The Tenterden Terrier

Number 85 Summer 2001

Journal of the Tenterden Railway Company Limited
Proprietor of the Kent & East Sussex Railway

The Tenterden Railway Company Limited

(Limited by guarantee and not having a share capital.) *Registered Charity 262481*

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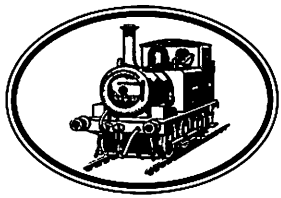

Number 85 **Summer 2001**

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FRONT COVER
The Terrier Club – our newly formed group for youngsters parades at Tenterden in front of Knowle, 12th May 2001 *(John Liddell)*

FRONTISPIECE
USA Wainwright awaits its next turn of duty at Rolvenden shed, 1st June 1999 *(Tony Page)*

BACK COVER
The view from a garden in Cranbrook Road across the valley, May 2001 *(Donald H Wilson)*

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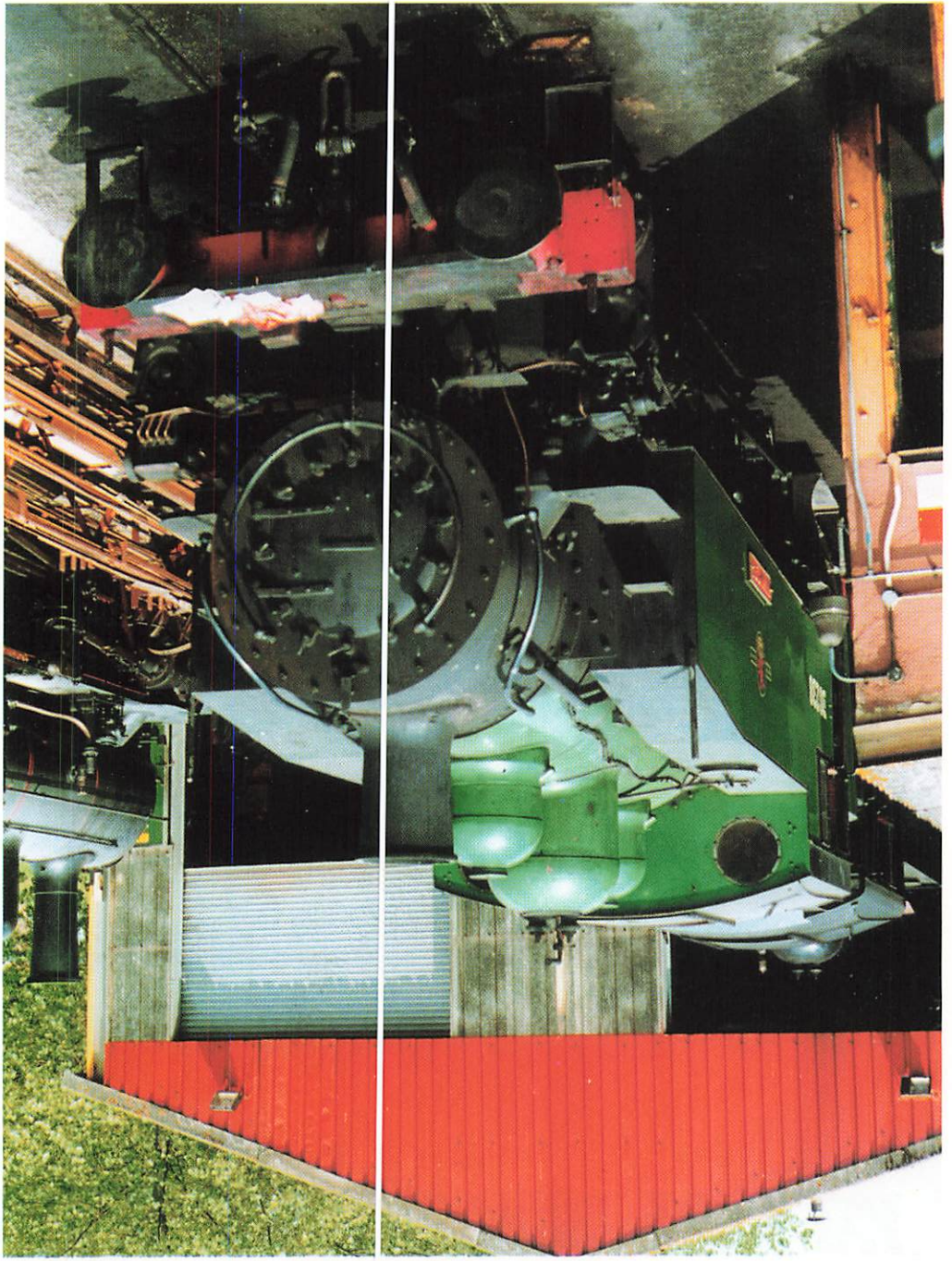

Editorial

Where do we go from here?

After the euphoria arising from the re-opening to Bodiam last year, the Railway's financial problems have been an unwelcome precursor to the new season, with tourism in East Kent being harder hit than most regions in the recent foot & mouth crisis. Of course, the underlying problems were always there, but if traffic had been buoyant we would not have been stretched to the limits that we found ourselves at the end of April. Although these problems have begun to recede with the onset of summer, there can be no let up in the drive to reduce costs and provide a stable financial infrastructure for the future. It is only then that we will be able to make a start on reducing the massive debts that have built up and at one stage threatened to overwhelm us.

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Our sincere apologies to those members who did not receive the last edition of *The Tenterden Terrier*. This was due to a short print run arising from administrative difficulties in the membership department and steps have been taken to ensure that it does not happen again.

Lineside News

Compiled by Duncan Buchanan

Commercial

Staff in the commercial office have been extremely busy, this spring, promoting the railway and taking bookings.

There have been visits from several film crews in recent weeks, two of which deserve special mention. First, Mike Debens and his cameraman from the popular TV series 'Southern Steam' spent some of the Easter weekend with us. The result is going to be a whole half-hour programme devoted to the K&ESR, to be screened on local television during July. Mike is renowned for presenting upbeat messages about heritage railways, so this should be a welcome boost. Secondly, in mid-June the children's programme 'Art Attack', which has a very large following, used Tenterden station to film a sequence of two youngsters creating a collage with a railway theme: this will be going out nationally in September. The number of enquiries from film and TV companies is increasing – a speedy and professional response is needed to convert them into business.

The shoestring advertising budget has not prevented us from raising our profile in the local print media. We have run regular newspaper advertisements – including one that a certain publication (which shall be nameless) ran with a picture of the Romney, Hythe and Dymchurch Railway! Our response to this was to insist on a free re-run the following week. We have also had illustrated feature articles in *Kent Life* and *Sussex Life*, and a number of half-page pieces extolling the virtues of the Wealden Pullman and the new range of food on offer. Finally, both the *Times* and the *Daily Telegraph* have recently carried items on Tenterden as a place to visit: we appeared in both.

Still on the publicity theme, and on the basis that every cloud has a silver lining, we managed to interest *Radio Kent* in the story that the foot and mouth crisis was leading to rising coal prices. The result was heavy coverage one morning on their main drivetime programme, even getting mentions on the news at the top of each hour. Meridian News also ran a good length piece on the following Sunday evening.

Any ideas for publicity or marketing remain very welcome – but please remember that putting them into practice requires a lot of time, money and/or effort, and that there are many organisations like ours queuing up for outlets and business. We have to make the running, and ensure that on the day we live up to our customers' expectations. Our visitors are getting more and more demanding, and increasingly less

tolerant when things go wrong.

So far this season Wealden Pullman customer numbers are roughly on a level with last year, and advance bookings are very encouraging. There are just a few places left in August and October only, so don't delay too long before deciding to treat yourself!

Although passenger carryings were low in the early part of the season (which begs the question of whether we ought to be running so many trains outside the main holiday periods) group bookings are well up on 2000, as are school visits. Again, these have to be worked for, and the Chairman has already appealed for someone to help out by cold-calling and negotiating for business. We work the coach and tour companies as much as we can, but there must be more potential trade out there.

Steam locomotive driving courses remain very popular: at the time of writing there were only seven places left for the whole of the remainder of the year! We are trying to increase the capacity. Diesel driving courses are taking off too, but we are ensuring that the product is right before plugging them in a big way.

Looking further ahead, we have secured – against the odds – an additional 'Thomas' event in September and we have been awarded the franchise for south of the Thames for a new schools-based 'Learning with Thomas' week next spring. As ever, volunteers to staff these events, and indeed to man the stations and trains throughout the season, are always required. All you need is to be enthusiastic, and to enjoy dealing with the public. Please contact the Office at Tenterden station, and you will be pointed in the right direction.

Shop

The new shop layout has proved a great success attracting much favourable comment from customers and others. Not only is it enhancing the railway's image but it is working as hoped and easing flow round the shop, whilst attracting customers to the areas appropriate to their interests. The only real 'snag' so far is that in inclement weather, it is becoming the station waiting room with both positive and negative effects.

The all volunteer effort continues, Judy French nobly volunteered to tackle the volumes of paperwork involved and the usual railway stalwarts have been able, just, to man the shop on a daily basis. Their efforts have ensured that sales have been maintained at last years, historically high, levels and contributed greatly to the railway coffers at a crucial time.

However the squeeze on voluntary and financial resources has undoubtedly had its effect. The inability to produce a new guidebook and video has, for instance, probably resulted in the loss of up to £1000 gross sales each month. Nevertheless the shop continues to develop new lines and introduce old ones. Railway branded jams and marmalades have proved a hit with coach parties in particular. The Hawkhurst Branch book, the limited edition Huxford model wagon and the Hornby Blue Bodiam have tested our supply capability to the limit. A new limited edition Guinness Hop Farms model wagon will anticipate the real world and hopefully appear for Hoppers Weekend. A collectors pin with the railway garter on it along with returned and revamped old favourites like the railway mug have proved popular. For members in particular the maroon company tie has returned and as a novel line a logo'd ladies' scarf became available in the summer.

With the continued availability of volunteers and the reinstatement of the autumn Thomas weekends we are looking forward to a very successful trading year.

Motive Power

Sadly, there have been two departures of volunteers from the department in recent months. Phil Barclay has greatly assisted Lawrence Donaldson and the team on running maintenance and especially washouts. His previous work on steam engines in BR days has proved invaluable to the current preservation movement. Experience like this cannot be bought today. Roy Champion has different skills and has helped by seeing through improvements to the lighting of the jobbing area and the top end of No 2 road by the machine shop.

However as one door closes another opens and the locomotive department welcomes two new volunteers, Joe Hockley and Claire Powell.

