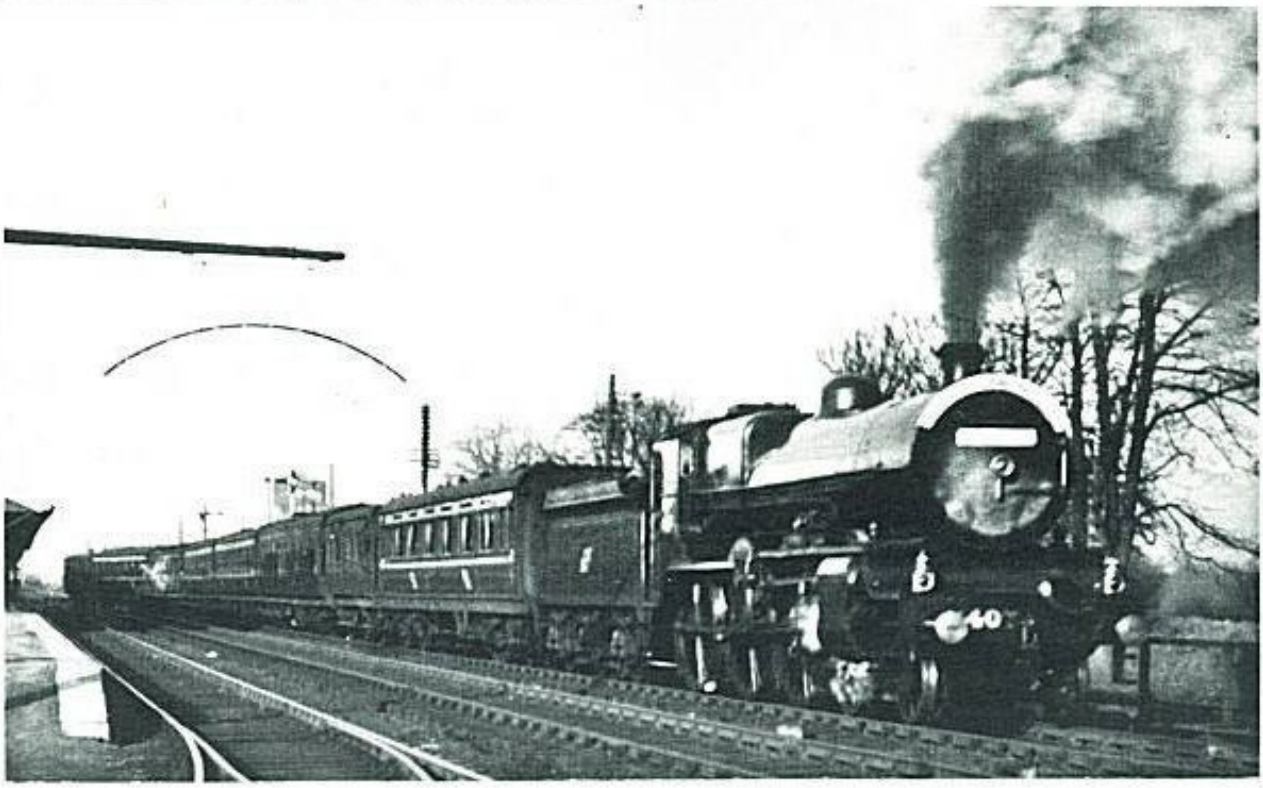
THE RAILWAY PRESERVATION SOCIETY OF IRELAND

PATRON: THE RT. HON. THE LORD O'NEILL

FIVE FOOT THREE

No. 4 January, 1968



Contents

Price 2/6d. Free to Members

FIVE FOOT THREE
No.4
January 1968

Editor: A. Donaldson

CONTENTS

Front Cover: On Good Friday 1951 the GNR rake which was coming up from Cork to work the 1:40pm Down Enterprise was immobilised near Thurles by a derailment. The photo shows the train, made up from spare coaches, leaving the Junction. At that time two GNR rakes worked the Belfast-Cork service. (A. Donaldson)

THE SHUNTING TANKS OF YORK ROAD — W.T. Scott

The first two NCC "pugs" were in fact examples of the 0-4-0ST to which this term is usually applied, though now all shunting engines seem to be so designated. No.42 was the first of the 0-4-0STs and was built by Sharp Stewart (Works No.2444). Before considering the engine herself, it is interesting to look at what she was intended to do.

With the opening of the Belfast Central Railway, traffic along the Belfast Quays was increasing and 42 was the engine ordered to shunt them. To reach the quays 42 had first to pass over the short tramway from the BNCR goods yard to the Harbour Commissioners' tramway. To accomplish this feat she required three persons to drive or conduct her, and if more than two wagons were attached, a fourth to look after them. Two of these were equipped with red flags. While on the tramway her driver was not allowed to sound the whistle, open the cylinder drain taps or allow 42 to blow off. Her maximum speed was to be three miles per hour.

Having got on to the Harbour Commissioners' tramway she was still not allowed to blow off or to have the cylinder drain taps opened. The maximum permitted load was 24 wagons, or 12 on Donegall Quay between 4 and 8:30pm. One other rather peculiar regulation forbade her to be nearer than 15 yards to any other train approaching or preceding her on the same line of rails. History does not record how

successful her drivers were in evasive tactics.

Apart from shunting the quays and goods yard 42's main duty was to go down to Albert Quay and bring up loads of locomotive coal. When she first appeared no cab was provided for the men, only a weatherboard which must have made her very unpleasant for the crew in wet weather. If one discounts the Sentinel railcar she was, for 39 years, the only outside cylinder engine on the NCC.

The front pair of wheels of the engine were partially enclosed in a splasher which did not come above the running plate, rather similar to the bogie splashers of the GNR. The buffer beam was of wood - common practice in 1875 - and the buffers were almost rectangular. The drive was, of course, on the trailing wheels and the slide bars were attached to a motion bracket just behind the leading wheels. The wheels themselves had twelve spokes and a very large balance weight. Sanding, which was by hand, was provided in front of the leading wheel and behind the rear one since the engine worked as much backwards as forwards.

Steam was admitted to the cylinders by outside steam pipes mid-way along the smokebox. Lubrication to the cylinders was by cylinder taps mounted over the cylinders. Immediately behind the smokebox was a cylindrical sand box, followed by a long tool box which largely concealed the leading spring. Jacks were carried as was common practice on all NCC engines at this time.

As already mentioned 42 first appeared with a weatherboard but was rebuilt in 1901 with a cab. No allowance was made in the cab for the safety valves which were of the Ramsbottom type. When the engine had a weatherboard only, the valves, which were placed over the firebox, exhausted in front of it but were later enclosed in the cab and exhausted through the cab roof. The spectacles were small and round and the cab sides were quite open. One peculiar feature of the engine was the extreme forward placement of the dome, on the first ring of the boiler. This was later perpetuated in No.16. The chimney was built up in three pieces and placed at the very front of the smokebox. On the saddle tanks, which extended from the front of the smokebox to the front of the firebox, was a Sharp Stewart maker's plate (removed, probably, when the engine was rebuilt). The livery was BNCR green with letters B.N.C.R. painted on the side sheets of the embryo cab.

No brakes, other than a hand brake actuated by a large wheel, were fitted to 42. This, the fireman was expected to work under the driver's commands and, to save himself a lot of unnecessary spinning, it was normal practice to leave the wheel set so that the brakes were just off. This did not please all of 42's drivers and one of them, if he detected the practice, would seize the wheel and spin it to the furthest off position. The regulator was of the standard two valve type and the reverse was by lever. The principal dimensions were as follows:

Cylinders	16" x 22"
Driving wheels	4'
Wheel base	7'9"
Pressure	130 lbs per sq. in.
Weight	30 tons (increased by about 1 ton on rebuilding)
Tractive effort	12,701 lbs

The usefulness of the engine for her task may be gauged from the fact that into a total wheel base of 7'9" was packed a tractive effort relatively high for a four coupled engine of 1875 and which could all be used since the whole of her weight was available for adhesion. She was in fact ideal for the tight dock yard curves.

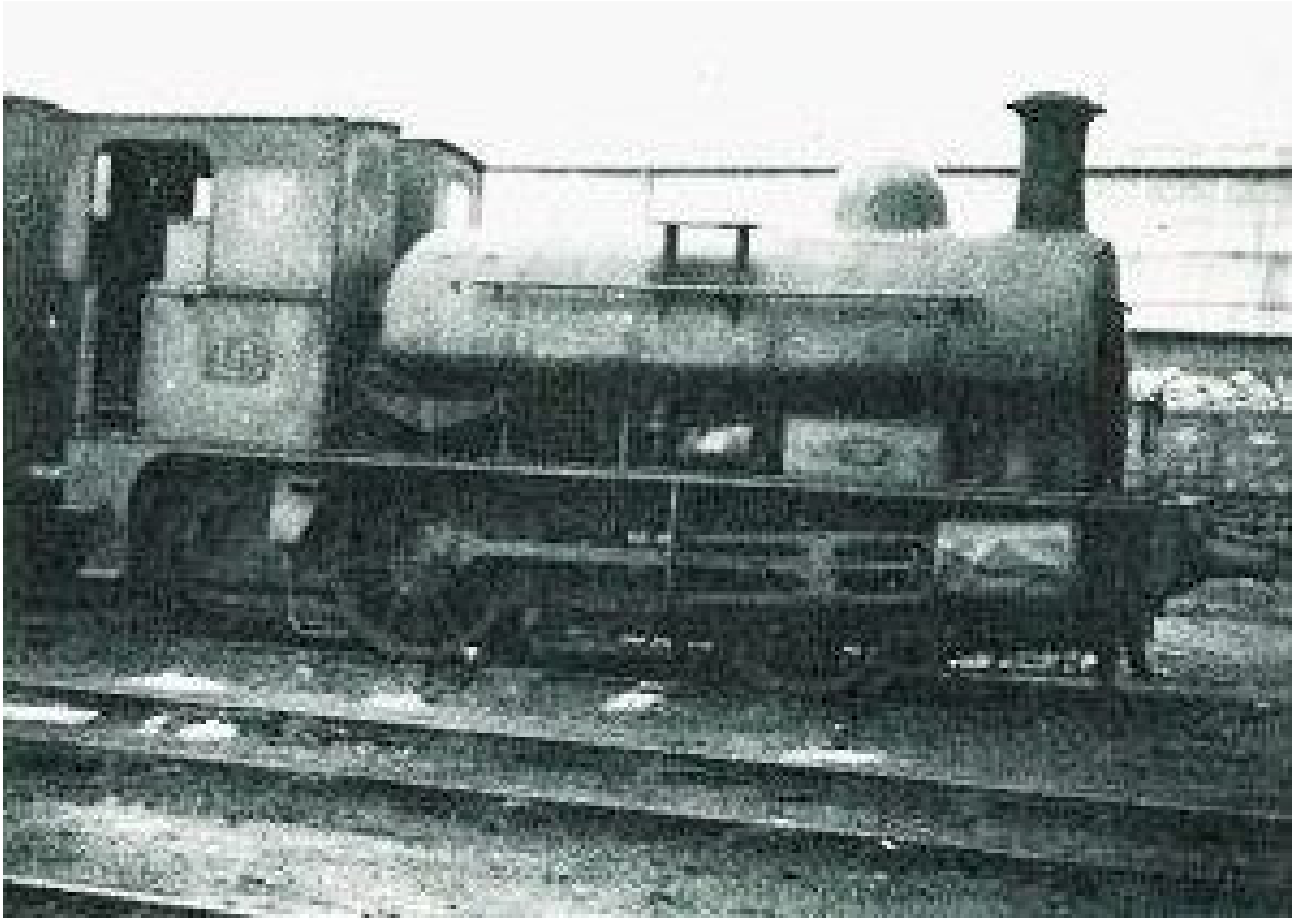
42 must have been at least reasonably successful as in 1914 the NCC built another similar engine in their own works. She was numbered 16 but for many years was nicknamed the "Donkey" by the men. In many ways she was a replica of 42 and the leading dimensions were similar, except that throughout her life a cab was fitted, recessed at the spectacle plate to allow for the safety valves, which in her case

were of the Ross “pop” type. Her spectacles were larger and rectangular, not round as in 42. The stool like structure on the tanks was a support for the water bag.

Cab controls were similar to 42 save that a steam brake was provided as well as the hand brake. The regulator handle was at first of the normal vertical type but later a long horizontal piece was secured to it, enabling it to be operated from either side.

The boiler fitted to number 16 was what the NCC described as the small tank type, and no record shows that the engine ever got a new one. The boiler dimensions were 11’9¾” long with a minimum diameter of 3’5$^{7}/_{8}$” . There were 118 tubes of 1$^{7}/_{8}$” outside diameter giving a heating surface of 590.88 sq. ft. The firebox provided another 70.24 sq. ft. The grate area was 11.39 sq. ft. so the fireman wasn’t over taxed. The boiler fitted to 42 was almost certainly similar but probably differed in arrangement and number of tubes.

