Harcourt Street portion off the Up Day Goods. Curiously enough, it sometimes double-headed the (Bray) engine for the 6:05pm Arklow train (often a G2). After the demise of the DSER 4-4-0s, various GSWR classes worked the DSER main line, especially the D4s Nos. 335, 337, 339 and 340.

In general, the variety of engines on the DSE section of the GSR was incredible. The numerous DSER classes were supplemented by engines from the GSWR, WLWR, MGWR and CBSCR as well as a Clayton steam railcar and the Drumm train. Then in 1941/2 the experiment was tried of working engines through between GNR and DSER suburban stations, to save fuel, both companies' engines taking part. When CIÉ took over part of the GNR, most of the DSER engines had gone, but there was a new influx of GNR classes. The GSR themselves, in 1928, built the fine-looking 2-6-2T No.850, using some parts of the missing Woolwich 2-6-0. Unfortunately no more of these appeared. Instead came the 670 class 0-6-2Ts based on the J15s. They were unpopular, though my own logs show them as the only class possessing a decent turn of speed. On one run on the "Greystones Express", for example, 672 with 195 tons cleared Seapoint (5¾ miles) in 7.55 after a maximum of 50, but was halted by signals outside Dún Laoghaire. And No.670, with 115 tons, worked up to 50mph when running non-stop only from Blackrock to Sandymount (2.4 miles), taking only 4.44. I am indebted, however, to Mr David Houston for details of some excellent work in 1960-61, mostly by GNR engines. One would not expect a GNR LQG 0-6-0 (4'7½" wheels) to excel except on an extremely short run; yet the best time I can find from Westland Row to Dún Laoghaire (8' 43" for the 6.0 miles) was made by No.158 hauling six bogies. Highest speed was 53mph. Curiously enough 158 was beaten on some of the shorter sections by larger wheeled engines such as U class 4-4-0 No.197, but was outstanding from Bray to Greystones, reaching 48mph in this 8' 55" run. Actually 132N beat this by 23 seconds and produced the best maximum (50½mph) between Killiney and Bray. Another star performer was J4 No.261, one of Maunsell's fine superheated 0-6-0s from the GSWR, which made the fastest time from Blackrock to Westland Row (6' 23", maximum 51) hotly

pursued by 197N, with 6' 26". 132N achieved the highest speed in this direction - 52mph.

From Wicklow to Greystones a fine performance was put up by J9 (GSRW 0-6-0) No.354 in 1954, when with 135 tons on the 2:50pm ex Rosslare, she raced over the 11¼ miles in 14.40, maximum 58mph.

Locomotives used on the Tour

NIR (ex NCC) class WT 2-6-4T

Tractive effort figures are somewhat academic these days, but here they are for those who want them: Cylinders (two outside) 19" x 26"; Driving Wheel 6' 0" diameter; Boiler Pressure 200 lb/square inch; Tractive effort 22,160 lb; Carrying wheels are 3' 1" diameter. More important dimensions are: Heating surface 1,417 square feet (including 246 square feet of superheater); Grate area 25 square feet; Total weight in working order 87 tons; Maximum axle load 17½ tons; Water 2,500 gallons; Coal 3½ tons (the extended bankers hold about 1 ton more).

They came in four batches from 1947 to 1950.

Ex-GSRW class J15 0-6-0

Cylinders 18" x 24"; Driving Wheel 5' 1¾ diameter; Pressure of Z class boiler (nominal) 160 lbs per square inch (186 works at 150psi); Tractive effort with 150psi is 16,100 lb; Weight in working order 37 tons 13 cwts; Total heating surface 886 square feet (including 112 square feet superheater); Grate 18 square feet.

Tender (built 1922) holds 3,345 gallons and 7 tons. Weight in working order 36 tons 1 cwt.

186 is a somewhat cosmopolitan engine. The original 186 was built by Sharp Stewart in 1879 but it is doubtful if any considerable portion of this engine remains. Our 186 was reboilered in 1898 and again in 1932 and received new frames in 1935. Some parts of her are off No.195, a Beyer Peacock engine, while her leading axle is inscribed "Krupp, 1932".

Both could be described as mixed traffic engines. Details of J15 performance were given in issue No.1 of Five Foot Three. Suffice it to say here that they have often been timed at over 60mph; the highest recorded speed being 69.

The WTs have worked on the BCDR and GNR as well as on their parent system, setting new standards of performance everywhere they go. On the Bangor line they produced speeds of 60-70 mph in places where such had been undreamt of. On the NCC perhaps their greatest triumph was to keep time on the new MPD schedules of 1959 when the diesels had to be withdrawn for re-engining. This involved start to stop averages of 60mph over distances as short as twelve miles. On the NCC the most startling performance I can find is one run with No.4 and 165 tons when, starting out of Ballymena, she made even time in 8¼ miles from the start and ran the 11.7 miles to Antrim in 11.34 start to stop!

Restarting in spite of a signal check at the advanced starter, she worked up to no less than 69½ at MP16, uphill, and never fell below 66½ on the climb. York Road was reached in 21.10 or about 20¾ net. A non-stop run from Ballymena with such speeds would have taken about 29 minutes for the 31.0 miles.

On the GNR, No.57 with 155 tons ran from Goraghwood to Dundalk in the excellent time of 21.52 start to stop, maintaining 45 almost all the way up the bank (there was a momentary fall to 42 near the summit). Speed did not (need to) exceed 69 downhill. On another occasion, 55 with 250 tons accelerated from Dundalk to 40 at MP56, fell to 32 on the 1 in 91 at Mount Pleasant, recovered to 44 at Adavoyle and 53 in the 'Dip'. After passing the summit at 46, she ran from MP66 to MP87 in 20 minutes 55 seconds, despite careful observance of the slacks, speed ranging otherwise from 66 to 72 mph. Time to Portadown stop was only 41.18.

Another remarkable sprint was from Lurgan to Lisburn, 12.4 miles in 14.04 start to stop. Posts 99 to 104¾ were reeled off in 4 minutes 52 seconds.

We hope that you will enjoy a Railtour hauled by such distinguished classes.

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Once again our best thanks go to both Northern Ireland Railways and Córas Iompair Éireann for their kind co-operation in a multitude of ways in making today's Railtour possible.

Our thanks are also due to Messrs G.F. Wigham and K.A. Murray, acknowledged experts on the DSER for supplying and checking much of the historical material in this souvenir.

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FURTHER INFORMATION

A full account of the working of the DSER will appear in the next issue of our journal "Five Foot Three", which will be on sale on our Saint Ciaran Railtour in September.

More information about the work of the Ws and WTs will be found in our Colmcille Railtour souvenir in October.

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ADDENDA

Further notes supplied by Mr Wigham indicate that between 1854 and 1959, there were four versions of the route into Bray, involving single, double, triple and double roads respectively. There were three successive routes round Bray Head.

Written by A. Donaldson

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This souvenir has been produced by the Magazine Sub-Committee of the Society.