In the meantime the two apprentices, John Waddington and Ben Swan have passed their

NVQ level 3 engineering exams and City and Guilds. Richard Moffat has also passed his City and Guild Production Engineering classes.

Lastly two pupils from Homewood Secondary school in Tenterden spent a fortnight with the Locomotive department on work experience. Apart from routine maintenance tasks they were involved with the cladding of 1638s boiler.

Water treatment has been in the news in the last year with other railways having had their fair, or unfair, share of problems. Our two water treatment plants, at Tenterden and Northiam, installed in the last two years, are having their chemicals checked and adjusted to give optimum results for water condition. This is hoped to reduce costs through extension to the time between washouts. There is already some early evidence to suggest that boiler corrosion is reduced and that boiler stays are in better condition than previously expected.

Steam locomotives

No 3 'Bodiam': The contractors at Bury have completed the strengthening of the frames, but miscellaneous tasks remain to be done including plating and re-assembly of the cab and bunker.

At Rolvenden boiler work continues with a steam test completed. There are various minor works to carry out, while additional work continues on the side tanks as a volunteer project.

No 8 'Knowle': In traffic and performing well. During the early part of the year the economies of running smaller sets has made this engine invaluable.

No 11 'P class': Commissioning is now tantalisingly close. The return to service could be around a month away, perhaps even by the time the magazine is published. Already the restoration has won a section award from the Eastbourne Historic Vehicle Club awards and thus entry into the final, which is judged in late June. To confuse the lovers of BR black, lined or unlined, the P class will turn out in the fine SECR livery and sport the number 753, her original 1909 one of course!

No 12 'Marcia': The motion overhaul continues at a steady pace. Martin Weeks has machined 4 new gun metal slipper blocks. Quotes are being obtained for new piston rods and heads. The previous rods are hollow and the heads loose on the blocks. New rings will also be needed.

The wheelsets are with Swindon Railway workshops and should be returned in mid-July. The front axle is to be replaced and the other tyres turned. The brake gear has seen much work with new pull rods and cross beams obtained, but awaits the wheelsets before it can be completed.

The main steam pipes have been repaired and they now reside in the smokebox, which requires the chimney and blower to be fitted. Inspection of the regulator valve is needed. A start will soon be possible on making up the full frame. In parallel work on the bunker back plate, to strengthen the fixings, has commenced.

Finally the owner, Dick Beckett, has expressed a wish to see the engine outshopped in Rother Valley blue livery.

No 21 'Wainwright' (DS238): In traffic and performing well.

No 22 'Maunsell' (65): In traffic again after a new smokebox front and door were fitted.

No 23 'Holman F Stephens': Work continues even though this is not a high priority project. Ben Swan has completed fabrication of the hopper ash pan while painting of the frames is all but complete. The axleboxes are being refurbished and Nick Young is carrying out some difficult machinging on the big end brasses.

No 24 'Rolvenden': In traffic and used mainly for the railway experience days and Sunday lunch trains. No 24 has suffered another broken spring and had another, more unusual, misfortune. During a Pullman working on 11th May the driver's side front buffer disassembled itself during the evening. Hard work early the next day by the steam raiser and shed staff saw the engine fit for traffic by 8:30 the next day.

No 25 'Northiam': In traffic.

No 30 GWR Pannier 1638: Work on the boiler at Chatham Steam Restoration is complete and the boiler has returned to Rolvenden to allow the smokebox door to be refitted. The boiler has now been reunited with the frames and thus has the appearance of a loco again, which is a great morale boost. The new tanks required have not been ordered due to continuing financial restrictions, however this does not limit the amount to be done on miscellaneous other items.

Diesel locomotives

No 20 (GWR railcar): Following the successful

ART ATTACK: Katharine Marsh and Jack Bateup (above) pose as the Railway Children with Pam and Sheila Stevens (below) as two Victorian Ladies *(John Liddell)*

blitz on the platform side framework of the large passenger saloon the team has now turned its attention to the 'home straight'. This consists of the luggage compartment framework on the platform side. The interior tongue and groove panelling has been removed, along with some of the floorboards, in preparation for the removal of the main uprights and waist-rail. The original items have suffered from the usual problems of rot and splits caused by corroding steel screws. The new uprights are readily to hand and the timber for the waist rail is in stock, so this work should not present many problems. The experience gained from previous work, on the railcar, should enable this task to be accomplished with relative ease.

No 40 (BTH diesel, 'Ford'): Several proving runs have sorted out teething troubles and this loco will enter service after a risk assessment and production of a driver's manual.

No 41 (Ruston): In traffic

No 44 (Class 08): In traffic, normally as Tenterden station pilot.

No 46 (Class 03): In service after an 'A' exam and routine service.

No 48 (D9504): following repairs to the engine govenor and battery isolating switch this loco is again available for traffic. A blow-by of the exhaust from the right hand cylinders has also been attended to.

No 49 (14029): Due to a brake fault this loco is temporarily out of traffic. The repair needs refurbishing of proprietary valves. An oil change has also been carried out.

Class 33: Available for traffic after the owning group has recently completed an A exam and repairs to the brake system.

Class 108 DMMU: In traffic and in much demand for this year's timetable. It has been used to fill out the sparse one train timetable at minimal cost. One of the four engines has been changed for a reconditioned unit and all gearbox oil seals have been renewed. All the vacuum brake hoses have been renewed with new examples still available from stock held by suppliers. It has not proved possible to bring the toilet back into service as parts, to the original design, are not available. Instead a different design is going to be installed.

Rolvenden Site

There have been complaints about the scrap yard appearance of the field at Rolvenden. Steps are in hand to tidy the site. This has been hampered by the bad winter weather and the water logged state of the field. However some new containers to hide away the smaller items and movement of some of the bigger items is beginning to help. Any further offers of help will be gratefully received.

The list of wants at Rolvenden, as always, has volunteers at the top of the list. Even relatively small amounts of unskilled time can be put to use. The financial restrictions mean more scavenging than usual is underway. Enamel paint is needed, even old half finished pots will help as these can be used on unseen areas. Bituminous type paint that can be used to hide and protect the previously mentioned containers would be very helpful. Finally there is a continuing need for rags and any old tools, hand tools, drill bits etc. that may be surplus to anyone's requirements.

Rolling Stock

Pullman Car Barbara (K&ESR No 52)

The completion of work on Barbara dominated C&W Department's activities right up to late May. As anticipated in the previous report, an appropriate mesh grill was fitted over the steam heat pipes and has proved a very attractive feature along both sides of the interior at floor level. Also at floor level, new blue carpeting was installed by a contractor and genuine crested Pullman mats installed in the entrance vestibules. (Thanks to Dave Sinclair for coming up with a replacement when we found we only had one useable). Also genuine were the original pattern transfers purchased from the old established firm of Tearne & Sons. Lining and paintwork were the responsibility of Alan Brice, assisted by Frank Kent and Gordon Young among others, whilst the Car's name was sign written by Meg Gooch. Door lock and sundry other brass work was undertaken by John Brice and Ron Nuttman. New tables were, as usual, mainly the work of John Millward. The 24 Volt electrics were 'sorted' by Clive Lowe and Boris Perkins – a far cry from their 750 Volt days on the 'big' railway!

The chair saga continued with the lions share of the joinery falling into the skilled hands of

Peter Kynvin poses on the newly restored postal trolley at Bodiam Station, 11th April 2001 (John Liddell)

Foreman Alan Brice. Carol Douglas completed the upholstery on one chair and then calculated it would take her until September to finish the job. Fortunately Carol knew of a firm in Canterbury who were able to take on the work, although she still cut the moquette (taken from C&W stock) herself.

There was a three week delay in returning the bogies from Sellindge, mainly due to the weather and water logged ground on the contractor's site. Once the bogies were safely underneath and the ride heights adjusted, Barbara was given a test run to Bodiam and back behind BTH diesel No 40 (both are 'old timers' from preservation pioneering days) on Monday 21 June and was formerly handed over to the Operating Department on Thursday 24. The latter occasion was marked by a special train, hauled by Terrier Knowle, to which contributing staff and contractors were invited. The deadline set by the Company had been met by two days.

Thanks must also be expressed to The Maidstone Area Group and the 300 Club for their assistance with the Barbara completion project at a time of financial stringency for the Company.

Woolwich Coach (K&ESR No 67)
Work has continued slowly with a pick up in momentum following the completion of Barbara. Adrian Landi of the Loco Department lent a hand during early June with riveting and welding work to the underframe.

Mark 1's
No 63 is in the carriage shed at the time of writing for attention to doors and locks. Some of the doors requiring rebuilt frames (leaving little more than the outer skins) and a supply of activating springs is being obtained for the locks. Pullman set BSO, K&ESR No 73 has had to be red carded following both door defects and serious flats to the wheels. The Pullman set has been running with the GER six-wheel brake – which is just as well, because with Barbara back in the set the BSO would be too long to go in the Pullman dock. No 73 will be attended to in the near future after which thought will have to be given to berthing arrangements for the Pullman!

Wagons
Open wagon K&ESR No 153 'Huxford' recently

became available as a limited edition 4mm scale model. Very nice, but the wagon modelled is the wrong type and the shade of red represents the paint as it might appear in perhaps five years time. The lettering is, however, authentic, being a photograph based reproduction of Meg Gooch's work on the original. Reports from the souvenir shop state their first customer for a 'Huxford' Wagon was none other than the sign writer herself.

Filming in Carriage and Wagon for the Meridian programme 'Southern Steam', April 2001
(John Liddell)

Operating

Although foot and mouth disease has affected our passenger numbers, Operating Department staff have still been kept busy running trains. As well as the direct impact on our finances we were further hit by an increase in the price of coal, which rose in price by £16 to £96 a ton. This increase was blamed on MAFF ordering vast quantities of coal for incinerating culled animals. However a coal merchant on holiday in Hastings heard about the increase and immediately offered us a new supply of coal at only £77 a ton, less than we were paying in the first place! In order to make further savings on the coal bill, and to relieve the workload on the larger locomotives, the train size has been reduced to two coaches on many mid-week days. This has enabled us to use Terrier 2678 on more occasions than originally planned. At least foot and mouth has given many of our passengers the unexpected opportunity to experience a trip behind a Terrier, every cloud has a silver lining! There has also been an increase in the number of charter and footplate experience courses run.

Congratulations to Ruth Groome who has recently passed her firing exam. With this latest promotion we are now able to roster an all-female crew of Driver, Fireman, Guard, and Signalman, is this another first for the K&ESR? Signalman Denys Fanner retired at the end of the 2000 season after being persuaded to stay on for another year after his intended retirement date. Thanks are due to Denys who has covered many midweek turns over the past seven years. We are hoping to welcome Fred Waller back to

Demonstration of weed killing equipment for Avondale Environmental Services at Tenterden Town Station, 26th June 2001. *(John Liddell)*

Signalmans duties in the very near future following a hip operation.