The overall length of both engines was 25’3½” and the maximum axle loading was 17 tons 5 cwt on the trailing axle. The weight of the rebuilt 42 and of 16 is usually quoted as the same, but in view of the differences in cab this appears unlikely, unless by some coincidence the lack of balance weights in 16 made up for the extra metal in her cab.



NCC 0-4-0ST No.16 at York Road ca. 1950. (A. Donaldson)

In her life on the NCC 16 ran a total of 705,696 miles, which was calculated on a basis of 5 mph average. Her overhauls were carried out on a three yearly interval generally. This raises the question of what happened on the quay after 1925 (the scrapping date of 42) when the “Donkey” was in the shops. One locomotive particularly used for shunting duties was number 31. The quays’ shunt was performed

as a rule by the locomotive waiting for the shops as she was loosest in the bearings. In the early 1930s of course the first diesels came on the job and shunted "round the clock". They caused some complaints that they frightened horses by their noise, not unreasonably since the horses were brought up on steam.

To conclude the story of 16, I must mention two stories told of her during the war years. As mentioned previously, the normal load for the quays was 12 or 24 wagons but on this occasion 16 had the colossal load of 57 wagons. Despite gloomy prognostications from those who doubted her abilities, she lifted the load and started down the Tramway. All went well until crossing the Dufferin Road, when a drawbar pulled out of a wagon, leaving the train stranded across the road. Many American servicemen were trying to return to their ship and of course couldn't get past. A helpful policeman assured them that wagons were only moved in tens and the block wouldn't take long to shift. As the hours rolled by he was forced to admit that "they seem to be moving them in 110s tonight".

The other story also concerns American soldiers. Normally number 4 platform was used for the loading of the troop trains and the men marched in from the docks by the cab entrance at the Hotel. The "Donkey" was putting carriages into number 5 at the time and one American asked the driver in a very amused way, "What is this tiny little engine supposed to be?" The driver, in no way disconcerted and perhaps suspecting his engine was being disparaged, readily answered, "Oh! We only keep her around here for warming our shaving water."

During the war the NCC were very short of shunting motive power and so three engines were transferred from the DNGR as no new engines were available. Number 1 "Macrory" arrived in August 1942 but required such repairs that it did not start work until October. It was finally sent back to Dundalk in January 1943 and didn't return north until 1952 when it was scrapped at Adelaide. During its stay on the NCC it worked at Belfast and Larne. Number 4 "Newry" came in July 1942, started work at once, returned to the DNGR in July 1943 and revisited the NCC in April 1944, staying this time until February 1946. This engine seems to have spent all her time in Belfast. Number 6 "Holyhead" came up in August 1942 and returned home in April 1944, having worked in Coleraine.

These three locomotives were typical examples of Crewe practice during the latter part of the 19th century, being 0-6-0ST to the design of J. Ramsbottom - tank versions of the famous DX goods engines. They had remained unaltered for nearly 70 years. The DNGR failure to obtain more modern motive power may probably be ascribed to two reasons. Firstly, the engines were well suited to the DNGR permanent way having a light axle loading. Secondly, the LNWR and L&Y had been involved in a dispute with private locomotive builders. This culminated in the latter gaining an injunction preventing the LNWR building engines for outside concerns and since they did not wholly own the DNGR it may have come under the restriction.

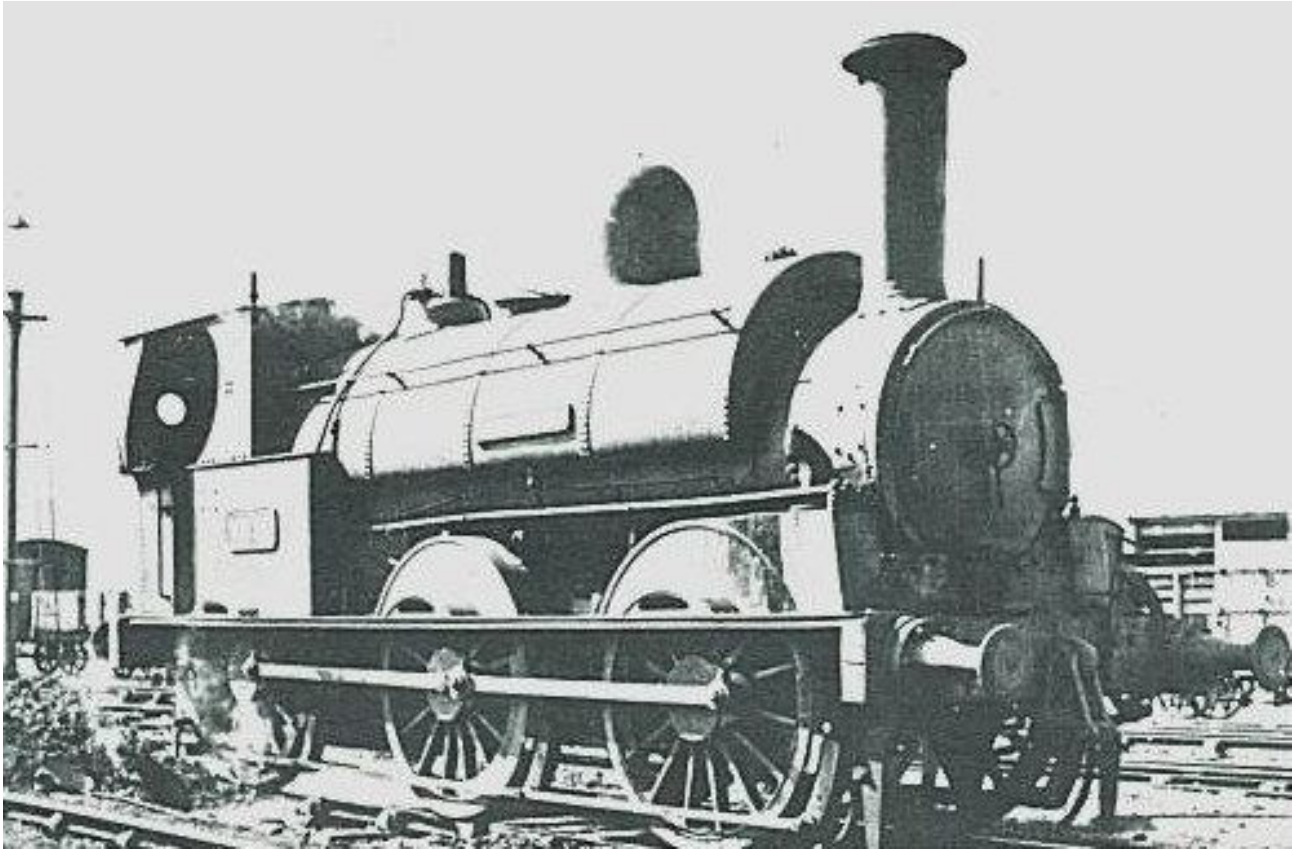
Whatever the reason, the NCC were presented with three examples of Crewe engines of venerable old age. It would seem that Crewe and Derby practice did not run any better on 5'3" than on 4'8½" for the engines were disliked by the NCC men. The reason usually given for this was their deficient brake power. In fact the three that came to the NCC were fitted with vacuum brakes on the locomotive, but these were never very effective. The DNGR engines normally had one vacuum ejector on the left hand side of the footplate which created a vacuum on the train but not the engine. Brake power on the engine was obtained from a very powerful hand brake.

The DNGR regulator was of the one valve type, cylindrical in shape and seated when closed in a similar manner to that of valves in a motor car engine. The regulator handle was similar to the NCC Mogul pattern and could be opened from either side of the footplate.

Other footplate fittings were minimal, only one gauge glass was fitted and one injector. The latter was large and awkward to fit and remove. It was operated by pulling a rod opening a steam cock to it. While reliable normally, if it did fail the injector had to be sent to Dundalk Works as the barrel was

sealed with solder.

One other point about the DNGR engines which did not endear them to the NCC men was the screw reverser - always a nuisance on a shunting engine. It must be remembered too that at this time NCC engines, except for the Moguls, had lever reversing.



DNGR No.1 "Macrory" at Greenore. (K. Clendinning)

In spite of their many defects the DNGR engines were in some ways ahead of their time. They possessed self-cleaning smokeboxes which passed the soot down the sides of the cylinders next the frames via a chute to the track. Also, they had an excellent hydraulic gear for starting the pistons from the crossheads for the fitting of new rings. In other respects the fitters were not so fortunate and only the extremely slim could get into the firebox and, worse still, out of it, after refitting the firebox door. The locomotives were free running and would move off smartly on very little regulator opening. They were extremely strong engines for their size and not given to slipping either on passenger or goods, indeed they were well liked by the DNGR crews for their ability to handle the traffic of their present system. The leading dimensions of the Crewe engines were:

Cylinders	17" x 24"
Boiler pressure	140 lbs per sq. in
Heating surface	1069 sq. ft.
Driving wheels	5'2½"
Tractive effort	13,206 lbs
Coal and water	1½ tons and 600 gallons
Weight	35 tons 5 cwt
Maximum axle load	12 tons 5 cwt on middle axle

Total wheel base	7’3” + 8’3” = 15’6”

Since the DNGR engines were not a success the NCC turned once more to Derby for help. They offered to help out with shunting engines. They were two 3F class locomotives Nos. 7456, built by Bagnals in 1926 which became number 18, and 7553, built by Hunslet in 1928 which was renumbered 19. Both were 0-6-0T engines with the following dimensions:

Cylinders	18” x 26”
Boiler pressure	160 lbs per sq. in
Heating surface	1064 sq. ft.
Driving wheels	4’7”
Tractive effort	20,830 lbs
Coal and water	2¼ tons and 1,200 gallons
Weight	49½ tons
Maximum axle load	17 tons 14 cwt on middle axle
Total wheel base	8’ + 8’6” = 16’6”

Despite the relatively long wheel base the engines could negotiate a 4 chain curve and slide valves were used. One unusual feature of the engines was the sandbox position which entailed having a recess in the tanks so that it could be filled. Another feature unusual to the NCC was the provision of “dogs” round the circumference of the smokebox - a typical Inchicore feature intended to keep the joint airtight.

The conversion to 5’3” gauge was simply done by reversing the wheels and of course renewing the tyres and crank pins. Possibly due to the light nature of their work the engines do not seem to have suffered from widening the gauge. Their frames gave no trouble and were not altered at all.

The second-hand cost of the engines was £3,755 each - a fair bargain especially since the engines were reboilered by the LMS in 1944, just before delivery. The boiler was a 5’6”.

When they first came, the engines were used on local trains to Carrickfergus, but this practice was terminated when it was discovered that the bearings were inclined to run hot. A test train of thirty wagons of coal was worked by No.19 to Ballyclare Junction without any difficulty. The regulator was ¾ open and the reverser three notches away from full gear. No.18 worked a similar train but had trouble with lubrication. Altogether No.18 ran 219,441 miles on the NCC and a total of 612,266 miles in her life. A suspect crank pin led to her early withdrawal in 1956. No.19 ran 667,521 miles altogether, 291,971 of them on the NCC. She lasted until 1963 although not doing much work in her last year.

The last three engines to spend their time on the York Road shunt were all 0-6-4T. Taken in chronological order, the first was BCDR No.29 - later renumbered 229. This engine by virtue of its small driving wheels (4’) was the most powerful BCDR engine. Like all BCDR engines she was unsuperheated, though this was no handicap considering her duties.

29 was built for the BCDR in 1923 by Beyer Peacock. Her main dimensions were as follows:

Cylinders	17” x 24”
Boiler pressure	160 lbs per sq. in
Heating surface	1064 sq. ft.
Grate area	18 sq. ft.
Tractive effort	19,652 lbs
Coal and water	3 tons and 1,350 gallons
Weight	55½ tons
Maximum axle load	14 tons on middle axle
Boiler diameter	4’4”

For the purposes of train loading 29 was placed in group D along with NCC 13, 14 and 15. She was certainly a very strong engine of massive appearance accentuated by her very small wheels. I remember seeing her shunt on many occasions and she always impressed me with her competence in handling a big load. She did not seem to suffer from slipping, a pernicious habit which sometimes plagued the SLNCR 0-6-4Ts. After 1948 she was fitted with a blast pipe orifice of 5" instead of her previous size of 3½". This was said to have improved her coal consumption, which had always been in the range of 90 lbs per mile. She ran approximately 41,000 miles on the NCC.

The next tank to appear as a York Road shunter was ex GNR No.166, renumbered 24. This engine held pleasant memories for me as it was on her that I made my first trip over the former Belfast Central Railway and was initiated into the mysteries of driving and firing. Engines of this type regularly made a trip down to Maysfields, leaving Adelaide at 4pm and returning with wagons for the Derry goods later that evening. No.166 differed from the rest of the class in having Ross "pop" safety valves which were fitted by Pearse McKeown - well known to Society members - during her last heavy repair.

While at York Road the engine worked a "passenger" train over the docks conveying enthusiasts and I can trace no other evidence of passenger haulage by the class. During her stay at York Road she also worked trips over to East Bridge Junction and shunted both goods and passenger yards.