Guard, Steve Luxton has recently entered hospital and will be away from the railway for a couple of months. We all wish him well and a speedy recovery to guard's duties again.

Several new trainee signalmen are currently studying in Peter Lamont's Signalling Class, some of the later entrants to the department have attended the Basic Railway Safety courses run by Pete Salmon which has helped to make up some of the early lost ground. Thank you to James Palk and Peter Watson who have rebuilt a traditional instruction diagram, consisting of a metal board with a number of magnetic representations of locomotives, coaches and signals etc which can be used to demonstrate graphically operating procedures, incidents etc. As ever, the summer running season will test our ability to keep signalboxes staffed, but with the switching out procedures at Northiam due to become operational shortly the position should ease somewhat.

Training of Steam Drivers has continued with several senior Firemen undergoing a full day's practical instruction under the supervision of a Footplate Inspector. This ensures that Firemen intending to sit their driving exam have the opportunity to gain experience of driving under normal operating conditions and cover all aspects of the drivers duties, including preparation and examination of the locomotive.

Andy Smith has produced a driver training course for the Class 108 DMMU and training of more drivers for this unit is now underway. Andy has also made progress with producing new footplate standards and assessment procedures. Thanks to Andy for taking on these tasks, although this work is largely unseen, it is a vital part of operating the railway to the high standards we have come to expect.

Following a re-think of arrangements for the Wealden Pullman stores we have been able to retain the old meeting room for use as a classroom, at least for the time being. We are currently considering several options for

relocating to a larger building.

The new season of Mutual Improvement Classes is now underway. We have so far enjoyed talks from Chris McNaughton on combustion and Laurence Donaldson on lubrication. There are several more classes arranged throughout the year, including a talk by Clive Groome of Footplate Days and Ways fame. More details can be found on the Operating Department web site at www.kesr.fsnet.co.uk and notice boards around the railway. All staff are very welcome to attend.

The Operating Department web site was set up by a member of the paid staff, working in his own time as a volunteer with the aim of making technical and other information available to Operating Department staff. The site was upgraded in June 2000 when a counter was also added to the site. Since that date well over 10,000 hits have now been recorded, of which nearly 6,000 have been unique. The site is now also publicising the K&ESR all over the globe, hits have been recorded from Australia, Netherlands, Belgium, Canada, New Zealand, Germany, Switzerland, Spain, Japan, Czech Republic, Thailand, Venezuela, and Italy. We have also recruited several new volunteers who have discovered our need for new staff whilst 'surfing the web'.

We are always pleased to welcome new members to the department. If you would like to participate in the operational side of the railway please contact Simon Long or Pete Salmon on 01580 761097 or e-mail operating@kesr.fsnet.co.uk

If any one has any part used tins of paint left over from home decorating we would welcome them at Rolvenden. In particular we could use a quantity of white gloss for painting gates and fences etc. Any usable old paint brushes, scrapers and wire brushes would also be useful. As usual we also would welcome any old rags suitable for cleaning locomotives. Please leave with the running foreman at Rolvenden.

32650 'Sutton' receives cosmetic treatment at Tenterden Town Station, 17th April 2001 (John Liddell)

S&T Engineering

Since the completion of the remaining signals at Northiam last Autumn, work has slowed to a more normal pace as the backlog of deferred work has begun to be addressed. Maintenance of all our sites is now up to date rather than lagging behind, and non urgent tasks such as the repair and overhaul of signal lamps has now resumed to make good the wear and tear of the last few years. Pete Hubbard of the Loco dept. has spent many hours silver soldering lamps to return them to good order for further service.

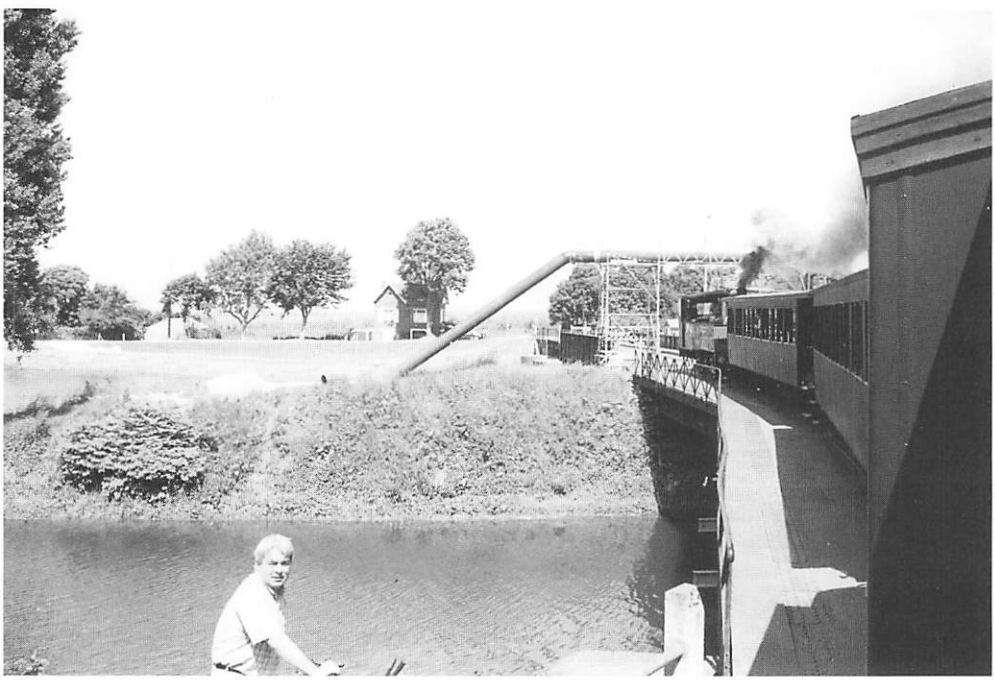
The mechanical locking has been serviced together with some alterations carried out at both Wittersham Road and Rolvenden, and renewals at Wittersham. We are now able to extend the maintenance periodicity at both these sites as the opportunities for maintenance during the former 'closed season' have reduced over recent years.

At Northiam the gate interlocking has now been brought into use, allowing the gates to be worked by either traincrew or station staff as and when their training enables them to do so. The new level crossing order has been drafted and is currently under final consultation with the various authorities involved. New approach signage to the level crossing has been provided by East Sussex County Council, and the gates now have additional reflective panels to make them more attention catching to the motorist – conventional hand worked gates are now the exception rather than the norm in Sussex, and the crossing is of course situated on a curve with limited sighting and fast approach speeds. Electric gate lighting is in the course of being installed which will also make the gates more visible at night. Also at Northiam the final wiring for the 'A' block system (that which allows trains to run through Northiam with the box 'switched out' and unmanned) has been installed and is now

No 65 simmers in the summer sunshine at Tenterden Town Station, 26th June 2001 *(John Liddell)*

under test on selected quiet days where there is no requirement to pass trains there. Only when a rigorous period of testing and approval by the HSE has been carried out will the system be brought into full use. The stormy weather during the winter wreaked havoc with some sections of the overhead line network and it became essential to remove some redundant sections of the network and carry out spot renewals of other sections; in particular one circuit between Wittersham Road and Northiam has had around half of the wiring replaced in order to keep it up to the required standards of reliability. Also renewal is under way of a further circuit on this section, so far work has encompassed renewal from Northiam to Rother Bridge, with the remainder to be tackled later this year.

Further modifications have been carried out to the internal telephone exchange at Rolvenden in preparation for the implementation of through dialing later this year. The electronic 'carrier' system (which allows multiple conversations over a single pair of wires) has now been transferred to the new circuit installed last year between Tenterden and Rolvenden. Balancing and alignment of this circuit continues to enable speech volume levels to be the best they have ever been, an important benefit when making longer distance calls on the system. Of necessity, this work usually has to be carried out during an evening when there is no traffic on the telephone network.



CFBS near St Valery Station showing the large bore pipe across the track for flood relief, 9th June 2001 (John Liddell)

Notices and Groups

New Members – come and hear about us!

New members will have the opportunity of joining a train and hearing a talk about the line, its history and the role of volunteers in running it. If you would like to join us, please contact the General office, leave your name and say which train you would like to join. Travel will be in the family saloon, which will enable everybody to hear and to ask questions of Graham Bridge, who will be organising the arrangements. The three dates are:- Saturday 18th August, Saturday 15th September and Saturday 6th October, the family saloon will be

Members of the K&ESR and CFBS outside Le Crotoy station, 9th June 2001 *(John Liddell)*

attached to the 10.30am departure from Tenterden Town Station.

CFBS News – Philip Pacey

The CFBS season got off to a disappointing start this year, owing to the bad weather which affected much of northern France and which caused serious flooding in the Somme valley between Abbeville and Amiens. Photographs of Abbeville streets under water even found their way into British newspapers (and probably onto television news?); services were disrupted on the SNCF main line and indeed Abbeville station was itself a victim of the flooding. Happily, just a few days ago (I'm writing this at the beginning of June) I was told that CFBS trains were full to capacity throughout the previous weekend. A national advertising campaign had been launched to promote tourism in the Baie de Somme and particularly to counter the negative effect of extensive media reporting of the flooding.

Apart from discouraging tourism, the flooding has had one dramatic although indirect impact on the railway. Because the river Somme is canalised from Abbeville to its meeting with the sea at St Valery, floodwater higher up the valley can only escape as fast as the canal and its overflow channel will permit. In late April, when the floods had still not abated after a month, the 'Direction Départementale de l'Equipement' (responsible for roads, rivers, bridges, etc) was ordered to increase the flow of the Somme into the sea, by whatever means possible. For a short period – a matter of days – there was considerable alarm within the CFBS, since it seemed that the railway would be cut by emergency works to enable water to be released from the canal into the bay at the only place where this was feasible – in the vicinity of St Valery Canal. Fortunately a spirit of goodwill prevailed, enabling maximum cooperation between all parties and keeping disruption of the railway to a minimum. A ditch was quickly excavated (in less than a day), passing beneath the track of the station throat, to accommodate pipes fed by high pressure pumps brought from Holland. These pumps can move 3 cubic metres of water per second, and I understand that they were initially installed on the site of the demolished chicory factory. However, later reports indicate that some were subsequently transferred to Abbeville, while those remaining at St Valery were relocated to the lock exit, where a pipeline was constructed over the road and railway.