The principal dimensions of the RT class were:

Cylinders	17" x 24"
Boiler pressure	175 lbs per sq. in
Driving wheels	4'3"
Weight	56 tons
Tractive effort	20,230 lbs (at 175 psi)
Heating surface	1086.5 sq. ft.
Grate area	16.3 sq. ft.
Coal and water	3 tons and 1,350 gallons
Maximum axle load	14¼ tons on middle axle
Coupled wheel base	7' + 6'6"

The RT class first appeared on the GNR to the design of Mr Clifford in 1908 when Beyer Peacock delivered Nos. 22 and 23, followed by 166 and 167. Following the GNR custom of building tank engines as similar as possible to tender engines, they were the equivalent of the A class goods engines save for the altered wheel base and reduction in driving wheel diameter. The boiler mountings were cut down to allow them to pass under the Queen's Bridge. What they lacked in chimney height was compensated for by their enormous buffers, 2' in diameter. They also enjoyed the distinction of being always cleaned on Sundays when not required for shunting duty.

All four RTs came in for heavy repair in 1938/39 and the opportunity was taken to alter their brake gear. Originally the cross shafts were 2¼" in diameter and very heavy, but now new brake gear similar to the later goods engines was fitted. 166 also got a new boiler when she was in, with the pressure reduced to 165 lbs. The bogies of all four were in poor condition. These were not of the ordinary swing link type but an Adams type, sliding with side play controlled by coil springs. The sliding members had to be reinforced with heavy section angle iron and welding. The engines only came in for repair about every ten years and were often in poor shape. On one occasion when one of them was lifted the driving axle box fell off the axle in halves.

Cab fittings followed standard GNR practice including two Gresham and Craven injectors. One alteration was the fitting of a Dreadnought ejector with outside exhaust pipe. Previously a pre-Dreadnought ejector was fitted, exhausting through the boiler to the smoke box.

In numbers 22 and 23 the leading and trailing horns were in two halves. All four engines had 1¼" play

for the leading axle and a swivel bushing in the front half of the coupling rods. These features were of course intended for dock shunting.

The cylinders were inclined at 1 in 8½ and ordinary short travel slide valves were fitted. Spring links were non-adjustable on the driving axles but adjustable on the bogies. Originally a short bell whistle was fitted but this was later changed to a standard type.

The last in the line of tank engines to shunt York Road is the former SLNCR "Lough Melvin", about which little need be said as she is familiar to all. On days when she and 186 were working, viewers could see representatives of the oldest and newest working classes in Ireland side by side.

Lough Melvin represents the last development in the line of 0-6-4Ts which had served the SLNCR for over seventy years. She is an interesting locomotive in many ways, not least in that she is a rare phenomenon - a locomotive which is still working after the closure of her own line; the SLNCR closed in 1957. She is also the last example of the very rare 0-6-4 wheel arrangement, never very popular in the British Isles, except of course on the SLNCR. Long may she continue to shunt York Road.

In the preparation of this account I should like to express my thanks to W.A.C. Macafee, Mechanical Engineer, NIR; J.H. Houston; R.N. Clements; P. McKeown; P. Mallon; F. Graham and ex-Inspector W. Hanley. Without their help it could not have been written.

HANDS ACROSS THE BORDER — Jack O'Neill

A brief seven years ago, Irish railways ran on coal burned by a large variety of steam locos. South of the border there were over 400 of these beautiful machines and they came in all shapes and sizes. There were the magnificent 400, 500 and 800 classes which were capable of speeds of up to 90 mph; the lovely 322 and 60 classes which could do 70 on a branch and last, but by no means least, the general factotum of the railways, the J15 of which there were over 100 in number.

They are all gone now, cut up for scrap value. The romance and glamour has vanished from the iron road and so has a great deal of the character which distinguished Irish railways. The dedicated railwayman is still there, but no longer will you find footplatemen reporting for duty before time. The driver, like the machine he handles, is no longer an individual and the loco and the guards van look the same.

A steam loco required skilled and careful handling and the goods driver would never presume to handle the crack expresses. There was a clear class distinction in loco circles respected by worker and management alike. A driver and fireman progressed from pilot to goods to passenger trains, reaching his ultimate when he stepped onto the footplate of an express engine. This now is also gone, for to open the power wheel of a diesel is like opening a domestic water tap; irrespective of who opens it, the result is the same.

As a footplate man reared on steam, I regretted very much the passing of the steam loco. Every engine I worked on was an old friend and their temperamental ways were a challenge to my skills. One by one I saw them go to the scrap yard and as they went I photographed them. I never thought I'd step onto one of their footplates again. Then, a very kind invitation from the RPSI to travel on a train hauled by J15 No.186. Loco 186! What memories this engine evoked! For 57 years she was attached to the Waterford area and she worked every kind of train possible to imagine. I knew her since 1946 and so, taking a loco man's holiday, I crossed the border to meet dedicated railway enthusiasts and some fine enginemen.

Railwaymen and railway fans are the same the world over. For them no borders exist. Conversation is locos and railway operation. I believe that railway societies offer a solution to wars. Let all politicians form a railway society! For to a footplate man, all footplate men are brothers and I have found the same

thing in the societies which cater for railway fans.

The Northern enginemen accepted me as a fellow worker - they showed me “their road” and like all railway men they were very proud of their native countryside through which the lines ran. Everywhere we stopped on the journey, old and young ran to the side of the line to view loco 186, and she certainly never looked better. A Picasso had been let loose on her! Red outside rods and reversing rod against a brilliantly cleaned black boiler. Her safety valves and whistle gleamed in the warm sunshine and her footplate fittings shone like the window display of a fashionable jeweller.

Jack O’Neill (CIÉ), Billy Croft (GN Section, NIR), Brian Nicholls and Alfie Crawley (NCC Section, NIR) on No.186 at Dundalk during the Cúchulainn Railtour. (Pearse McKeown)

I felt very happy, and happier still when my Northern colleagues invited me to “take her”. How can I describe my feelings on opening a regulator for the first time in five years and feeling the power being transmitted from boiler to cylinders? I leave it to the imagination of the reader for it’s impossible to describe how it feels to control a steam loco. It’s like handling a pair of spirited horses and you must not let them exhaust themselves in their first burst of speed. There is the difference between steam and diesel driving. Power is limited on a steam loco, limited to the ability of the driver to take full advantage of the terrain over which he travels and his personal knowledge of what the loco is capable of. On the run I learned to have a deep respect for the banks on the Great Northern Railway and I will not attempt to give a description of the day’s outing. I leave that to someone more qualified than I.

Loco 186 lived up to her reputation of being "a good engine that would eat out of your hand", to quote an old Rosslare Harbour driver named Duggan, who has long since gone to his reward. This man had No.186 on the Rosslare to Cork express via the DSER line from Macmine Junction to Waterford in the Civil War years of 1922-23. Owing to the viaduct at Taylorstown, in the Wellington Bridge to Ballycullane section of the South Wexford line, being blown up, the express ran over the DSER to Waterford and the only locos capable of taking the heavy train over the murderous gradients of this line were the J15s, the numbers being 144, 166, 183 and 186. Unfortunately this DSER branch is now gone except for the fifteen miles from New Ross to Waterford, but I'm sure many of the members of the RPSI were acquainted with this branch line.

It is my sincere wish that No.186 will continue to give pleasure to the professional railwayman, to the enthusiast and to the young and old alike. May she continue to be a link between North and South and a reminder to future generations of how the railways made the world everyone's oyster.

I should like to take this opportunity to thank most sincerely all my friends in the North for their boundless hospitality. It would be unfair to single out any one person, you were all a grand lot of people and I look forward to future runs with No.186, the pride of North and South.

237 on goods ex Limerick entering Waterford ca. 1949. (A. Donaldson)

OUR ENGINES **I.C. Pryce**

Since the Dalriada tour in May, No.186 has had an unprecedented spell of activity, with six weeks of pilot duty at York Road in addition to the two Autumn tours. This has given a useful opportunity for assessing the condition of the engine, which has proved generally sound. However, the big end knock mentioned in the last issue is suspected to be partly due to uneven wear on the crank pins and correcting this could be a difficult and expensive job, although the possibility of having this done is being investigated.

The right injector has continued to be somewhat erratic in operation and attempts to cure this have met with little success; it is planned to fit a replacement as soon as one is obtained. Finally the leaking tender has had to be temporarily repaired with concrete, but the arrival of a larger (and watertight) tender should not be far away. Some slight steaming trouble on the return journey from Dundalk was caused by a badly set pipe in the smokebox which spoilt the draught. This has been attended to and no further trouble has been experienced. Indeed the free steaming of the boiler has been commented on

several times, as has the low water consumption.

In the summer hopes were high that the Dundalk Engineering Works could overhaul No.171. The first negotiations were encouraging, but it later transpired that a job of such magnitude could not be undertaken with the present facilities in Dundalk. It should be remembered that the cost of restoring No.171 to full pre-war condition will run far into four figures.

Guinness No.3 was moved to Whitehead on 18th November and work has started to prepare the boiler for inspection. Several fittings have been stolen, but thankfully nothing irreplaceable has gone. There has been some delay in obtaining insurance for the engines, but once it was made clear that they were driven and maintained by professionals cover was forthcoming.

Our thanks go once again to the many railwaymen at York Road who have given practical help and suggestions, including Messrs Macafee, Dunlop, McDonald, Wilmot, Steenson, McCracken, and of course Driver Crawley.

THE GLOVER 4-4-2 TANKS — Fred Graham

It was in 1913 that Col. Glover introduced the first 4-4-2 tank locomotives to the GNR. They were built by Beyer Peacock & Co, and had 5'9" driving wheels (a new size for the Railway), 18" x 24" cylinders and, in working order, weighed just over 65 tons. They were not superheated and had short smokeboxes. They were painted black and had the legend "GREAT NORTHERN" on the tank sides and this livery continued up to 1928.

One would have thought that Glover, being an old NER man, would have favoured the 0-4-4T type as that company never possessed any of the 4-4-2T type, but no doubt the DSER 4-4-2 tank "King George" must have impressed him for he arranged for his directors to visit Grand Canal Street Works to see this loco performing.

The new engines were numbered from 185 to 189 and were additions to the GNR loco stock and did not replace scrapped locomotives. They were to become the forerunners of a neat and efficient class which eventually totalled 25 engines. No.188 was fitted out to work an armoured train during the troubles of 1921-1922.

In 1921 a second batch of similar locos was delivered by Beyer Peacock with running numbers 1 to 5 and these engines replaced the 2-4-2 tanks which formerly worked the "Motor-Trains" running between Belfast-Lisburn and Dublin-Howth and were superheated from new.

Ten further engines were built in 1924 by Nasmyth Wilson of Manchester, the first GNR locos to be delivered by this firm. They were numbered 21, 30, 115, 116, 139, 142, 143, 144, 147 and 148, and all were put to work on the Northern section of the Railway, replacing Nos. 1 to 5 which were transferred to Dundalk and Dublin. Strangely enough, they did not seem to work beyond Dungannon on the Derry road, probably because of their concentrated overall weight. They were not permitted to run between Banbridge-Newcastle and Banbridge-Scarva.

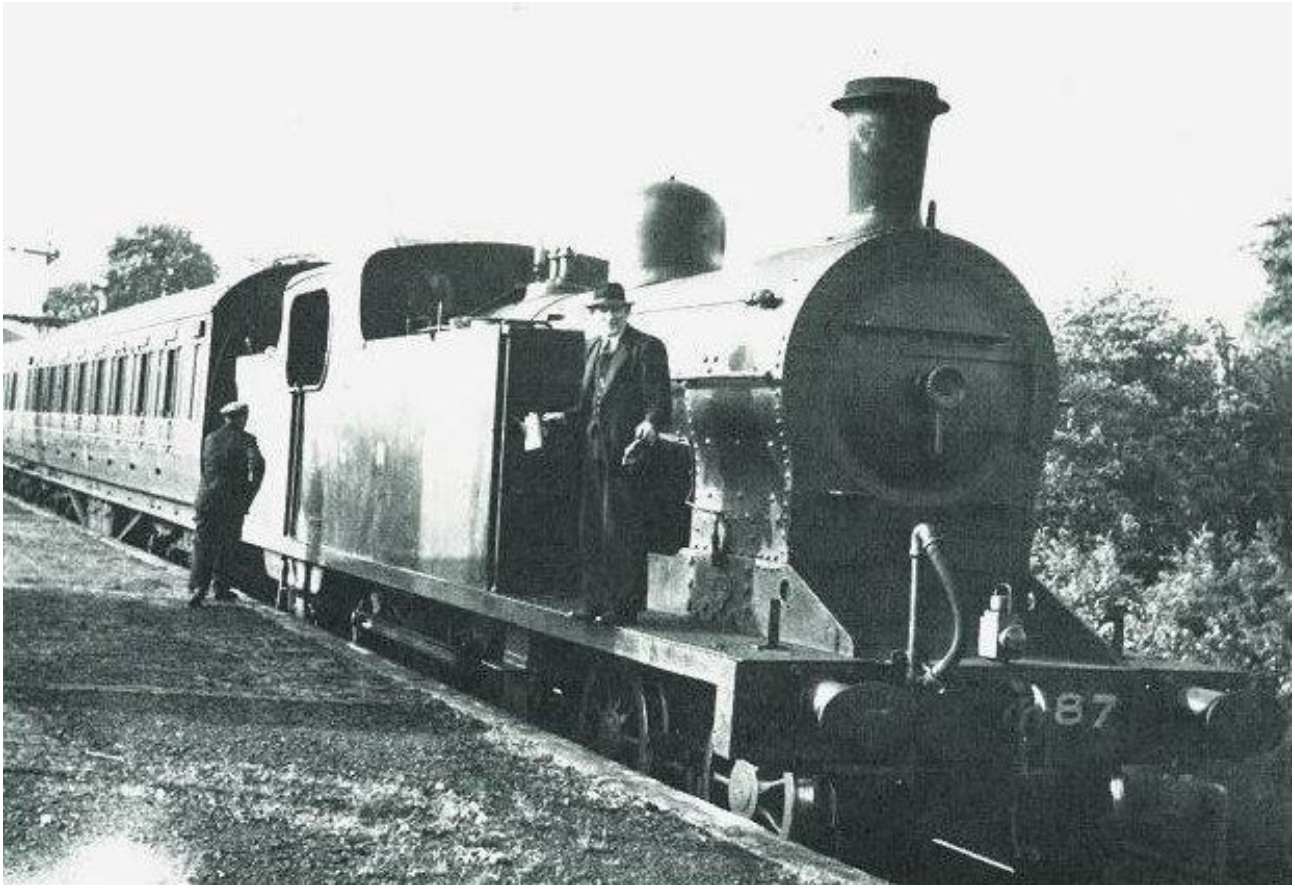
About 1926 No.142 went over to the NCC and worked on the Larne line, making better times to Carrickfergus than the larger 4-4-0 "Castle" class which were also built in 1924. It was about this time that the original five locos received superheated boilers. Beyer Peacock delivered the last five engines of the class in 1929 (running numbers 62 - 66) which had increased water supply and weighed 67 tons and a working pressure of 200 lbs per square inch against the 175 lbs of the earlier engines. Nos. 64 and 66 usually took turns on the 2:10pm Saturdays only express Belfast-Warrenpoint, timed to run non-stop to Newry in 55 minutes, the longest non-stop run in Ireland at that time. The load was 9 and sometimes 10 bogies and they made a fine sight as they passed Adelaide Shed.

Another turn was the 12 noon to Clones and back, running in from Portadown non-stop in 31 minutes.

No.65 (Driver J. Ramsey) usually worked this train and was always smartly turned out. No doubt the higher pressure made them more powerful and suitable for this work.

Those taken over by the UTA were never renumbered and No.187 of the first lot was the last one to be scrapped, spending her remaining days shunting at Great Victoria Street.

The class were popular with the enginemen, especially in winter, and could take their turn on goods trains as required. It was quite a common sight to see one on the Lisburn and Hillsborough goods which was often loaded to fifty three wagons and van.



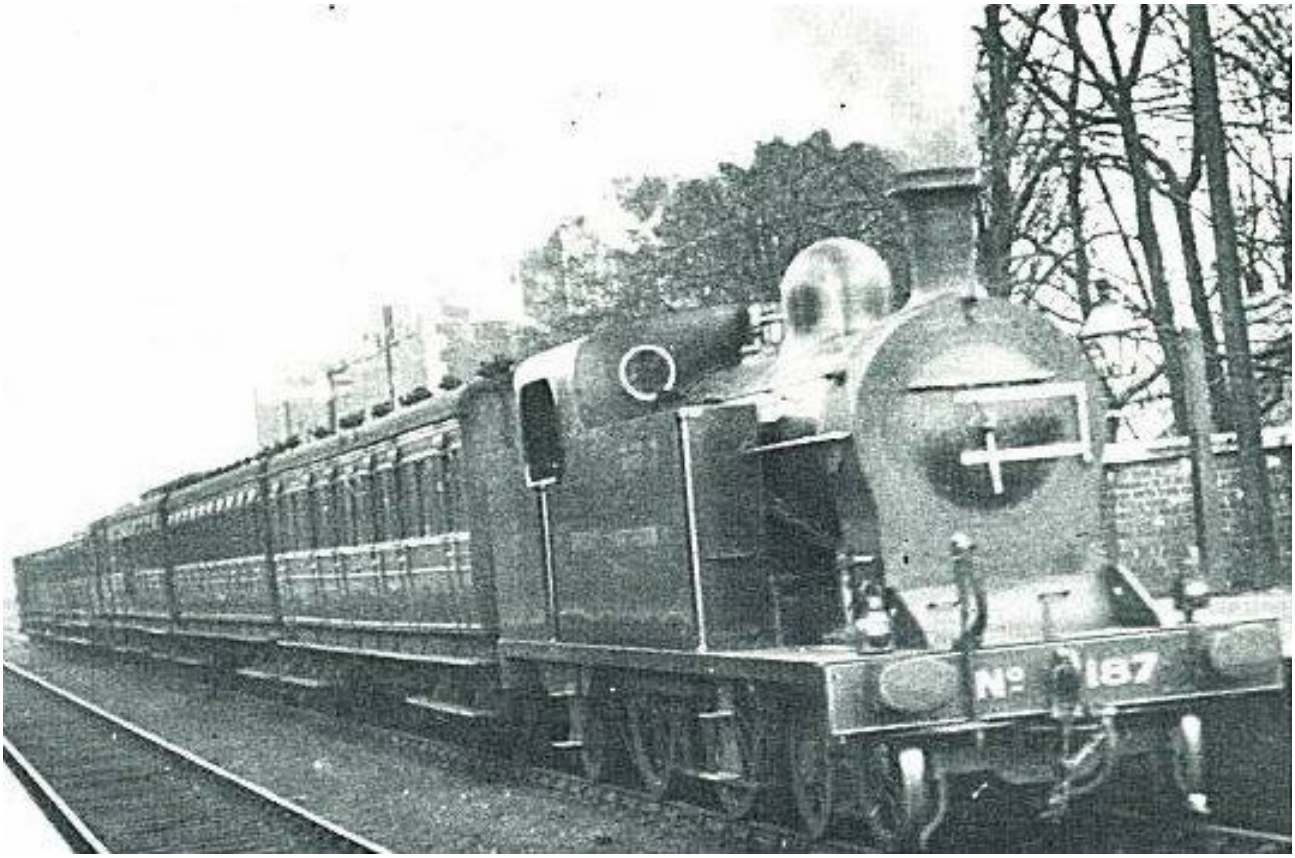
T1 No.187 at Drumsough on 16th May 1952. The train was the 5:38pm ex York Road, all stations to Drumsough, returning immediately. Loco Inspector W. Hanley stands on the running plate. (A. Donaldson)

[Here is some additional information from W.T. Scott about the interchange mentioned by Mr Graham. - Ed.]

While on the NCC, No.142 worked to Carrickfergus and for the first week was handled by a GNR crew. Her best time was 12¾ minutes with a load of 7 bogies. The second week she was taken out by an NCC crew, but try as they might they couldn't get down to the GNR crew's time. The GNR time was made apparently by very fine uphill work between Whitehouse and Greenisland together with a smart stop. The NCC men may have been handicapped in the latter case by the absence of a steam brake on 142. Their inability to equal the GNR crew's time annoyed the NCC men and they asked permission to try with their own engine No.83. The best time with her was just over 13 minutes and it wasn't for another ten years that 142's time was beaten by 96.

To put the performances of 142 and 83 into their proper perspective, it only remains to add that with

WT class engines, the best times I have had to Carrick have been 12 minutes 6 seconds to pass and 12 minutes 51 to the stop. In each case the load was four bogies. During 1952 187 was over on the NCC and worked on one occasion to Cookstown Junction. Some complaints were made on this occasion about her excessive rolling and this was attributed to the design of bogie springs. These were the only two occasions to my knowledge when Glover tanks worked over the NCC.



No.187 (saturated) at Dunmurry ca. 1913, probably on a Clones train. (J. Chirnside)

WATERING AT THE WOOD **J. Glendinning**

"A good supply and drivers may fill their tanks"; that was the Great Northern 1930 Appendix's opinion of the situation. It must have been a comforting thought for the drivers of Up Main Line trains whether they had a Big D on a heavy Portadown to Dundalk goods or a new-fangled compound with a wee tender on the Up Mail; not to mention the solace it must have been for a Down return Warrenpoint to Armagh excursion before tackling the 1 in 76 up to Lissummon.

Nowadays the lines to Armagh and Warrenpoint are only fond memories and the Wood is a blank space on the railway map, blank that is except for a pair of water cranes. The job that the Portadown Area was given seemed simple - get water to come out of the bags in time for the Cúchulainn railtour.

The first job was to find the storage tank, which is well hidden in the bushes above the Down platform. Two locals helped us in the search and assured us that the water made good tea. And so it should, for before it went into the locos, the water, which came down from wells on top of the Lissummon, went through storage tanks, settling beds and a chlorine plant. However, all the engineering involved goes for nothing in 1967, for the ball cock sat drooping amongst the weeds in the bottom of the tank and somewhere along the way the whole thing was badly airlocked. It was a case of back to the drawing board.

Because of the air lock, a new method of getting water into the station tank had to be found and it was suggested by my father that we use a 300 gallon tank on a tractor trailer and take water from a nearby hydrant. The operation involved filling the tank from the hydrant and towing the tank about a quarter of a mile to a point on a disused road about 300 feet above the station tank and letting the water run via a PVC pipe bought from Unidare.

Before we could start, Eamonn Jordan sought permission from Newry No.2 Rural District Council to use their hydrant, and having been given all the help we could have wished for, Operation Splash got under way on the Tuesday before the Cúchulainn. The pipe arrived at high speed on Eamonn's boat trailer along with a couple of life jackets - just in case! Then the tractor and trailer arrived from GlenAnne, enveloped in a cloud of steam that would have done credit to No.186. The fan belt had broken and the radiator was boiling over; the tractor was withdrawn from service until the following day. Then the combination made its first run to the hydrant and the tank was filled. To keep the load balanced, two members had to stand on the drawbar, but gear changing was still a bit rough and this caused the trailer to lurch, sending a tidal wave through the tank which broke with fury over the end of the open tank, drenching the members on the drawbar. At journey's end, the water flowed down the pipe to the tank, making use of Sir Isaac Newton's revolutionary invention commonly known as gravity.

No.174 piloting WT No.57 on 6:30 ex Dundalk entering Goraghwood ca. 1961. (A. Donaldson)

Each run took 45 minutes to do, but after the first four of these we found that the water was running away as quickly as it was going in. A frantic search of the station revealed a burst outlet pipe over at the cattle dock. The burst was quickly bunged, but the fact remained that the day's work was for naught.

After a few runs on Thursday we found to our delight that water was pouring out of the bag at the quarry end of the station. This was soon turned off and, heartened, we got in another 900 gallons before dusk, but the morning revealed that some 600 gallons had vanished overnight. As it was now only 24 hours before No.186 would be coming up Drumbanagher, we decided to allow for a 600 gallon leakage and, working frantically all day, we had just over 1,500 gallons in that night; more than enough we hoped.

I'm sure that few of those on the Cúchulainn gave little more than a side glance at the watering at

Goraghwood, but those of the Portadown Area who had devoted the previous week to fighting bushes, bursts and railcars, chugging up and down past the Manse and eating most of the blackberries, the watering itself was sufficient reward for our efforts. Would it be wrong for the Society to take this as an omen of what it can do in the future?

In conclusion, our thanks must go to Newry No.2 RDC for supplying many of the tools needed, giving us a lot of co-operation, not to mention the necessary 'liquid refreshment' for No.186.

VAPORARIA — J.A. Cassells

After last year's quite exceptional steam revival, the Larne line was less exciting this summer, although the 5:30pm and one other tea-time train could be relied on on weekdays, and on Saturdays in July steam often appeared on the 7:55 and 10:05 Boat Trains, as well as the booked 2:05pm. A fair number of other trains were steam at least once due to diesel shortage, including the Larne Perishable.

The highlight of the summer was the Carrickfergus R.B.P. demonstration which provided a shuttle service of fifty trains hauled by 3, 4, 5, 6, 10, 51, 53 and 56. Stone traffic continues, of course, six days weekly and as a result of the Downshire Park derailment on 31st August, empty trains are now restricted to 20 mph and the practice of double-heading has now ceased. At the time of writing (December 1967) the 5:30pm has just reverted to diesel haulage.

On the main line the 1:15pm Portrush, Monday to Friday, was frequently steam, and on a few days in July the 9:25 Portrush and all the branch trains were steam.

On Saturdays the 8:35 Derry, a booked diesel turn, was steam on all but the last two weeks of the summer timetable, and operated to the amazing schedule of 120 minutes running time, involving ten stops. Several times in July it went to Portrush. The 3:05 Portrush was booked steam, being the second working of the day for the 8:35 engine on the days that train went to Portrush. As well as these, the 10:50 Portrush was steam on a few Saturdays during the season.