Construction of a permanent overflow channel leading directly into the bay was also mooted; this was to have been at the 194 km post immediately

before the first set of points on the approach to St Valery Canal from Noyelles. (If you have a copy of my book Railways of the Baie de Somme to hand, you can find a picture of this location, with the depot in the distance, on page 26.) However, this scheme was subsequently dropped. Instead, plans to replace the existing exit from the lock (crossed by road and railway on the swing bridge) by a much wider arrangement are being speeded up; this will clearly be the occasion of a major and exciting engineering project, but will result in the loss of a well-loved landmark, and unless the entire work can be started and finished during a winter, CFBS operations will inevitably be interrupted. Meanwhile, I understand that the lock opposite the entrance to St Valery Canal (i.e. between the canal and the canal basin) was to be demolished in the middle of May.

It is good to know that the CFBS has offered to waive fares for people from the flooded areas who choose to visit the railway this season. CFBS members have also been invited to contribute to an appeal fund for victims of the flooding: in case any reader wishes to contribute, the address is l'Association 'Abbeville Solidarité inondations', Mairie d'Abbeville, 80100 Abbeville.

As I write this I am looking forward to my own annual visit as a *benevole*, in the second week of July. It will be interesting to inspect the work that has been done and to learn more of what is to come.

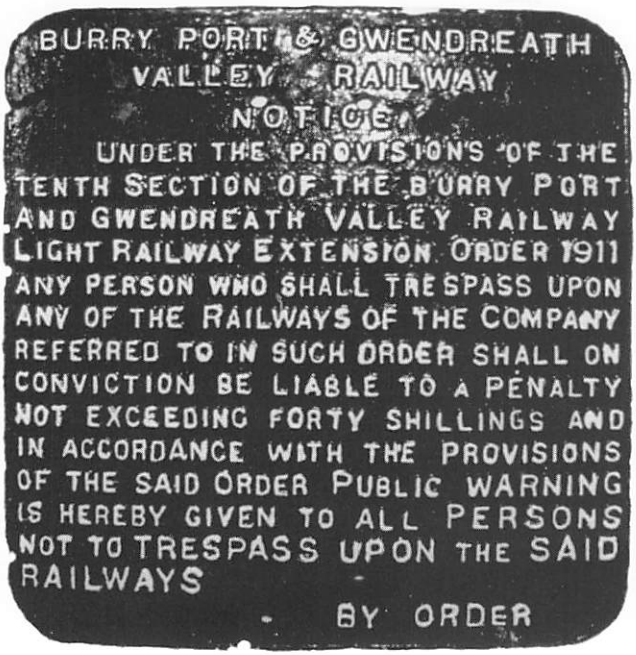
Ashford Area Group

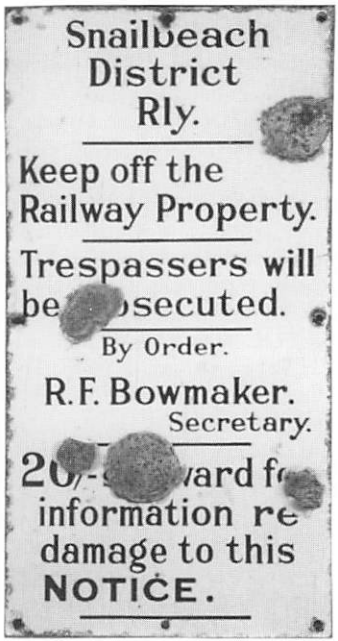
The group had a most successful visit to the 10¼" gauge Birchley Railway at Biddenden on Saturday 16th June by the kind invitation of Drummond and Jennifer Randall. About 50 visitors enjoyed train rides all afternoon behind four locomotives with a super tea provided by Jennifer. In spite of the Queen's Birthday celebrations being washed out on the same day, we had a lovely afternoon with some nice periods of sunshine for the many photographers. We now look forward to a return visit when the large extension is completed!

At the May meeting 50 or so people heard David Morgan, Chairman of the Heritage Railway Association, talk about the association and his involvement in railway preservation which has now become worldwide.

A warm welcome awaits you at the BR Social Club, 7.30pm on the third Wednesday in the month – details from Eric Graves, tel 01233 623687.

Ashford Area group visit to Birchley Railway at Biddenden, 16th June 2001 *(John Liddell)*





Museum

Last year the Museum was open on 167 days and took £5,526 in admission charges, but 17½% of this was paid in VAT. There were 5281 visitors, (5312 paying and 509 complimentary, mainly for TRC members), which was 656 down on the previous year. Numbers for this year, up to the end of June, are encouraging and standing up well against visitor numbers for the same period in 1999/2000.

Staffing is proving difficult this summer. Two previously regular attendants are now stalwarts of the main gift shop and a third has retired due to ill health. But we have been open for business on all the advertised days and even on some Mondays and Fridays.

The picnic area outside the Museum is looking better than ever and thanks are due to Doug Ramsden for the regular cutting of the grass.

Recent acquisitions include a black and white enamel 'warning not to trespass' sign from the Snailbeach District Railways. This measures 9 x 18 inches and only two others are known to exist.

A very rare cast-iron 'no tresspassing' sign from the Burry Port & Gwendraeth Valley Railway has also gone on display. It probably dates from Stephens' completion of the upgrading of the mineral railway for passengers in 1913. The wording is interesting, in that it unusually refers to the Light Railway Order, made in 1911, for the extension of the line. The last section of the railway was built on a new alignment in order to avoid a gradient of 1 in 32 on the original route. The sign has been broken, with a good repair made by welding, though the subsequent painting leaves much to be desired. It measures approximately 18 x 20 inches.

Both these signs may receive some further restorative treatment at a later date and both were purchased at auctions from the proceeds from second-hand book sales.

A light card K&ESR timetable poster for 26th September 1938, 'until further notice' has also been received. It measures about 11 x 18 inches and is in good clean condition with just a centre fold.

Bodiam

Less attention has been given to Bodiam during the Summer, owing to the demands of the Museum. The main jobs have been to keep the site tidy and the grass cut. The platform hedge is growing well and is due for trimming.

A flight of steps made from old sleepers has been constructed at the side of the toilet block to give easier access to the picnic area. A handrail will be put in later.

Letters to the Editor

Volunteers

Sir – The subject of volunteer staff involvement across the railway was a key theme of the volunteers meeting held on 10th February. At that meeting the directors attempted to address the concerns of the membership on this subject, without taking into account the views of the paid managers. The issue of volunteer involvement is one that concerns us. We constantly face the challenge of balancing the limited time that volunteers tell us they have available with their need for varied and challenging work. I feel it would be opportune to outline some of the work that has been or is carried out by the volunteers in the Locomotive department.

Projects

- Marcia locomotive overhaul
- SECR P class 753 rebuild
- Procurement and stripping of 'Southall' Austerity locomotive
- Manufacture of new tanks for No 3 'Bodiam'
- 36 ton crane maintenance

General work

- Clean down and repaint No 23 wheels and frames
- Ladder inspections and repairs
- Electrical PAT testing and repairs
- Refurbishment of parts for 'Bodiam'
- Installation of improved lighting to jobbing area and side aisles of loco shed.

Jobs list

We maintain a list of various items that need doing with something available to suit all skill levels. The jobs carried out by volunteers day to day include assistance with running maintenance, washouts, site tidying etc., as well as specific activities associated with overhauls. For example John Clarke recently manufactured special spherical joints for the main steam pipes on 376.

Many of the jobs will include a degree of involvement of the paid staff. There are special reasons for this, such as the need for technical advice, discussion of methods, specification and procurement of parts etc. One notable example is that of Brian West instructing our apprentices in the art of valve-setting on the 'P'class.

The railway has grown into a large undertaking with an intense operation. This means that repairs and overhauls must be progressed with all possible speed. This has become increasingly important as the line has been extended. It would be impossible to operate without a mix of volunteers and paid staff. No one is more important than the other. I feel we should work as a team to meet the overall aims of the K&ESR.

I hope you will not mind my expressing an opinion in the *Tenterden Terrier*, but as a management issue, this is one that we constantly try to address.

Rolvenden, Kent Lawrence Donaldson

Greenwich Ghost Line and 'P' class locomotives

Sir – The line I refer to is the old SE&CR Greenwich Park branch.

It was closed to passenger traffic during World War I, finally disappeared between the two World Wars and few people realize it ever existed.

Although it served London with commuter schedules, its main function was to operate shuttles between Greenwich and Crystal Palace, either via Nunhead to the high level, or connecting the South London loop to Crystal Palace low level, making connections between the two South London tourist attractions. I possess an old photograph of a P class sitting in the Greenwich Park station, operating a push pull service, with the locomotive in the centre of the train.

My main query is does any member or reader have any historical records of these

unique engines serving this long lost branch or even the beautifully restored locomotive in *Tenterden Terrier* No 84 on the inside cover.

Orpington, Kent J Horton

Historical Articles

Sir – To perhaps conclude this debate, I was originally struck by the opportunity that was missed in publishing the excellent two part article about 'Gazelle' in the *Tenterden Terrier*. This could have been published to a wider audience if it had been printed as a booklet, to reach a wider readership and raise funds, for the Museum, for example. I note that there is more news (and excellent illustrations) than historical articles in issue 84.

I still wonder why the photo of Cannon Whitchurch (in issue 82) merited whole page reproduction.

East Grinstead Alan Lawrence

It didn't – but we had spare space – Ed

30 years ago

Sir – With regard to Simon Marsh's article '30 Years Ago' I would like to make a few points of correction: Herne Bay lever frame is still extant in our stores, it survived a purge on disposal of surplus frames some 6 years ago as although it has deteriorated somewhat after 20 years outdoor storage, it is still potentially a renovatable entity, and was in fact considered for Northiam.

Robertsbridge 'A' box was dismantled and stored on the ground, where it deteriorated beyond repair. I am keen that we build a replica of this at some date in the future as we still have the original 7 lever Evans O'Donnel frame it contained in store. The other box Simon missed was the old Tenterden box which stood at the Headcorn end of the yard, and was a ground level corrugated iron and timber structure. Again I remember moving it to Wittersham Road in the 1980s from where it disappeared.

Tenterden Nick Wellington

H.F.Stephens at Cranbrook

Sir – Interesting biography of Stephens. I note your reference to the Light Railway Syndicate and the failure of most of the schemes promoted thereby, but cannot help feeling that Stephens was still 'learning his trade' in the mid 1890s, when he was involved with this body. For instance, the Gower Light Railway was first promoted as a narrow gauge line, in which form it might just have stood a chance of being built. (The main financier in this case appears to have been H.N.Miers of Ynispenllwch.) However, Stephens allowed himself to be persuaded by George Gordon, owner of the Penlan and Killan collieries, that the proposed line would tap vast reserves of coal (which it would not, being aligned along the ridge of Millstone Grit rather than the coal measures, which were, in any case, of somewhat doubtful viability in North Gower, being very severely faulted), and subsequently resurveyed the line as a standard gauge one, in which form it eventually received its L.R.O. (only the second, I believe, to be granted by the Commissioners under the terms of the 1896 Act). I think this is a case where, perhaps, lack of local knowledge overrode his engineering instincts.

By email Nigel Wassell

The Light Railway Syndicate was quite a small organisation. Of the £1221 issued share capital, 150 shares were held by Peterson and 50 by Stephens, neither of whom were directors. The largest idividual shareholder was The New General Traction Company with 526 shares. This company, which had a Stock exchange listing for its shares, was formed in 1895 for the purpose of installing traction systems for light railways and tramways. Its Managing Director, Mr E.A.Hopkins, was also one of the three directors of the Syndicate. Both companies achieved very little in the way of their objectives. – Ed

Northiam Signalbox

Sir – You published a letter from me in the *Tenterden Terrier* No 83, in which I commented on the siting of the new Signalbox at Northiam. Underneath my letter the S&T department described the working of the ground frame by the level crossing, but they failed to answer my comments on the siting of the Signalbox.

I have reason to believe that there are other members besides myself who would welcome the reasons which led to the Signalbox being built at the opposite end of the platforms to the level crossing with the resulting inconvenience to the station staff who have to lock up the booking office every time the crossing gates have to be opened and closed. We all look forward to the S&T's reply.

Sheffield Park B.Howe

When the plans to erect Wadhurst box were made back in the early 1990s, although it had originally been intended to locate the signalbox by the road crossing, it was decided at that time that it was more usefully located at the Bodiam end of the site, the reasons for this being twofold; 1.) The majority of the pointwork to be controlled would be at the Bodiam end of the site; 2.) The longest block section on the railway is, and is likely to remain that of Northiam - Northiam via Bodiam, plus the time to run round, attach the loco and prepare for departure. Locating the box at the Bodiam end of the site means that the train staff is always delivered to the train 'as it passes the box' which is the most efficient in terms of time. Northiam station is normally staffed by three staff, one in the buffet, one selling tickets, and one on the platform. In practice the platform staff and ticket clerk normally share the duties between them. This arrangement is quite conventional with examples still in use at Wye (Kent) and until about 15 years ago at Rye.

The Health & Safety Executive (who regulate us) require us to manage our activities in a safe way. Installation of non interlocked gates would have found little or no favour with them and certainly was unacceptable in the case of the passenger crossing outside the box.

The system is now working well and Guards will also be trained on the operation during the winter of this year for when the box is switched out of circuit but trains still run.

As Duncan Buchanan explained in Tenterden Terrier *No 83, the Signalman does not worry whether the gates are open or not, he 'pulls off' and when the gates are open the Crossing Keeper then also operates the ground frame. Only when both Signalman and Crossing keeper have reversed their levers do the signals clear.*

Nick Wellington

Barbara

The restoration of Barbara was completed in our own workshops earlier this year. The return to service of this magnificent vehicle on 24th June was preceded by a C&W press train on 24th May 2001.

Members of the Carriage and Wagon team are shown on the platform.

(John Liddell)


BARBARA

How are the Railway's Finances?

Company Accountant, Philip Shaw, spells out the issues that we are facing at present

The Kent & East Sussex Railway suffered badly during the early months of this year from the unprecedented bad weather, which resulted in the worst floods in the region for a century. This was exacerbated by the Foot & Mouth crisis and tourists simply stayed away from the countryside. Other attractions in Kent were similarly affected and the recovery has been slow and difficult. At one stage our income was around one half of what we had anticipated.

Up to the end of May, passenger numbers in 2001 were 23% down on last year, but the month of May itself was only 7% lower, and the recovery has been progressive. However, this is not the whole story. Our cost base had been rising substantially throughout 1999 and by the end of 2000 had reached a level, which is totally unsustainable for the volume of business that we are likely to achieve. The audited accounts for last year to be presented to the members at the October AGM will show that we achieved a modest profit of around £75,000 – rather lower than we had originally anticipated, on a turnover of some £1.25m. This was a year in which passengers were literally standing in the aisles on some peak days, but it masked an underlying weakness in our administration, which with hindsight, should have been addressed somewhat earlier.

Several years ago the Railway adopted a policy of widespread daily running. In 2000 we operated on 235 days and ran 1233 trains, excluding Pullmans and charters, even then, some 43% of the traffic was conveyed in the months of July to September, including a 'Thomas' in September, but many of our trains – then and now – have been running largely empty. The sight of a Terrier and two coaches simmering in the sunshine at Tenterden with scarcely anyone in sight or sound, apart from the staff was commonplace; beautifully authentic as a light railway in a time warp of

The newly revitalised gift shop is now stocking a wide range of merchandise to meet the requirements of all our customers. *(John Liddell)*

Our new Chef, Andrew Nash, poses in the kitchen of Kitchen Car No. 69, 12th May 2001 (John Liddell)

the 1950s, but uneconomic to the point of absurdity. We did not monitor daily income data closely, had we done so it would have drawn attention to the inadequacies in our strategy.

Although the Railway has been established for over a quarter of a century, it has never been a high volume carrier and anyway its sites are somewhat limited for space. In fact, passenger numbers had shown no real growth for more than a decade. In an attempt to address the situation, expenditure on advertising was raised by no less than 140% between 1995 and 1999, but this provided little obvious benefit and passenger numbers continued to track downwards. The push to Bodiam in 2000 gave an initial and welcome boost to traffic and a logical destination, but the financial benefit was dragged down by an overblown overhead structure and massive debts, which had and still have to be serviced and ultimately repaid. The level of volunteer assistance has also been below what we would have liked, although our members have been generous in their financial support.

The railway has tended to rely more and more on paid staff and the wages bill, which was £152,384 in 1997 had risen to a massive £360,463 in 1999 and a similar level in 2000.

We spend some £100,000 per annum on coal and oil and another substantial item is finance costs – nearly £100,000, which to a large extent are a reflection of our massive debts. Quite simply, we are living beyond our means.

So what is being done to restore the Kent & East Sussex to viability and ensure its existence? Well, quite a lot. Firstly, the timetable will be radically reviewed and running days reduced for 2002. It is virtually impossible to introduce changes before then, without the risk of offending passengers who have the existing published timetable, which has been widely distributed. Furthermore, we are now approaching the peak of our trading season. However, as part of the overall review, fares may have to be increased next year. Our advertising expenditure, already substantially reduced, is being targeted at key areas, where we perceive that there will be a measurable benefit, particularly when we organise special events. We are getting good free publicity through filming activities and editorial coverage.

We are going all out for group business, in many cases with a catering offering. A trip on the train to Bodiam Castle with tea and scones serves is an attractive package, which appeals to coach parties. Our customer base also seems to be changing, with older people predominating over the traditional – turn up and go – family passenger. Special events such as 'Thomas', 'Santa Specials' and the 'Steam & Country Fair' are highly profitable and will be pushed aggressively. Our greatest growth area is probably in the area of special catering trains- the Wealden Pullman, Sunday Lunch and Special Charter trains, where our new chef, Andrew Nash, is already achieving a reputation for superb cuisine, boosted by editorial publicity in local newspapers and journals. Our gift shop was re-vamped at the beginning of the year and under Brian Janes's watchful eye, is achieving higher turnover from a wider and more imaginative range of merchandise,

However, difficult decisions that have been made still have to be implemented. It is likely that the Company will achieve an overall loss on its operations during 2001, even if there is a substantial increase in business during the latter part of the year. We must return to profit in 2002 and this Autumn we must show our bankers that we are capable of both servicing and reducing our debts in the short term. This can only be done by reducing our overheads. We are carefully managing our trade creditors, with each item requiring authority of the finance department before items can be ordered. Tim Leigh will be leaving us at the end of July and, in the short term, the department will be administered by me with Karen Bridge, under the overall authority of Paul Wilson, our Finance Director. Paul has direct responsibility for setting the public timetable and the financial budgets, dealing with the Bank and he is also monitoring income levels on a daily basis. I produce monthly accounts for the Board from data supplied by our book keeper, Karen Bridge, monitor day to day expenditure with departmental managers and keep an eye on the office.

Of the thirty five years in which I have been associated with the Kent & East Sussex Railway the last two have been particularly challenging. Nevertheless, if all the necessary measures for re-vitalising the business come into place, I shall look forward to the future with optimism.

THE K&ESR 300 CLUB
PRIZE WINNERS

HAVE YOU JOINED THE 300 CLUB YET?

February 2001 Rolvenden

1st	Mr P Haskell	(018)	£60.00
2nd	Wilf Watters	(600)	£40.00
3rd	Ian Legg	(140	£30.00
4th	I R Foord	(252)	£25.00
5th	Dave Williams	(280)	£20.00
6th	Clive Harris	(508)	£15.00
7th	John Debling	(104)	£10.00
8th	Alan Dawes	(010)	£5.00

April 2001 Wealden Pullman

1st	Alan Dean	(343)	£60.00
2nd	D A Brooker	(553)	£40.00
3rd	Richard Halton	(468)	£30.00
4th	M V Heywood	(304)	£25.00
5th	Eleanor Chandler	(278)	£20.00
6th	Brad Bradley	(068)	£15.00
7th	Mrs Nutman	(369)	£10.00
8th	J Chesswright	(467)	£5.00

March 2001 Wealden Pullman

1st	B Goldie	(557)	£80.00
2nd	F H Wade	(576)	£70.00
3rd	David Barrows	(445)	£60.00
4th	R Lukehurst	(100)	£40.00
5th	Wilf Watters	(604)	£30.00
6th	Peter Smith	(366)	£20.00
7th	Wilf Watters	(600)	£15.00
8th	P I Barckley	(500)	£10.00
9th	Mr Lucien Perring	(558)	£5.00

To join, phone Brian Heyes on 01622 744509 or Chris Garman on 01424 441643 for an application form.

Registered with Ashford Borough Council, under Section 5, Schedule 1 of the Lotteries & Amusements Act, 1976

At Last – a Real J94 on the K&ESR

Richard Moffat announces the recently formed 68078 group.

Many readers will be aware that earlier this year the Tenterden Railway Company completed negotiations for the purchase of a rare example of the LNER/BR variant of the ubiquitous ex-WD 'Austerity' class of locomotive. Negotiations for the purchase from the Great Western Society based at Southall, had begun in the run up to the opening of the extension to Bodiam. Anticipated passenger figures once we began running to Bodiam indicated the need for an increase in the number of class 5 locomotives. 68078 was seen as an obvious candidate and it was planned that restoration would be completed to make the loco available by 2010.