As for special occasions, 12th July saw three specials from Coleraine to Derry (4, 51 and 55) as well as steam on the regular 5:55am Coleraine and 7:30pm Portrush-Belfast. Next day Nos. 3, 4, 10, 51 and 55 worked to Portrush on specials. On 12th August Derry shed was host to 3, 4, 5, 10, 53, 55 and 56 which had worked in on specials from Belfast, Antrim, Ballymena, Coleraine and the regular 8:35am and 1:00pm ex Belfast.

The Derry holiday fortnight saw a steam set based in Derry and working daily to Portrush in the second week of August; and on 26th August provincial R.B.P. demonstrations led to steam on two interesting trains - the 5:55 Belfast-Coleraine and the 4:35pm Belfast-Cullybackey. Apart from Ballast trains, the only main line Sunday steam was provided by the 2:55pm Ardrossan Boat train to Derry in mid-July.

Nos. 3, 4, 5, 6, 10, 27, 51, 53, 55, 56 and 186 were all in use this summer and during the period 5, 27, 50 and 56 spent lengthy spells in the shops; while 55 was in for a few days after breaking a spring at Kellswater on 15th July and 4 had her valves reset. Out of a total of 14 occasions in July and August, when the regular 8:35 and 3:05 trains operated, it is significant to note that all but 3 of these involved 51, 53 and 55. Of these 51 was most reliable as 55's injectors were at times suspect and 53 proved extremely erratic. 3 and 10 appeared infrequently on the main line and towards the end of the summer 5 re-appeared from the shops, replacing 4, which never appeared on the main line after 12th August. The weakest engine in York Road was No.6 which, appropriately, was kept off the main line all summer. 50 appeared in traffic at the end of November, while 53 was withdrawn from traffic at the end of October, after serious damage to her valve gear while shunting.

Several engines have now been withdrawn. UG No.146 was brought from the GN in July in the vain hope that she would be able to shunt, but has now been condemned, and Nos. 2, 8, 9 and 26 have been

cannibalised.

THE SOCIETY

Engines

The first piece of news - and it was very grave - is that No.171 has again been vandalised. Bob Edwards noticed on the evening of 13th December that the following cab fittings had been removed:

Both injectors, lubricator and brake ejector.

The barbed wire had been cut and the fittings removed using tools. The reason why No.171 was still lying at York Road was that a boiler test was expected daily. The police have been informed.

It now appears that No.186's faulty crank pin can be put to rights. Members P. McKeown, P. Mallon and J. O'Neill have promised to attend to her big ends, and plans for her external restoration are under way. Details of painting, lining and number plates have been furnished by R.N. Clements, one of our foundation members.

Mr Macafee has always been a good friend and his name is mentioned in this issue elsewhere in several connections. One fact which may not be generally known is that when difficulties arose about renewing insurance cover for our engines it was his representations more than anything else which brought negotiations with the insurance company to a successful conclusion.

Spares

Negotiations are in progress with all relevant departments of CIÉ for the acquisition of J15 spares, as well as a standard GS&WR 3,345 gallon tender. We have been assured that these will be held for us. The CIÉ Traffic Department are active on our behalf in this matter.

Member R. Edwards has negotiated the purchase of some useful equipment from Ballymena.

We are grateful to Mr C. Pemberton of Inchicore for his assistance in our search for spares. We look forward to being able to purchase these in the near future.

Outings

Since the last issue, Craig Robb has achieved two outstanding successes - the Cúchulainn Railtour in September involved travel over CIÉ metals and we were made most welcome by all concerned. To the list of those publicly thanked by the Society we add Mr Walsh of Dundalk Loco who was chiefly responsible for the attention No.186 received there, including the provision of lubricant which largely cured the leaking gland.

Then in October NIR did us the exceptional favour of allowing SL&NCR 0-6-4T "Lough Erne" (No.27) to work to Antrim and back - the first time this loco had worked a passenger train since her own line closed in 1957.

Members will be glad to learn that an even more ambitious railtour programme for 1968 is at an advanced stage of preparation. It is as follows, subject to locomotive fitness and minor modifications:

23rd March: The Olderfleet Railtour.

Tour of Belfast Dock lines behind the Guinness locomotive, followed by a run to Larne Harbour and back with the SL&NCR tank locomotive.

4th or 11th May: The Slieve Cualann Railtour.

2-6-4T to Dublin and No.186 thence to Wicklow Goods; the return similarly.

14th-15th September: The Saint Ciaran Railtour.

A two day tour to Athlone with a cruise to Clonmacnoise. The locos will be Belfast to Dublin - 2-6-4T or No.171; Dublin to Athlone (by MGWR route) and thence to Portarlington – No.186; Portarlington to Belfast - 2-6-4T or No.171.

26th October: The Colmcille Railtour.

To Derry and back behind No.186. Members will enjoy priority in booking at reduced rates, so make sure you renew your subscription - or join, if you are not a member already.

Whitehead

In addition to the information given elsewhere, a water supply is being arranged and the Guinness will have her boiler test there.

Areas

Portadown and Belfast have already held several interesting meetings and have full plans for the coming winter.

The Dublin representative having resigned, Mr S.J. Carse has been elected for 1968 and has already made arrangements to revive this important area. The close liaison existing between the RPSI and IRRS is exemplified in the use of the IRRS premises for the RPSI Dublin Area AGM. We are most grateful to the IRRS for their hospitality.

Society correspondence arising out of the 1967 session should be addressed to the following as appropriate.

Hon. Chairman:	L.H. Liddle
Hon. Secretary:	E.F. Jordan
Hon. Treasurer:	J. Richardson
Dublin Area:	S.J. Carse
Locomotives:	J.H. McGuigan
Hon. Editor:	A. Donaldson
Membership:	W.T. Scott
Outings:	A.C. Robb
Publicity:	D.J.A. Young
Site:	J. Richardson

WHITEHEAD — R. Edwards

A little over a year ago I looked over the Whitehead site for the first time. This was before the members had voted for or against making the site our permanent base to store the locomotives in.

I walked slowly down the siding from the station. It was not the best of days as slow rain fell on a reluctant mist which obscured most of the distant detail. The track was not in wonderful condition either, for the most part the sleepers were covered by grass and rails were only brown streaks from one tuft to another.

Most members know what the site layout is so I will not go into any detail at the moment. One fact most members do not know is just how bad the condition of the track and shed really were in before work started on the site. The track for the most part was at least two inches out of gauge while all except about six of the total number of sleepers were rotten and useless.

As for the shed, there was not much roof at the time but the brick work was fair although shaky at the top. Many of the roofing timbers were rotten and fairly dangerous. As one might have expected, not

one window was intact. Rusting tins, rotting wood, and old bicycle frames and oily puddles covered the ground between the rails.

There is a lean-to at the back of the shed, but I did not enter there as there was a sinister smell one connect with unused buildings.

Outside, only the water tower had not been engulfed by the ever pressing brambles. 'They' said that a turntable existed on the site, so off I went on a lone safari through the jungle of grass, brambles and whin bushes. At last I found the remains near the road bridge - the pit was full of grass and I noted that the circular rail was missing thus rendering the table useless.

My first impressions were not very high of the proposed site when I walked away, nor was I very enthusiastic when on the twelfth of May it was decided to go ahead with the lease of the site.

Up to this time W.T. Scott had been the Site Officer and had sent out to all members a request to help at the site and to let him know what they would like to do. However, he resigned on 12th May and J. Richardson took on the job, as well as being our Treasurer.

My next visit came in late May when I went down to Whitehead to see what was going on. I found three persons under the direction of our Treasurer trying to replace a small section of rail by the engine shed door. I introduced myself, shook four filthy hands and then set to and got filthy myself. That first day we only got four sleepers relaid but it was a start in the general direction of Whitehead station.

Next week we all arrived back to do battle with the site again. We found some serviceable sleepers on the platform and tossed them off the grass-covered pile on to the ground. Those that fell in two were burnt while those that didn't come to harm were used on the line.

Our method of track resleepering left much to be desired at the first few attempts. We simply tore up the track, rails and all, then laid new sleepers (second-hand UTA ones) and dropped the rails back into place. A sound principle when one is laying new track but one is in trouble if the rails have to fit back on to already laid track as the problem of expansion soon sets in, as we found to our cost.

At last we got the use of a railway jack and this little item speeded up the process no end. It was not now necessary to tear up the track but simply jack up, slide out the old sleepers and insert the newer ones. Easier said than done, a very true set of words.

By the end of July we had made real progress in the right direction and somewhere in the region of one hundred yards of track was down.

Up to now no work had been done on the shed, but a contract with Messrs Alexander, Reid and Frazer had been entered into. The shed was started late in July after the holidays and work proceeded for some weeks.

At the end of it all the shed was most respectable. A complete new roof was put on along with a new guttering system. The windows were bricked up while clear plastic sheets were put in the roof for giving light to the shed. The lean-to was also covered with a new roof and wire netting put over the plastic windows to prevent urchins entering the shed. Also, a connecting door was made for the lean-to and now it is possible to walk through all three rooms at the back.

All the time the work was going on in the shed, the tempo had increased on the relaying. Visible signs of work being done on the shed brought many new faces to help on the track. Our average turn out on a Saturday is about eight to ten members. Sometimes the numbers reach the twenties.

Our best day of resleepering was sixty between eight of us, so it just shows what can be done if everyone works hard.

We encountered many hazards such as ants, four crashed vans and urchins who played havoc in the shed after we had gone home. As for the ants, well ants in the pants are not recommended and the

Whitehead ants had voracious appetites for our pants! The vans presented a problem in the transportation of tools and materials from the workman's cabin to the shed. Whenever we received a load of sleepers from the UTA they always managed to get on the wrong side of the vans. Sleepers feel very heavy, even between four persons with tongs.

One day we tried our hand at cutting rails with a rail saw. When the thing was set up it resembled the motion of some far distant engine when motions were just invented. It took fifteen minutes between five of us. The local Whitehead populace viewed our actions with interest from the bridge above.

By the end of September all the track except the point had been relaid and the shed was ready for service. Some of the timber for the shed road inside had to be replaced as we feared another twenty-seven disaster.

There is not room to name all those who have helped at the site as about forty people have turned up off and on. However, I must mention John Richardson as none of the work would have been so far advanced without him. As for everyone else, from the old to the young, they have all done only their best and the Society as a body must surely be well pleased at their effort.

Looking quickly into the future, the plans are to go ahead and relay as much of the original track as is possible. Also for the erection of a signal cabin for operating any shunting movements we may wish to make. Talk of a lean-to engine shed at one side of the main shed is in the air if we can obtain another engine for tours. However, there is plenty of work to be done on both engines and site before we can consider new engines and expensive installations.

I must end and say that anyone who has not helped at the site yet is most welcome to come and join in.

CORRESPONDENCE

Dear Sir,

In your last editorial, you rightly praise the worthy efforts of our Outings Committee. Exiled as I am, far from the delights of Irish steam, I greatly look forward to our railtours.

But how long will we be able to travel on such tours? Trips, such as that to Dundalk, would be curtailed by the closure of the Antrim line. Some may claim we still have the NCC. Yes, but for how long?

In the August edition of the Government magazine "Ulster Commentary" there is an article on the New City. An accompanying map shows that country about 1975 or so, with railways and roads clearly marked. The Larne, Bangor and Dublin lines are there, but of the NCC main line there is no sign! Hardly an artist's error, as the new motorway is shown (well away from the present railway) with a branch to Coleraine.

I feel we of the Society must reconsider our position in Whitehead. We may find ourselves with next to no running lines at all. The prospect of short tours to Larne and back may well deter many of the visitors from Britain; the possibility of the declining interest of British members looms darkly.

I hope this matter will be carefully examined. A base south of Belfast would appear ideal. Craigavon looks as though it may have several stations in it, suggesting the safety of the Dublin line for many years to come.

W.L. McAllister

DALCASSIAN STEAM — A. Donaldson

Of the many pleasures enjoyed in the last decade and sadly missed in the present one, the greatest to my mind was the steam on the Cork main line, and more especially between Limerick Junction and

Cork.

I first set foot on Limerick Junction platform on Whit Monday 1940 after a 61 mph start-to-stop average from Thurles with Mark Foley and 800 on the Mail. By contrast D17 No.11 (with double-door smokebox) was waiting to whisk me to Limerick, touching 60 mph en route. Whether this introduction be the reason or not, the Junction has been my favourite railway spot ever since and it was good to find it obviously held in high regard by those in charge of CIÉ - it now holds even greater operational possibilities than in the old days.

Stepping off the excellent "Failte" express which had also averaged 61 mph (from Heuston this time), I wondered if its curious title was not justified by the hearty welcome put in front of me by an old friend on the station staff from whom I learnt that, with all its modernisation, the Junction still retains facilities useful to steam.

More recently, I was lucky to meet at the IRRS none other than Peter McGibney, who was responsible for at least one outstanding run detailed in this article. Not only did he remember me, but the details of the run were still freshly in his mind. His brother James who was also present, brought back more happy memories - Fad saoghail do'n bheirt acu! *[Long life to both of them!]*

Historical associations cling to every townland in the area, but two must suffice. It was at Sulchoit (cf. the Irish name of the Junction) that the Dalcassian King Mahon (brother of Brian Boru) defeated the "Danes" in 967, the first serious check in their hitherto victorious progress; and at nearly the same spot in 1919 the first incident took place of the War of Independence.

Scenically, the terrain is more attractive than the Central Plain. After some undulations near the foothills of the Galtees, the line drops from MP 140¼ at 1 in 151 to cross the Blackwater by the "Ten Arches" just past Mallow, whence it rises at 1 in 125/140 to MP 151¾ and then falls almost continuously, over many high embankments and lofty viaducts, to Cork.

Though the undulations between the Junction and MP 140¼ are gentler, they were sufficient to produce rousing maxima on occasions, and were readily recognisable either by the fluctuations in speed of engines which had their controls left unaltered or variations in exhaust of those which had not. The chief of these gradients are: a rise at 1 in 156 to MP 109½; a fall past Kilmallock to about MP 126 - this was sufficient to produce the record breaking 95 mph by "Maedhbh" when on trials in 1939 - if the engine had not been eased the sequel would have been either a 3 figure speed or a derailment. There follows a climb through Rath Luirc to MP 130¼ and a descent from MP 133¼ to Buttevant, whence the line rises at 1 in 178/142/230 to MP 140¼.

As is well known, Up trains face a climb of 1 in 78/64/60, starting in Cork station, and aggravated by a tunnel nearly a mile long. There is a brief respite at Kilbarry, which was very noticeable, as engines raced away with regulator and cut-off unaltered. Then there is actually a short fall north of Rathpeacon which often produced speeds in the fifties for ½ mile or so. After Blarney, the hardest length is at 1 in 116 between Posts 158 and 157; this normally produced the overall maximum for Down trains.

This tremendous bank provided one of the railway sights of Ireland. Although very definite loads were laid down for each class of engine, piloting was in fact the almost universal practice if the load exceeded six bogies or so, no matter what the train engine, to avoid drawing her fire in the tunnel. This bank, too, was the principle reason for the introduction of classes which were remarkably powerful by Irish standards, in an attempt to do away with piloting - such were 341 and the 400, 500 and finally 800 classes. In the 1950s the 400 class were allowed 7 bogies unpiloted, on the "Enterprise" only, and managed this load very creditably. 800 herself is recorded as having taken fourteen bogies unpiloted on the tightly-timed 1939 Mail, while one of the class is credited with seventeen bogies on a test train.

800 made a good climb unpiloted on the return Centenary train in 1949 with 9 bogies and a 6-wheel

van. Speeds were 16 in the tunnel, 25 at Kilbarry, 18.4 on the 1 in 60, 29 at Rathpeacon, 40 before Blarney and actually 60 through Rathduff. Mallow was passed in 32¾ minutes. In the 1950s, however, this class rarely showed up well and usually worked at a pressure much lower than the designer's 225 lbs.

Detaching the pilot at Blarney was naturally reduced to a fine art - I have seen it accomplished in 64 seconds (see run 17) - not bad as the pilot always had to set back to clear the main line. Even so, the then standard 37 minutes to Mallow start-to-stop was far from easy if you had to stop here. The Enterprise was harder - 34 minutes to pass - hence, no doubt, the reluctance to pilot this train. It must have been a curious experience for American visitors to board Ireland's crack train and then find her pounding for miles at 25 mph - often with two engines which enveloped acres of countryside in black smoke as they pitted their strength against the grade.

Being really the intersection point of two main lines, Limerick Junction retained its character long after other junction stations had become merely stopping points for through trains. In any case it was until recently impossible to run any through trains other than on these two main lines except, oddly enough, between Limerick and Cork - I well remember 328 making her sinuous but non-stop way through en route between the two Munster cities on a CBS special. Limerick always had a huge variety of engines any of which they were liable to send out to the Junction, to the delight of the enthusiast. The pilot, which seemed to spend a lot of her time trying the gas cylinder wagon in every road, had to be capable of taking over a main line train in an emergency, and I recall D10, D11 and D12 classes on this duty. At first the pilot was shedded at the Junction, but later she came out from Limerick in the morning and was replaced by another engine in the afternoon. Otherwise, the classes which appeared on the short workings included D14, D17, D19 (4-4-0), G3 (2-4-0), F6 (2-4-2T) and E2 (0-4-4T), while at times of water shortage No.317 of Class C7 (4-4-2T) would work a water train of obsolete tenders from Limerick - providing inter alia a challenging exercise in identification. The through Limerick-Waterford passenger trains had usually 4-4-0s - class D4, D10 and D12 - but latterly J15s. Naturally, there was not the same opportunity of observing the goods trains, main line or branch, but apart from J15s, classes J4 and J9 0-6-0s together with 2-6-0s of classes K1, K1a and K3 worked them. About 1954 the fine DSER 4-4-2T No 457 (class C2) was sent down to work some of the branch trains which involved a quick turn around, but some heating trouble which she developed was never fully put right and she mostly shunted at Limerick and did not put in any appearance at the Junction after all.

The peculiar method of entering the Junction must have been disconcerting to strangers. One American lady realised with consternation that she was passing her intended destination at 25 mph and enquired frantically when she would get a train back! This was on a local that terminated there.

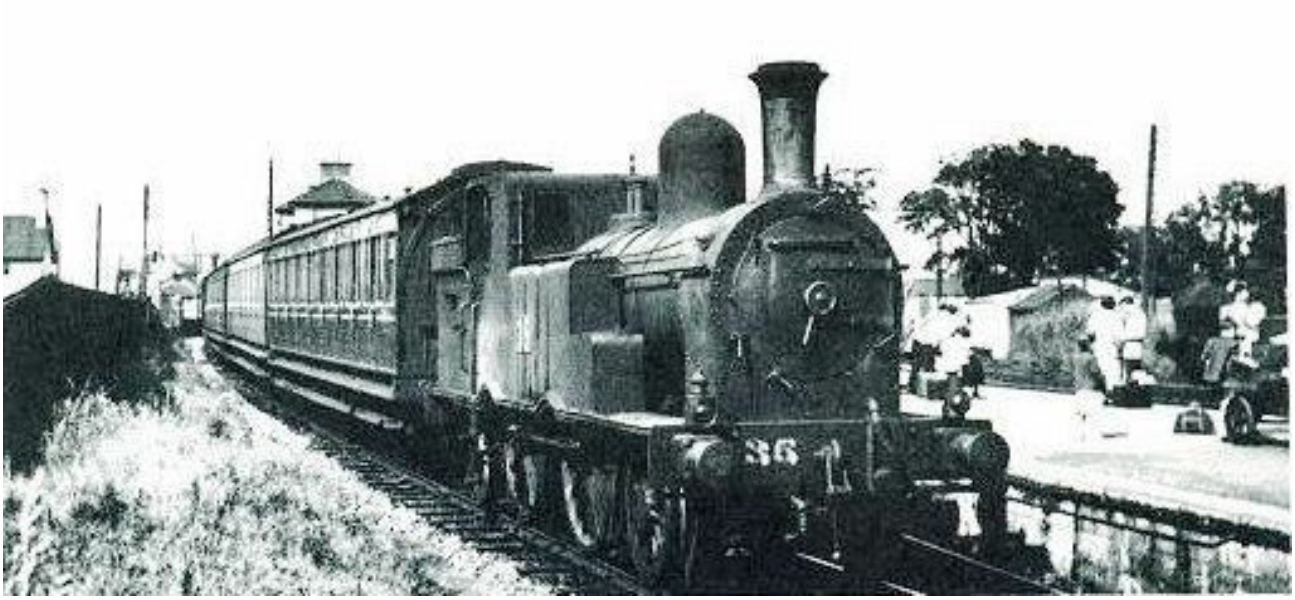
Perhaps the best time to be at the Junction was around midday when five trains converged on it in succession (apart from the pilot). The first to arrive was the 7:15am Perishable from Kingsbridge which might be headed by anything from a D17 to a newly shopped 800 class; if the latter, one might see all three 800s within a few yards of other.

Next came the branch trains, which found their way by complex routes to their respective platforms. Finally there were the Up and Down Cork and Kerry trains, often loaded to 12 bogies in summer; I once saw a 400 pound up the 1 in 156 with no less than 15 bogies on the Down train. These were always, of course, rostered to be hauled by 4-6-0s. To add to the general activity, a coach or more off the 12:15 ex Limerick was often worked back there on the 10:50am ex Waterford. The transfer of these vehicles was another complicated operation requiring the services of both branch engines. After all the interchange traffic had been dealt with, the engines watered and recalcitrant coal shovelled forward, the trains departed in the reverse order of their arrival.

The only sign of branch working at Rath Luirc, on the other hand, was likely to be in the late fifties, if one was lucky, a cement special halted at Rath Luirc Junction.

Mallow had the distinction of being the last junction (it outlasted Ballybrophy) at which through carriages (from and to the Kerry road) were attached and detached, the trains being the 10:30am Down and 11:25am Up mentioned above. These trains were carefully called by the station staff, who changed the cry from Cork train, change for Kerry, to Kerry train, change for Cork, at the appropriate point in the length of the train. While this may have satisfied the returned exile with the tricolour ribbon round her hat who had been setting her companions a nice exercise in orientation by tearfully asking, at five-mile intervals, in what direction lay Killarney, it would upset American tourists, who would hear the call for the other part of the train and (unless a timer was present) fight their way to a door with mountains of luggage, only to find they were in the right portion after all.

In the Down direction, the Kerry portion was simply uncoupled, but in the Up, the procedure was as follows: the Kerry train arrived first in the beach, then the Cork engine, on arrival, lifted the van off the front of her own train, set back on to the Kerry train, which also had a van in front and placed the lot in front of her own carriages. Thus, however long the combined train, it was always easy to unload heavy baggage, or bikes, at Limerick Junction and Kingsbridge.



No.35 on 3:45pm ex Limerick at Limerick Junction in 1955. (A. Donaldson)

According to the sound principle that each train must connect with as many others as possible, the above trains coincided with the stopping trains between Cork and Rosslare, thus providing services between the Kerry road and Cork and between stations north of Mallow and those east of it, in both directions. The 3:40pm Saturdays Only and the daily Down Mail also carried Kerry portions, though through carriages were not advertised in the latter case. Some of the main line stopping trains were also timed so as to give Cork connections off the Kerry road. Apart from this interchange passenger traffic, there were always several engines in steam and a fair number of goods and cattle trains in all four directions plus the beet specials in their season.

The operational interest was fully matched by that of the locomotive performance. Drivers were keen, most engines in good order and in many cases out-of-course delays gave sparkle to the running while the long banks were a fine test of steaming and tractive capacity.

For convenience, I shall deal with: (1) “All Stations” trains; (2) those stopping only at Mallow; (3) the “Enterprise”.

“All Station” trains might not seem worth mentioning, but it must be remembered that in this country,

except on suburban lines, distances between stations were often great enough to permit of speeds in the sixties, by stopping trains; also the CIÉ principle of "a minute for starting and a minute for stopping" over non-stop times meant that sectional times were quite tight. I need only mention the snippet on the 8:15 Mallow-Cork (whose engine returned on the 9:30 Cork-Tralee) when D14 No.65 - an engine not generally associated with lively running - ran the 5.1 miles from Rathduff to Blarney in 7 minutes 1 second with a top speed of 60. The load was 86 tons gross. The 6:10pm Cork-Limerick Junction (which returned to give an "all station" service out of the 6:30pm Dublin-Cork) left a portion behind at Mallow and generally only took one bogie forward. Run Nos. 15B and 16B in the table show the effect of this load on a J15 and a D2 respectively. Run 15A, by the way, is included to show members that: (a) A J15 could easily climb the bank out of Cork with a moderately loaded passenger train. The 9:20pm was not so bright, though on one occasion 312 (D10) with 75 tons ran the 8 miles from Kilmallock to Buttevant in 10.55 start-to-stop, with a top speed of 65 mph. (b) On the Rosslare trains time seemed to be kept without any necessity for hard running. (c) The Dublin-Cork "perishables" sometimes afforded surprises. They were generally allowed plenty of station time, but on occasions the amount of station work to be done at Mallow caused the allowance there to be exceeded so that the chance was seized to do a bit of speed. Such was run 3B. Even with this light load Mossie Teehan performed a remarkable feat in running 11.4 miles in 14.36 start-to-stop considering the uphill start. Not far behind is the effort of 301, in the next column (4B) on the same train. This class was not often to be found on mainline trains - they had actually been rebuilt to make them more suitable for branch work - but this particular engine always seemed to excel. The 342 or D4 (1926) class were not as a rule popular, though there are records of first-class work certainly by 343/4. 346 was the engine with roller bearing bogie and tender and she certainly showed the benefit of them in run 1B.

The 8am Up was interesting in being normally entrusted to a 321 class (it was dieselised in 1953). It was, in my experience, characterised by competence rather than brilliance and run No.17 is typical.