As so often happens, "the best laid plans...". As part of the ongoing actions to rescue the company's finances the Board decided to offer some assets (rolling stock) for sale with a condition that after purchase, the items were kept on the K&ESR. J94 68078 was among the items offered for sale.

A meeting was held on 14th June 2001 of interested parties and the 68078 Group was born. The Group is happy to be able to confirm that monies pledged at the meeting were sufficient to purchase the locomotive. Accordingly, a formal offer has been made to the Board and it is hoped that negotiations will be concluded at an early date.

The 'Austerity' locomotive as a K&ESR class has and to a degree still does, come in for

Austerity 68078 at the Widdrington Screening and Washing plant, 25th January 1986 *(N.Stead)*

some derision. Groans of "not another Austerity" were quick to appear when the Company's purchase of 68078 first became public. A reaction that takes no account of the fact that the class has been an integral part of our loco fleet and as synonymous with the latter-day K&ESR as the 'Terriers' were in earlier days. What is often overlooked is that they represent one of the more successful designs in the latter days of steam traction and in the period 1943-1964 no less than 484 machines of the type were built by 7 companies.

The design arose out of the War Departments need for an inexpensive, simple and robust shunting tank locomotive to meet the needs of the war effort. They needed to be rugged, with a requirement to move 500-800 ton trains and be able to survive with minimum maintenance. The basis of the design was the standard 18" Hunslet 0-6-0 saddle tank, with some modifications. The original production of 377 locos was specifically for the WD and although the first locos went into use at various WD establishments around the country, many of the later produced engines went into store ready for shipment to Europe after the invasion in 1944, where they saw service in Belgium, France and Holland. After the war, many were sold to private concerns and found extensive use in collieries and docks where their power and short wheelbase made them ideal machines.

In common with the other three mainline Railway Companies in Britain during the war years, the LNER suffered badly because of a lack of men and materials. Many of their shunting and tripping locos, inherited from the pre-grouping era, were in need of replacement. Having been responsible for the servicing of a number of WD 0-6-0 saddle tanks on behalf of the Ministry of Supply, it was decided to purchase 75 of the surplus locos from the WD instead of building new locos to the Company's own design. Of the 75 'surplus' locos purchased in May 1946, six (including 8078) were still under construction. They entered traffic with the LNER as class J94 and were allocated to mainly tripping duties. All were taken into BR ownership on nationalisation when they were re-numbered 68006 - 68080 and survived until the end of steam on BR. At this time most were scrapped but six, including 68078 were in such good condition that they were sold for use elsewhere.

During their LNER/BR days the class had a number of modifitications to make them more sutiable for main line usage. These modifications included new lamp irons, extra handrails and footsteps, cab side doors and in some cases, a modified bunker. 68078 had all these modifications and it is intended that restoration will perpetuate them. 68078 was sold in 1963 and then worked at Widdrington screening and washing plant near Morpeth, Northumberland. It underwent a fairly extensive overhaul during 1967 and continued in service until late 1978 when it became due for a 10 yearly boiler exam. It was put into store until the decision was taken to sell it in 1984 when it was purchased by the G.W.R. Preservation group.

With the formation of the 68078 Group, assuming that Tenterden Railway Company accept our offer, it is intended to restore the locomotive for use on the K&ESR. The previous owners have looked after the locomotive well and as far as can be seen before completely stripping the locomotive, it is in good shape. It is presently located at Sellindge and the intention is for the remaining stripping out to be done there, including removal of the asbestos boiler lagging by a specialist contractor.

It was mentioned earlier that the Group has raised the funds necessary to purchase but we will need further cash to complete restoration. We also require more able-bodied people to help carry out the work.

If you would like to be part of this exciting project – you do not need to be a Rockefeller to contribute! – please contact Lawrence Donaldson on 01580-241448, Barry Holmes 01233 627393 or Richard Moffat 01303 840205.

A Sheppey Centenary

Thursday 1st August 1901 saw the opening of the Sheppey Light Railway, from a junction with the main line at Queenborough across the island to Leysdown. The origins and early days of the Sheppey Light were described in an article in the *Tenterden Terrier* for Summer 1987, and more details will be found in Brian Hart's book on the line, published by Wild Swan in 1992.

Few traces are left of the railway, which closed to all traffic on 2nd December 1950, but for nearly fifty years it served the island in peace and war. It was promoted by the Light Railway Syndicate (mentioned in the *Tenterden Terrier* for Spring 2001) and was in fact the only project of the Syndicate to be built. Holman F Stephens was the engineer of the Sheppey Light and Edward W I Peterson its solicitor. The contractors were William Rigby & Co.; Rigby also built the Headcorn extension of the K&ESR and served as chairman of the Shropshire & Montgomeryshire Light Railway.

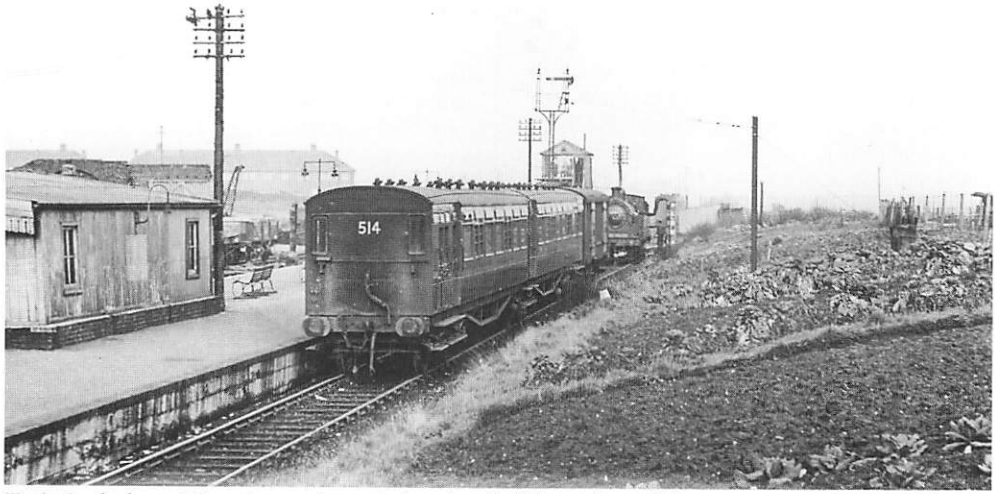
The Sheppey Light was always worked by the South Eastern & Chatham Railway, who obtained powers to purchase it outright in their Act of 1905, and so its rolling stock and operation were less idiosyncratic than those of the railways managed by Stephens. None the less, such buildings as graced its stations were typical corrugated iron huts, many of its level crossings were ungated, and the light railway kept something of a separate identity to the end.

Rigby's men began work in January 1900, the start of construction being marked by a supper at the 'Halfway House' inn. Hopes that the line would be open before the start of the new century proved unfounded, even though there was very little in the way of earthworks or bridges. It was not until June 1901 that Stephens was able to invite the Board of Trade to inspect the new railway. Major Pringle visited on 24th June and reported on a number of minor points requiring attention. As is the nature of such things, these matters took longer to put right than Stephens had hoped, but the work

Crowds at the opening of the Sheppey Light Railway, Leysdown Station, 1st August 1901
(Colonel Stephens Historical Archive)

was finally complete and the opening set for Thursday 1st August 1901.

The inaugural train, of six carriages, left Queenborough at 9.05 am and carried many well-known Sheppey personalities, as well as the Assistant Superintendent and the Faversham District Superintendent of the SE&CR. More people joined the train at each of the intermediate stations – originally Sheerness East, Minster and Eastchurch – and a further contingent were present to greet the train on its arrival at the Leysdown terminus. Here some of the passengers adjourned to the 'Rose and Crown' inn to celebrate the occasion. A second train conveyed some more senior officials of the SE&CR, who on their return were amongst those present at a luncheon held at the 'Royal Hotel', Sheerness.



Train in the bay at Queenborough, on the last day, 2nd December 1950
(Colonel Stephens Historical Archive)

Guard closing the gates behind the train at Harty Road Halt, 2nd December 1950
(Colonel Stephens Historical Archive)

11.36am departure awaits at Leysdown Station, 2nd December 1950
(Colonel Stephens Historical Archive)

The next day was the start of the regular service of four trains a day, generally taking thirty-five minutes for the eight and a half mile journey. Among the passengers were the children from the Union Workhouse, who made an excursion from Minster to Leysdown, where they were treated to lemonade and cakes at the expense of Mrs Ingleton (the wife of a local JP) and her sister.

The weekend immediately following the opening was the August Bank Holiday, and many people took the opportunity to visit the new railway. No less than 1,770 tickets were issued on the Monday alone. In those days there were no amusements for visitors at Leysdown and its resident population was no more than 200, but a number of local people took the opportunity to provide teas and other refreshment, so it would seem that a good time was had by all.

The directors of the SE&CR had been unable to attend on the 1st August, but made an official visit on Friday 9th August (Brian Hart quotes an alternative date of 16th August for this event). A special train, including a saloon for the directors, left Victoria at 10.55 am and was due to arrive at Queenborough at 12.08. Calling at Sheerness East to pick up local guests, it went on to Leysdown, where the party alighted to examine the station and have their photograph taken on the platform. The exclusively male party were dressed most correctly, and none was bareheaded or in shirtsleeves. As a concession to the season and the seaside, many wore straw boater hats, although bowlers and top hats were also in evidence.

The special train then took the party back to Sheerness East. Here, a number of traps waited to convey them to the Co-operative Hall in Sheerness, for a celebratory luncheon given by Mr John Copland, clerk to the Sheppey Board of Guardians and someone who had done more than most to make the light railway a reality. The 160 guests were no doubt ready for their luncheon, as it was not due to commence until 2.15 pm. They included Henry Cosmo Bonsor, chairman of the SE&CR, Vincent Hill, the general manager and Charles Sheath, the secretary, Colonel Boughey representing the Light Railway Commissioners, Holman F Stephens, Edward Peterson and William Rigby. A banner reading 'SUCCESS TO THE SHEPPEY LIGHT RAILWAY' was hung across the hall, and the usual congratulatory speeches followed the loyal toast. Once these were over, the London contingent returned to their train while the local guests dispersed, all no doubt with high hopes for the desired success of the new railway, which were destined to be only partially fulfilled over the coming decades.

Tom Burnham

Book Reviews

Locomotives of quality: a pictorial history of Manning Wardle & Co. by John E. Simpson, published by Ross-Evans, price £8.95, soft covers, 143 pages, 149 illustrations, ISBN 1-874498-02-4

As one of the select band of railway enthusiasts who extended their interest to minor railways and industrial locomotives in the 1930s, Dr Simpson has been watching and photographing Manning Wardles at work for many years. In this book he outlines the history of Manning Wardle & Co. and its products from its foundation at the Boyne Engine Works, Leeds, in 1858 to its closure in 1926, 2004 locomotives later. The evolution of the familiar four- and six-coupled saddle tanks is explained, with tables of typical dimensions for the so-called 'standard' classes. Narrow-gauge Manning Wardles and those built for export are not forgotten either. The narrow-gauge engines, particularly, were much more varied in design than most of their standard-gauge counterparts.