The pick of all the stopping trains, however, was the Down Mail (it actually ran non-stop from Mallow to Cork). It was often worked by a 321 class and No.1A is a run with this type. On another trip No.407 with 210 tons ran Knocklong-Kilmallock (7.1 miles) in 9.49, maximum 65, and Rath Luirc-Buttevant in 10.46, maximum 68. Run 2A, I remember vividly still. As the 8am Up had been dieselised, I based myself in 1955 on Limerick, came out to the Junction on the 8:40 (which usually provided a rousing experience with a small engine), joined the main there and travelled all day over the main line, returning to Limerick by the exciting 9:05pm. On the day in question there was a special from Limerick to Cork via the Croom line on which I had planned to travel as 801 had not been doing too well on the main line earlier in the week. But Mossie Teehan averred that 401 was doing brilliantly for him (I had always thought her a big "lazy" engine) so I changed my mind about the Croom special and he did not let me down.

Another smart piece of work by Chinn with 405 appears in Run 14. This was on the similarly timed and loaded Sunday train.

The Down main ran non-stop from Mallow to Cork and although the schedule was generous - 33 minutes - running was usually lively. Actually standard time from Mallow to Cork was 30 minutes though most trains had a recovery margin. In any case, many drivers on leaving Mallow simply went all out for Cork - once you got over MP 151¾ it didn't matter whether you had any steam, coal, water or anything (provided you had oil). Thus I have had far more arrivals in Cork before time than behind it.

Run 5B represents my fastest time from Mallow to Cork with a Cork crew on the Down Mail. Fog had precluded fast running before Mallow, which was left late. Of course, the load was trivial for such an engine, though the driver to judge from his language didn't seem a bit pleased with her when I hastened to congratulate him.

Run 6B was made on the same train and is included chiefly because of the fine starts out of Mallow and Mourne Abbey with this load. Run 2B is of interest as showing 401 could fly downhill. It was also made on the Down Mail.

The Up and Down "Kerry" trains, i.e. which carried a Kerry portion, were at first very heavy, which made it more difficult to work up a high speed. In 1953 a fast diesel service was introduced between Tralee and Dublin which took some of the traffic from these trains. With lighter loads, the 48 minute timing between the Junction and Mallow was quite easy. In the reverse direction, the time was for long given in the WTT as 44 minutes but most drivers seemed to take it as 49 minutes (the same as the Up Mail) and regulate their running accordingly. Run 3A is a fine effort by "Pop" Kelly, the senior driver in the link in the heavy load days. I developed in those years a tremendous grádh *[love/respect]* for 409 which has never left me. She always seemed to be the engine responsible for the outstanding runs. Timers used to make an unofficial "engine of the year" award and 409 nearly always won it. Run 5A concerns the same train and although perhaps the double-heading detracts from its interest it does bear out Charlie Maguire's dictum that you could put a 60 class in front of any engine and she wouldn't "get in among her feet".

401, as everyone knows, had been fitted with Caprotti valve gear when altered to the two cylinder arrangement. Lack of spares caused the fitting of Walschaerts gear again in 1949, though the lower rear footplating remained to remind one of the previous arrangement. Run 6A shows what she could do on a fairly heavy train - again the 10:30am Down. Run 4A was on the 6:30pm Down, the return of the 8am Up. 331 has much smart work to her credit.

As these trains left a Kerry portion at Mallow, the last section was easy, but I have included some runs on the corresponding Up train, the 11:25 am.

Run 16A gives my fastest time from Cork to Mallow, start-to-stop. Being well before time, Jim McGibney took things easily down Mourne Abbey bank but actually got into Mallow before the Kerry portion, which was booked to precede him.

Run 18 represents my highest speed down the same grade on a stopping train. I understand, of course, that an 800 has been timed at 86 mph here and a 400 at 88 mph.

Run 20A is a good effort by No.501 which had a heavy load for this train. On this occasion the Kerry portion was worked up separately. The climb out of Cork is noteworthy, but then the running always was when 329 appeared, and Run 19A shows an even more electrifying start out of Cork. This train was a special booked non-stop to the Junction but the 6:10pm local ahead was so delayed by the heavy Mallow race traffic that the later running of the special was ruined by checks.

No.208 was timed by E. Gilmore and is chiefly noteworthy for the tremendous start from Mallow up Two Pot House. Even with 2 engines the load was heavy enough to require an exceptional effort. Despite only moderately fast running thereafter, the net time to the platform at the Junction did not much exceed that transcendent 44 minutes.

Run 21B was made on a day of exceptionally heavy loading. An 800 class had gone out to Mallow to take the Kerry part of the traffic forward and Jack Pyne followed with the moderately loaded Cork portion. His start was of about equal merit with the previous one and the happy combination of Jack and 323 produced plenty of sparkle till he caught the Kerry at Emly - to the great delight of the Cork ticket-checker who had confidently forecast ever since Mallow that Jack would "go into him - he said he would". No doubt Jack would have run even harder but for a slight check at Buttevant, the next section being longer than average.

The Up Mail was a very different proposition from the Down. In those days there was no "Slainte" so that if you missed the Mail, there was nothing but the Night Mail leaving you in Dublin at 4:10am. This

was all right for a timer going out again on the 6:40am but otherwise only for the Post Office. The Day Mail was, therefore, heavy in summer and Runs 21A and 19B are good examples of its running both with the unrivalled 409, but on different occasions. The former is included especially for the start out of Blarney after detaching the pilot - the best I've ever timed on this section. It was here you first heard the exhaust of a 400 properly in the Up direction and 409 left no doubt over a large area of Co. Cork that she was really trying. Signal checks, unfortunately, spoiled the last section. The latter was by one of the McGibneys - I think it was Jim - and again leaves nothing to be desired. Schedule was 49 minutes to the Junction platform, but loading of tomatoes from the Kerry Gaedhealtacht and other commodities often occasioned a late departure from Mallow.

Runs 7, 8 and 9 were all made on the 3:40pm Down - a Saturdays only summer train which didn't fit any engine roster - in fact no one quite knew how the engine got back to Dublin. The result was surprises and the crews, to judge from the running, seem to have been among the most energetic. All three runs are brilliant - but then you expected brilliance of 329 and 502, both of which were in my opinion the best of their respective classes. What is more, the latter was so fresh out of the shops that her boiler cladding still had "502" painted on every section.

61 is the engine I remember most vividly on this train. Standing on the Junction platform ready to choose a milepost seat as the train passed, I saw in the distance what I took to be a J15 - certainly an engine with a "Z" class boiler - and wondered what was wrong that a fair special had been let out in the very path of the 3:40 - but it wasn't a J15 nor a fair special, but 61 on the 3:40 itself - on the dot. I have only recently heard how it had happened. 306 - herself an unusual engine for a fast mainline train - had been stopped at the last minute through big end trouble, and Charlie Maguire had nothing to offer Peter McGibney but 61. "Ah well," says Peter, "she's an engine anyway," and followed up that philosophic reflection with the superb piece of work here set on record. When I congratulated him at Glanmire, he was apologetic. He'd have run properly only for another hot big end. Incidentally, the 60 class had been displaced from mainline duties about 50 years before.

I have left the Enterprise to the end as being a special working. Brilliant as the other trains were, they did at least nominally work to standard times, and if drivers had not been so keen, they might have got by with dullish running - but the Enterprise had to keep fast times - 40 + 28 minutes in the Down direction and 34 + 42 in the Up. Considering the speed restrictions which did not exist in 1939, these bear comparison with the Mail times in those days of 40 + 27 minutes Down and 33 + 43 minutes Up - stopping, unlike the Enterprise, at Mallow, of course.

In 1951, the Up running was more exciting than the Down, as drivers had not realised how easy the 127 minutes timing from the Junction to Amiens Street really was, and tried desperately to reach the Junction on time. In 1953 they weren't so particular about the Junction times, often leaving a few minutes late and making it up en route. I was never lucky enough to have a 4-4-0 on this train, though Teehan told me he had once kept time easily on winter loading with 327 from the Junction, where he took her over after a failure, to Amiens Street. Another thing about this train is that its introduction enlivened the running of other trains as well. This is a common phenomenon, and was noticed, for example, on this line in 1939, on the GNR Derry road on steam trains after the introduction of fast diesel times, and on many CIÉ lines similarly, e.g. Kildare-Waterford.

On the other hand CIÉ, unlike the GNR, weren't particular about limiting the load; towards the end, as the train became popular, it was regularly made up to 10 bogies and I did once see 402 storm out of Amiens Street with eleven. Nor did they worry about things like piloting or out of course stops - even for water. But they did care a lot about arriving to time and Runs 10 - 13 and 22 - 25 show how it was done.

Run 10 is a fairly normal time-keeping effort, in spite of PW checks - so much so that the engine was eased to avoid an arrival too much before time.

406, still with Caprotti valves and 400 boiler, often worked “against” 409 at this period and although it was often said that she was never the same after the Straboe collision, she put up a good show on this occasion (Run 11).

Runs 12 and 13 were made in 1953 when drivers were making up time in this section. In spite of her heavier load, the gallant 409 held her own against the bigger engine to Mallow, but found it hard going up Mourne Abbey, whereas “Tailte”, though working at well below her proper pressure, hardly noticed the bank at all. Both drivers made a very fast finish, as Cork, of course, is not a terminus at all.

In the Up direction, Run 25 was made in November 1950. 800 was working at 200 lbs pressure and naturally made light of her task - indeed she was considerably eased after Knocklong, being then well before her time. I travelled on to Dublin on this occasion, and Pop Kelly, reeling off mile after mile, up hill and down dale, in the sixties, showed he could have kept the modern schedules without difficulty.

Runs 22 and 23 were made in 1951 and are interesting in providing a comparison between 409 and 402, the most thorough rebuild and for long the pride of Inchicore. Both engines had the “K” class boiler. 409’s run was made on a “soft” day and her driver asked for a pilot in case of slipping in the tunnel. As he had the permitted 7 bogies this was refused, so he made an extremely gentle climb, but opened out to good effect once up the formidable 1 in 60, to produce my second fastest speed in this direction - up the bank. The signal check at Buttevant was a piece of bad luck - the signalman had pulled the distant but it had failed to come off. On the whole, perhaps 409 has the edge on her rival. Run 24, again timed by E. Gilmore, again shows the advantage of putting a 60 class in front. A pilot would have been taken to Blarney in any case, but so far as I can see from our records, 94 was returning to her home shed after piloting a Down train and so was not detached.

Though some of the enginemen are still enjoying well-earned retirement - and I hope this issue may reach some of them and let them see their efforts did not go unrecorded - those grand engines have, except 800, all gone. I feel like ending with the words of the seanchaidhe, “ni bheidh a leitheid ann aris ...” *[there will not be the like again]*

But all is not quite lost. Limerick Junction has still water, a turntable and, if the latter is removed, a new loop forming a triangle with the main Waterford-Limerick lines. Who knows but a steam engine may yet again grace this Omphalos of our railway system.

I acknowledge a dept of gratitude to that doyen of timers, R.M. Arnold, whose negotiations with the CIÉ Traffic Department made it possible to do so much running at cheap fares.

	Run	1A	2A	3A
	Loco	321	401	409
	Driver		Teehan	Kelly
	Load (Full)	150	175	330
0.0	**Limerick Junction**		00.00	00.00
2.6	**MP 109½**		05.15 41 55½	07.35 26 33½
6.6	**Emly**		10.24 58	13.59 45 56
10.2	**Knocklong**	00.00 60½	05.41 62½	18.08 51 aft
17.3	**Kilmallock**	09.58 52¾	10.06 57	25.38 66 70
21.3	**Rath Luirc Junction**	06.00 52	05.34 54	29.26 55½
22.4	**Rath Luirc**	07.34	07.20	30.34 50½ 47
27.2	**Ballyhay Crossing**	05.14 52½ 61½	04.56 56 66½	33.55 53/51 66
30.4	**Buttevant**	11.20	10.57	39.13 58½
33.4	**MP 104¼**	05.43 45 65½	05.26 48 58	42.38 47 67½
37.6	**Mallow**	10.48	10.55	47.49 46 net

	Run	1B	2B	3B
	Loco	346	401	307
	Driver		Shiel	Teehan
	Load (Full)	150	190	98
0.0	**Mallow**	00.00	00.00	00.00
0.6	**Killarney Junction**	01.35 26 36	01.49 36 39	01.50 35
3.7	**Mourne Abbey**	07.02	06.18 37	06.41 41
7.25	**MP 151¾**	05.55 48½ 61	12.07 40	6.27 40¼ 61
9.9	**Rathduff**	09.20 66	15.06 62 76½	09.23 61½ 73
14.9	**Blarney**	06.43	19.22 72½	14.36
17.0	**Rathpeacon**	03.36 50 61	21.05 67½ sigs	08.30 46 sigs
19.5	**Kilbarry**	06.35 40½	21.21 25	09.10
20.8	**Cork**	09.03	27.36 26¼ net	12.40

	Run	4A		5A		6A		7	
	Loco	331		95 & 405		401		61	
	Driver							P. McGibney	
	Load (Full)	240		390		270		160	
0.0	**Limerick Junction**	00.00		00.00		00.00		00.00	
2.6	**MP 109½**	06.19 pw	30/45 38	05.45 pw	35/51½ 40	06.33	33½ 48	06.00 pw	33/49 43
6.6	**Emly**	12.10		11.02	55 59	12.12	30½ 58	11.18	51
10.2	**Knocklong**	16.20	52 69	14.58	58 65	16.51	56 69	15.12	58½ 64
17.3	**Kilmallock**	24.00	67 69	22.13	64 66	23.53	69 69½	22.42	62
21.3	**Rath Luirc Junction**	27.50	57	26.10	55 aft	27.33	60	26.57	53 aft
22.4	**Rath Luirc**	28.58	48	27.20	47¼	28.39	50¼ 49¾	28.08	47¼ 46¾
27.2	**Ballyhay Crossing**	32.18	54 64	30.45	55/53 61½	31.52	56/53 65½	31.30	53 60½
30.4	**Buttevant**	37.39		36.15	58	37.00	62	37.05	59½
33.4	**MP 104¼**	41.20	41/60	39.49	48/60	40.24	48½/54	40.37	45/60
37.6	**Mallow**	47.24	46 net	45.00	44 net	46.47	43½ net	47.05	46 net

		Run	4B	5B	6B	
		Loco	301	801	407	
		Driver				
		Load (Full)	115	150	255	
0.0	Mallow		00.00	00.00	00.00	
0.6	Killarney Junction		- 33	01.52 36/38	02.04 34 sigs 39	01.53 36
3.7	Mourne Abbey		07.35	06.09 43	-7.15 08.57	06.24 38¾ 42
7.25	MP 151¾		07.09 39½	10.50 51	16.57 35	11.40 45
9.9	Rathduff		10.13 57½ 66	13.30 63 77	20.07 58 69	14.36 60 71
14.9	Blarney		15.46	17.40 74½ 76½	24.47 67 70	19.13 66 67
17.0	Rathpeacon		03.38 48½ 56	19.23 72½ 67	26.39 63½ sigs	21.07 61
19.5	Kilbarry		06.45 45	21.53 51	30.26 31.00	23.58 44/37
20.8	Cork		09.37	24.31	34.26 27 net	26.32

	Run	8	9	10
	Loco	329	502	409
	Driver			
	Load (Full)	250	335	220
0.0	**Limerick Junction**	00.00	00.00	00.00
2.6	**MP 109½**	05.49 36	06.06 39	05.31 40 54 pw 38
6.6	**Emly**	10.34 60 62	10.50 60½ 65	10.24 51 64
10.2	**Knocklong**	14.09 60 54/65	14.15 65	14.04 61½ 70
17.3	**Kilmallock**	21.22 64 66	21.19 60	20.58 71 aft 74
21.3	**Rath Luirc Junction**	25.17 55½	25.34 51½	24.31 65 bef
22.4	**Rath Luirc**	26.29 47	26.48 45 42½	25.32 58 64
27.2	**Ballyhay Crossing**	29.49 52 50	30.30 52 48½	28.17 61 69
30.4	**Buttevant**	35.17 54½	36.02 59	33.04 69
33.4	**MP 104¼**	38.56 44 57	39.30 48½ 63	36.18 51 sigs 70
37.6	**Mallow**	44.30	44.57	41.11 35 pw
38.2	**Killarney Junction**	01.43 40 47	01.58 36	42.26 42 47
41.3	**Mourne Abbey**	05.28 46	06.03 45¼ 47½	46.19 46½
44.8	**MP 151¾**	10.14 48½	10.42 48½	50.52 51½
47.4	**Rathduff**	12.54 62 66	13.24 64 75½	53.28 66½ 77
52.5	**Blarney**	17.33 69 72	17.35 70 68½	57.47 56 eased
54.6	**Rathpeacon**	19.23 70 66	19.26 63 64	60.47 47 53
57.1	**Kilbarry**	22.08 48	22.24 34	63.26
58.4	**Cork**	25.03	25.33 66	66.02 65 net

	Run	11		12		13		14	
	Loco	406		802		409		405	
	Driver							Chinn	
	Load (Full)	215		250		295		220	
0.0	**Limerick Junction**	00.00		00.00		00.00		00.00	36
2.6	**MP 109½**	05.36	41/53	06.02	36	05.36	39	05.42	43
		pw	36				61½		
6.6	**Emly**	10.51	55½ aft	10.49	62	10.07	65 aft	10.58	
			64½		66		68		53
10.2	**Knocklong**	14.26	64	14.10	64½/62	13.24	62½	05.58	
			56		72		60		62
17.3	**Kilmallock**	21.24	66½	20.39	70	20.20	70	10.13	
			69		73½		71½		58
21.3	**Rath Luirc Junction**	25.04	60½	24.09	64	23.43	66	05.53	56
22.4	**Rath Luirc**	26.08	53	25.11	56/54	24.43	58	07.26	
			52		61½		57		
27.2	**Ballyhay Crossing**	29.21	55½	28.04	60	27.31	65	05.06	55
			64		74		72½		56
30.4	**Buttevant**	34.30	63	32.43	68½	32.07	70	11.04	
							54½		
33.4	**MP 104¼**	38.17	43	35.39	56	35.13	55	06.01	42½
			59		66		66½		64
37.6	**Mallow**	43.04	37 pw	39.47	59/55½	39.30	52	11.10	
					62				
38.2	**Killarney Junction**	44.09	43	40.34	56	40.22	51½		
			43		51½		41		
41.3	**Mourne Abbey**	47.54	46	43.49	52½	44.12	42		
							40		
44.8	**MP 151¾**	52.30	51	48.08	49	49.30	41		
			67						
47.4	**Rathduff**	55.02	65½	50.47	67	52.30	58		
			74		78		72		
52.5	**Blarney**	59.20	69	54.57	71	57.10	66½		
			72½		76		68		
54.6	**Rathpeacon**	61.09	66	56.39	68½	59.02	64		
					71		70		
57.1	**Kilbarry**	64.48		58.58	54½/48	61.30	49/42		
		70.34							
58.4	**Cork**	73.44	64 net		61.26		64.31		

	Run	15		16A		17	
	Loco	109		801		109** & 323	
	Driver			J. McGibney			
	Load (Full)	110		190		195	
0.0	**Cork**	00.00		00.00	21/25½	00.00	20½
			16				
1.3	**Kilbarry**	05.10	20½/26	04.10	27/33	04.20	25/30
			19½		26		29
3.8	**Rathpeacon**	12.05	35	09.32	43	09.24	41½
			42		48		46
5.9	**Blarney**	15.26		12.15	47½	12.37	
			44			13.41	41¾
11.0	**Rathduff**	09:30		18.55	45	23.15	41
					49		
13.5	**MP 151¾**	05.36	35	22.11	48	26.51	44
			47		62		
17.1	**Mourne Abbey**	11.03		26.03	63	30.39	63
					65		
19.3	**MP 146**	-		28.02	65	32.41	64
			42 bef				65
20.2	**Killarney Junction**	05.06		29.50		33.26	63½ bef
20.8	**Mallow**	06.46	41	30.29	58	34.50	

	Run			**16B**			
	Loco			328			
	Driver						
	Load (full)			27			
20.8	**Mallow**			00.00			
25.0	**MP 140¼**	08.00	39 53	05.53	59 60½	09.34	37
28.0	**Buttevant**	12.23	 44	09.57		13.38	 57
31.2	**Ballyhay Crossing**	07.47	54½ 57	07.05	60 65	06.09	54 56
36.0	**Rath Luirc**	11.36		10.26		11.26	
37.1	**Rath Luirc Junction**	02.01	50 57	02.04	49 65	02.17	47 56
41.1	**Kilmallock**	07.10	 58½	07.21	 65½	07.05	 54½
48.2	**Knocklong**	10.19	 51½	09.42	 59½	11.26	
51.8	**Emly**	05.54	 56¼	05.05	 57½		
54.2	**MP 111**	04.10		05.10			
55.8	**MP 109½**	-	36 pw	-	34 pw		
58.4	**Limerick Junction**	09.53 11.22		09.55 11.29			

** Pilot off at Blarney

	Run	18	19A	20A	21A
	Loco	20** & 502	329** & 405	329** & 501	170** & 409
	Driver	Condy			
	Load (Full)	230	260	270	290
0.0	**Cork**	00.00	00.00	00.00	00.00
1.3	**Kilbarry**	04.26 25 22½	04.53 30½/33 27	04.09 28 25	04.36 23½/28½ 25½
3.8	**Rathpeacon**	10.37 38½ 46	08.48 47 55½	09.50 43 50	10.05 42 48½
5.9	**Blarney**	13.54 15.24 41½	11.26 12.43	13.00 14.58	13.12 15.03
11.0	**Rathduff**	24.22 39 40½	21.37 41 45	23.39 40	23.48 47 52
13.5	**MP 151¾**	28.16 38½	25.09 44½ 64	27.11 42 68	26.52 50½ 68½
17.1	**Mourne Abbey**	32.08 66½ 70	28.54 63½ sigs 64	30.50 68½ sigs 69	30.17 68 sigs stop 9:23
19.3	**MP 146**	34.04 60	30.57 58½	32.53 43	32.14
20.2	**Killarney Junction**	34.54 58	33.33 10 13	34.15	43.55
20.8	**Mallow**	36.27	36.40 32 net	35.58 35 net	46.10 34½ net

** Pilot off at Blarney

	Run		**19B**		**20B**		**21B**	
	Loco		409		313 & 502		328	
	Driver		J. McGibney				Pyne	
	Load (Full)		305		330		210	
20.8	**Mallow**		00.00		00.00		00.00	
25.0	**MP 140¼**		09.10	37	07.06	49	08.10	43
							sigs	53
28.0	**Buttevant**		12.38	64	10.10	60	11.44	56
				57		49		58
31.2	**Ballyhay Crossing**		18.02	57½	15.42	53	17.31	57/55½
36.0	**Rath Luirc**		20.59	60	18.48	58	20.28	60
								62
37.1	**Rath Luirc Junction**		21.52	70	19.46	64½	21.28	62½
				72		66		67
41.1	**Kilmallock**		25.22	67½	23.35	56½	25.14	61
						53		63½/54
48.2	**Knocklong**		32.42	62	31.10	61	32.38	58½
				64				59
51.8	**Emly**		36.14	62 bef	34.45	56½	36.38	43
54.2	**MP 111**		-	45 pw	-	34 pw		
55.8	**MP 109½**		41.03	49	40.17	54½	40.35	62½ pw
				60				
58.4	**Limerick Junction**		44.34	44 net	44.02	43½ net	45.28	43 net
			46.30		46.27		47.15	

	Run	22		23		24		25	
	Loco	409		402		94 & 407		800	
	Driver	Harvey		Harvey				Kelly	
	Load (Full)	225		220		275		190	
0.0	**Cork**	00.00	14.6	00.00	23	00.00		00.00	
1.3	**Kilbarry**	05.24	15 16/13.8	04.31	25 16.9	05.10	28	04.57	(21/26) 21
3.8	**Rathpeacon**	14.02	35	12.46	34	10.56	41	11.24	41
5.9	**Blarney**	16.48	50½ 59	15.38	47 51½	13.50	45 51½	13.53	55 57/46
11.0	**Rathduff**	22.18	53	22.03	47 51½	20.14	50	19.52	49 55
13.5	**MP 151¾**	25.22	47 72½	25.11	53	23.18	47	22.47	53 65½
17.1	**Mourne Abbey**	28.52	73 aft 75	28.31	76 78	26.43	72 74½	26.19	62½ 65
19.3	**MP 146**	30.36	75½	30.18		-		28.24	
20.2	**Killarney Junction**	31.15	pw	31.05	44 pw	29.10	58	29.18	57
20.8	**Mallow**	32.19	31½	32.16	32	30.00	47	30.04	49
25.0	**MP 140¼**	38.47 sigs	48 67	38.30	46	35.30	50	35.28	51 68
28.0	**Buttevant**	42.32	40 59½	41.30	67 68/54	38.30	65 57	38.29	67½ 70/66½
31.2	**Ballyhay Crossing**	48.14	66 60	46.40	62 55	41.40	60	43.24	62 65½
36.0	**Rath Luirc**	50.49	66 71	49.40	60	44.18	64½	46.02	69 72½
37.1	**Rath Luirc Junction**	51.42	76 75½	50.38	65½ 68	45.14	67 70½	46.56	72 77
41.1	**Kilmallock**	55.11	60½ 50	54.30	57	48.55	60 50	51.18	68½ 58
48.2	**Knocklong**	63.25	58 60	62.43	62 64	56.32	60	57.12	64 66
51.8	**Emly**	67.20	50 aft	66.04	63 49	60.10	56½	60.42	55½ 64
54.2	**MP 111**	-	47 pw	68.48	59½ 61½	-	38 pw	-	
55.8	**MP 109½**	71.16	63	-	40 pw	65.32	44½ 52½	64.44	62
58.4	**Limerick Junction**	75.20 77.00	71 net	73.49 75.41	71¼ net	69.40 71.58	68½	68.30 70.07	