Several Colonel Stephens railways used Manning Wardles, especially the Selsey Tramway and the Weston Clevedon & Portishead. 'Hesperus', the only example on the K&ESR, did not look like a Manning Wardle as it had been drastically rebuilt by the Great Western Railway at Swindon before it arrived at Rolvenden. Finally, thirty-five Manning Wardles which have been preserved around the world are listed. Many are illustrated, including 'Charwelton' and 'Arthur', formerly on the K&ESR and now being restored by the Middleton Railway.

This book does not claim to be an exhaustive catalogue of Manning Wardle locomotives. However it is readable and well illustrated, and can be recommended to *Tenterden Terrier* readers, not least for its coverage of engines used by public railways.

TGB

Return to Blaenau 1970-82 by Vic Mitchell and Alan Garraway, published by Middleton Press, 95 pages of illustrated captions, hard laminated covers, price £13.99. ISBN 1-901706-64-8.

This latest offering from Middleton Press is listed as number 10 in the series of Great Railway Eras and illustrates some of the aspects of the final stages of the Festiniog revival through the camera of Alan Garraway, who was General Manager throughout the period covered by the publication. Given that Alan Garraway was the man 'on the spot' many of the subjects caught on film are rare and provide a unique insight into the final rebuilding programme of the Festiniog railway. The quality of the photographs is variable and reproduction of this book generally is not amongst the highest of Middleton's prolific range of publications. The subject matter is dealt with chronologically and the text is very comprehensive, necessitating the use of a comparatively small typeface throughout.

PDS

Light Railways Explored: A Photographic Diary 1931-38 by John E. Simpson, published by Ross-Evans, 2001, soft covers, 106 pages, 88 photographs, price £10. ISBN 1-874498-03-2.

When John Simpson went up to Cambridge, he had already decided to visit and photograph all the small, independent railways in England and Wales, and this fascinating book describes his experiences with twenty four of the twenty six on his list – the North Sunderland was simply too far away and the Southwold had closed before he was able to get there, though he was later able to pilot a Gipsy Moth biplane over the engine shed while he was learning to fly.

Visiting the railways during the holidays by train, cycle and foot required careful planning. This did not rule out the unexpected, as when the author and a friend walked over the hills from the Corris Railway to Abergynolwyn where they stayed overnight. Arriving at the Talyllyn Railway station the next morning, they found that no trains were running that day. You will have to read the book to discover how they eventually arrived at Towyn.

Readers of the *Tenterden Terrier* will be most interested in John Simpson's visits to the Colonel Stephens railways. The K&ESR, he writes, "was one of the first light railways I visited, and the whole day in April 1932 was one of my most delightful experiences". A trip in a Shefflex railmotor on his last visit to the West Sussex Railway, however, "was

not a pleasant ride, in fact the noisiest and most uncomfortable rail journey I can remember. The best parts were when we had to stop in silence and drive sheep off the line!"

The book is well illustrated with photographs taken on the visits, including one of the author proudly standing on the boiler of 'Thisbe' at Kinnerley shed. It captures the spirit of travel on minor railways in the 1930s and breathes life into the dry bones of railway history. Recommended as a thoroughly good read.

TGB

British Railway Signalling in colour by Robert Hendry, published by Midland Publishing (Ian Allan) price £14.99. 80 pages of text, illustrated by 200 colour photographs, in A4 format, soft covers. ISBN 1-85780-114-8.

Released as a volume for the modeller and historian, this delightful book traces the history of signalling from the earliest days in the format of extended captions to the photographs, all of which are in colour and have been taken by the Author and his late father over half a century up to the present day. As lines closed and power box working opened, this unique recall of British Railway Signalling was completed by visiting box after box before it was too late. Subsequent reference is easy, through a comprehensive index and there is a glossary of technical terms.

This is a comprehensive and authoritive book, which will appeal to both the signal devotee and the less knowledgeable reader, as much effort has been made to explain the more complex aspects of signalling in layman's terms. The author is also an experienced railway modeller and his signalling knowledge has been put to use in operating his father's extensive 0 gauge model layout, which possesses correct semaphore signals and block instruments.

PDS

The Ramsgate Tunnel Railway

Ramsgate Tunnel Railway 1963. The yellow set at Hereson Road Station *(John H Meredith)*

Background

Ramsgate, a thriving port and seaside town situated in East Kent on the eastern edge of the Thanet peninsula, was placed firmly on the railway map in 1846 by the South Eastern Railway from London via Redhill and Tonbridge, with a station three quarters of a mile inland. Eight years later, the Kent Coast Railway reached the area from the north Kent coast via Margate and a far more convenient terminal station was opened adjacent to the harbour. However, the site was in a very cramped location approached on a 1 in 75 falling gradient through Dumpton tunnel, ¾ mile in length. The difficulties this arrangement was to produce for both down and up working can be imagined. Worked from the outset by the SERs arch-rival, the London Chatham and Dover Railway, the latter absorbed the KCR in 1871.

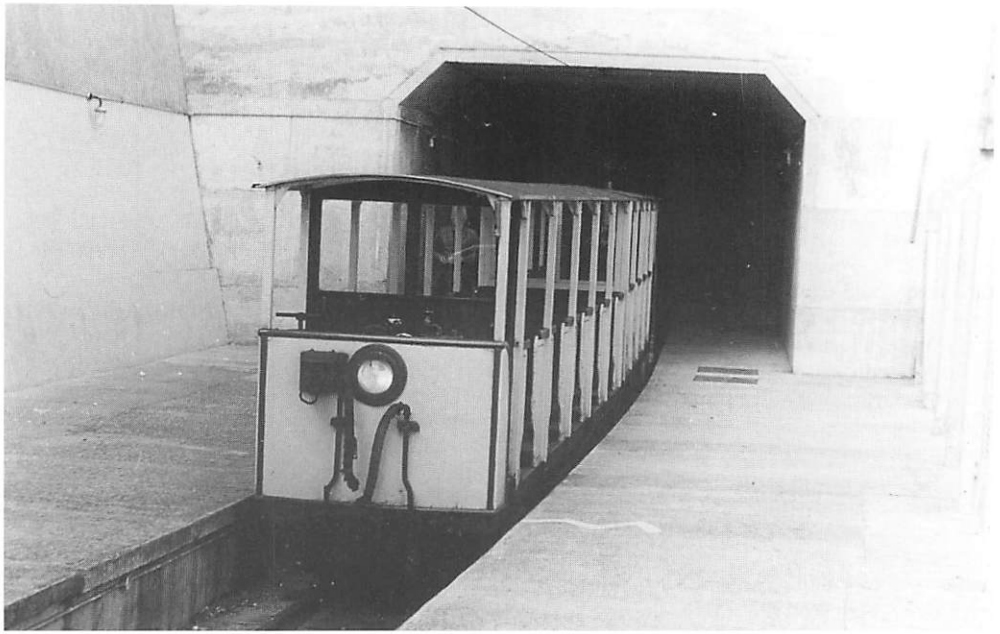
In July 1901, Thanet Electric Tramways opened a 3′ 6″ gauge route from Westbrook district, West of Margate, to the town terminating at the former SER (by then South Eastern and Chatham Railway) Ramsgate Town Station. This was to operate successfully for 36 years until closure on 24th March 1937.

On 2nd July 1926, the newly formed Southern Railway rationalised the lines in the Thanet area by, inter alia, linking the former LCDR line from a point immediately north of Dumpton tunnel with that of the former SER close to the original Ramsgate Town station. A new Ramsgate station was built (this time one mile inland from the seafront!) and a new intermediate island platformed station was opened at Dumpton Park. The former LCDR line to the harbour was closed. Until the routes to Thanet were electrified in 1959 and 1962 by the Southern Region of British Railways, there was little of note on the main lines but Dumpton tunnel was to be instrumental in the emergence of a little known, but nonetheless fascinating, miniature railway.

The Scheme

Following closure, Ramsgate Harbour LCDR station was acquired by Thanet Amusements Limited. But what was to be done with the disused railway tunnel, a gaping black hole at the far end of the site? Eventually, the decision was made by the company to build a 2′ 0″ gauge railway to run partly through the old tunnel and terminate at Hereson Road, Dumpton, adjacent to Muir Road. Not only would this provide an entertaining journey for holiday makers but also bring punters from the outskirts of Ramsgate right into the heart of the amusement park! The Ramsgate Tunnel Railway was about to be born.

The red set at Hereson Road Station, 5th July 1953 *(John H Meredith)*



The Yellow set at Sands Station, 12th June 1963, note the concrete repair of the tunnel mouth (John H Meredith)

The new railway would be built using 30lbs per yard flat-bottomed rail on wooden sleepers (in time to be relaid with 50lb rail) and electrically operated by overhead trolley line. Commencing at Ramsgate Sands station adjacent to the tunnel's lower entrance, the single line would ascend the 1 in 75 gradient through the old tunnel for just over half a mile at which point it would bear left to enter a new, much smaller, bore on a stiff gradient of 1 in 15. Hereson Road station, the upper terminus, was to be constructed behind houses in Muir Road in a spacious cutting excavated for the purpose. Both stations were to be double track with three platforms. This arrangement was to prove useful at busy times as the alighting crowd would keep clear of passengers boarding from the island platform by using the outer platform.

Building was commenced in May 1936 by a London company, Holborn Construction. It was stipulated that the line should be ready for operation for August Bank Holiday. The line duly opened on time with track, rolling stock, sub-station and testing completed within the three month deadline.

The construction of rolling stock was sub-contracted to English Electric at their Preston works. Two Train-sets were supplied, each of 4 coaches with a power unit (standard mining equipment of the time, known as a bogie articulated with the adjacent coach at each end. Painted yellow and red, the stock was classified and known by the livery. From the outset, a driving cab was incorporated in one end of two centre coaches of the yellow set; thus at quieter times, the train could be run as two separate 2-car units. In due course, the red train was modified to enable it to work in the same way. A roof was provided but sides were open.

Power was supplied by The Isle of Thanet Electricity Company at 400 volts AC which was converted by a motor generator, later mercury arc rectifier, to 400 volt DC for use by the 30hp traction motors, two per 4-car train. Each full length train was nearly 100 feet long and could accommodate approximately 100 seated passengers three abreast.

How the train sets were maintained appears not to have been recorded; probably heavy maintenance was undertaken by the builders at their Preston works.

The railway was duly opened from the Hereson Road end on August Bank Holiday 1936 in the

presence of the Mayor and Mayoress, the opening speech being made by Mr E.C.Cox, Traffic Manager of the Southern Railway. The venture was an immediate success as, indeed, was to be expected with over one million persons visiting the resort annually, mostly by Southern Railway.

Operation

Operation was single line throughout with a loop at the half way point where trains in opposite direction would pass. The right-a-way was given by bell worked by a hand-generator as soon as one train was ready to depart, both up and down trains leaving their respective stations simultaneously, generally no fixed timetable being adhered to. Colour light signals with trip-cocks were provided (following London Underground practice), track-circuiting, Westinghouse brakes and each train was fitted with a dead-man's-handle (today better known as a driver's safety device). In case of emergency, either station could be contacted by a portable telephone, carried on the trains. Average speed was 10mph and journey time 4½ minutes. Ticketing was by paper ticket, torn from a roll, purchased from an adjacent kiosk.

The railway was open during the summer season and was worked in complete safety until 1939 when it closed for the duration of WW2. Like so many tunnels during those difficult years, conversion was undertaken to form an air-raid shelter, the railway re-opening at Whitsun 1946.

Although by no means a 'toy', the Ramsgate Tunnel railway was, primarily, intended as entertainment. Running in tunnel throughout, 'something to see' was provided by views on the (cleaned!) tunnel walls depicting scenes 'from around the world', thus, in ones imagination, one could leave Hereson station and arrive at the edge of the English channel via romantic areas such as the Pyramids, California, India and Japan. Unofficially dubbed 'The World Scenic Railway', the company was quick to incorporate the title at the entrance to the lower station:For the re-opening, illuminated tableaux was added with automatic switching as the trains passed.

In February 1957, fortunately it was the off-season, the lower end of the original tunnel collapsed. This was duly repaired by the construction of an ugly concrete wall with a small aperture for the single line to pass through but the railway did not operate until the following year.

A far more serious incident occurred on 1st July 1965 when the yellow train failed to stop at the foot of the 1 in 75 gradient and crashed through the stop blocks and into a building at Sands station. The power unit's cab was wrecked, the two carriages damaged and the driver severely injured. Although the railway continued running until September, sadly it failed to re-open for the 1966 season and was permanently closed, the equipment being sold off soon after. Thus, after 31 years, 23 of which this unique railway operated with great success, came the end of an era.

Today, the site of Hereson Road terminus can easily be identified, occupied by a Costcutter petrol station, while both the upper and lower ends of Dumpton tunnel can be seen, the former from the train between Broadstairs and Dumpton Park, the latter by the keen-eyed from the eastern breakwater of Ramsgate Harbour.

Norman Johnson

In the preparation of this article, my grateful thanks are due to two local historians from Ramsgate, John T. Williams and Terry Wheeler. Reference was also made to the Tramways of Kent Volume 2, Middleton Press publications Thanet's Tramways by Robert J. Hartley and Kent Narrow Gauge by Vic Mitchell and Keith Smith, and History of the Southern Railway by C.F. Dendy Marshall

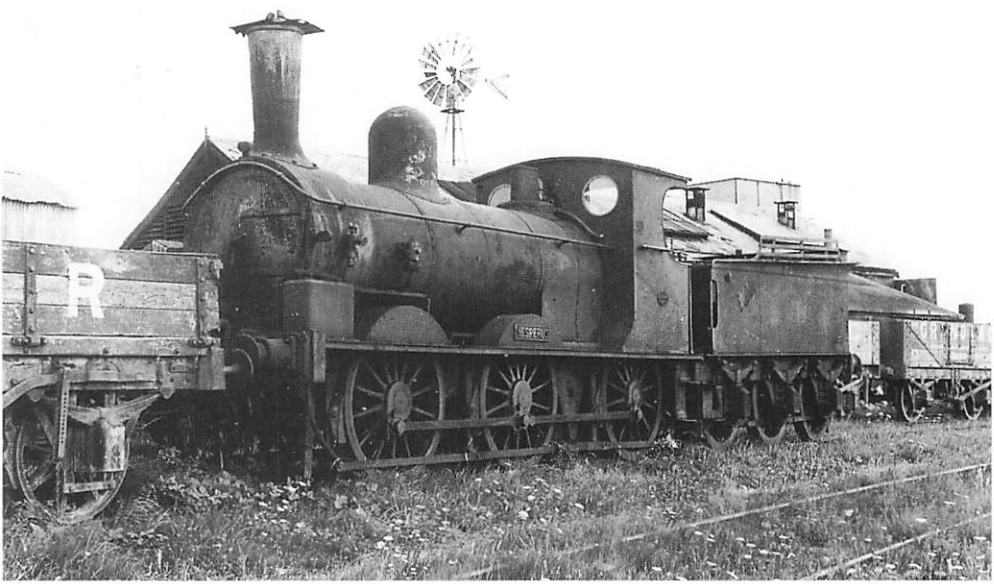
[1] Whilst operated by the amusement park, the lower station appears not to have had an official name being variously referred to as Sands, Beach and Olympia.

Wind and Water

The need to fill up with water at regular intervals is an inconvenient necessity of steam locomotives, and it is apt to be an expensive one. The idea of harnessing the free power of the wind to pump water from one's own well is one that seems to have appealed to Colonel Stephens, who was always a man with an eye for a bargain.

Before looking at the windpumps used on the K&ESR and some of the Colonel's other railways, it will be useful to consider the technology available to him in the early 1900s. Traditional windmills had of course been around for centuries, but they were large and expensive structures, built and maintained by skilled craftsman and requiring constant attention. They were typically used to grind corn, but there were also quite a few pumping windmills. Most were for drainage but they were occasionally used for water supply, and the tower of one of these can still be seen near the motorway on the outskirts of Faversham, where it was built for the Corporation waterworks in about 1858 to supplement steam pumps.

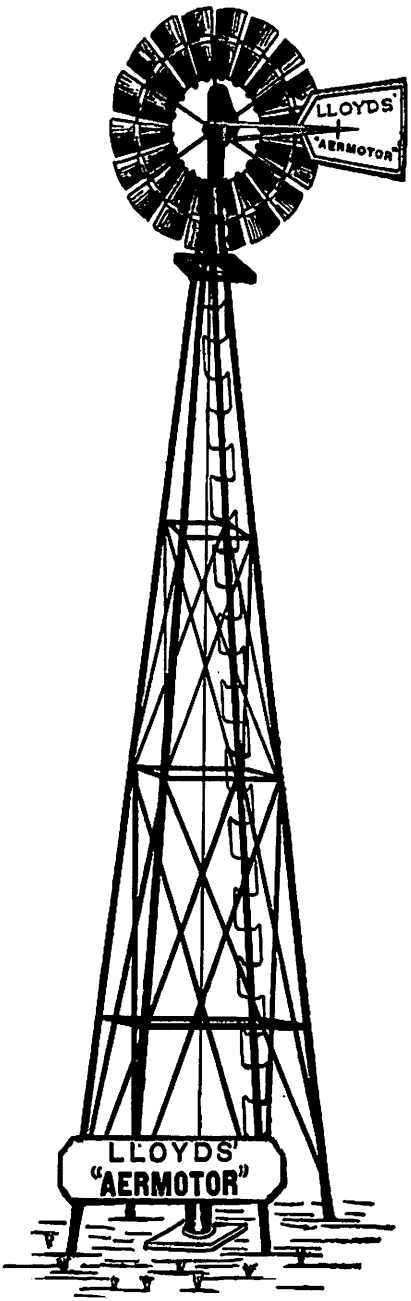
As settlement spread across the plains and prairies of North America, farmers and ranchers needed a cheap, reliable way to tap underground water resources, and with typical Yankee ingenuity one Daniel Halladay designed a self-governing windmill (as it was called in America, though strictly speaking a wind pump or wind engine). This had a vane which automatically turned it to face changing wind directions, and a governor to regulate its speed automatically by pivoting the thin wooden blades which formed its wheel. Most importantly, it was a standard product that could be made in a factory. In partnership with a mill repairer, John Burnham, Halladay began to manufacture windmills in 1854, and was soon selling 'Halladay Standard' windmills by the thousand. Other companies and types appeared, for example the 'Eclipse' of 1867, and by the time of the Chicago International Exhibition of 1893, the various



The windpump behind Ilfracombe Goods locomotive 'Hesperus' at Kinnerley Locomotive shed, 1933
(Colonel Stephens Historical Archive)

LLOYDS' STEEL AUTO-OILED, DUPLICATE-GEARED

"AERMOTOR" WINDMILLS



Galvanized after Completion.

ABSOLUTELY PROTECTED from RUST

Geared back 3½ to 1, Run in the Lightest Winds.

Develop greatest possible amount of Wind Power.

Withstand the Strongest Gales, and will pump more water than any other Mills in the market.

Lloyd's **Windmill Wheels are made of Steel,** are rigid, light and strong. The **Towers** are made of **Angle Steel,** and the whole is Galvanized when finished, leaving no parts to be affected by the weather.

Outfits erected 25 years ago are still working well.

The Latest Pattern is fitted with

DUPLICATE GEARS RUNNING IN OIL.

It is **perfectly self-regulating.** The light weight and perfect construction enables it to face up to, and get the **full benefit of any breeze,** however gentle. It is more decidedly than ever "The windmill that runs when all others stand still."

Every bearing of the **Auto-oiled "AERMOTOR"** is constantly flooded with oil. The gear case, in which the duplicate gears run, holds two or three times as much oil as is required by the mill for a year of continuous running. The oil flows through every bearing in a constant stream.

The greatest difficulty experienced by users of Windmill Pumping Outfits has always been to get local workmen to climb the 30 or 40 or more feet up to oil the Mill heads regularly. **This is now overcome.** If properly erected there is no need for ascending the towers to fill the helmet with oil more often than **once or twice a year.**

WIND COSTS NOTHING—HARNESS it with THE AUTO-OILED "AERMOTOR"

manufacturers were able to display a veritable forest of windmills. The first mass-produced windmills were made largely of wood, but as the 19th century progressed, iron and steel were used more and more.

An important advance came when Halladay's US Wind Engine Company hired an engineer, Thomas O. Perry, who analysed the operation of windmills scientifically and developed a completely new and much more efficient design. The company was, however, reluctant to invest in re-tooling and rejected Perry's proposals. As a result, Perry went into partnership with a businessman, LaVerne Noyes, and they established the Aermotor Company in Chicago in 1888. At first users scoffed at what they dismissed as the 'mathematical windmill' and only a few units were sold in the first year. However, demand grew quickly and Aermotor soon came to dominate the market, once it was realised that an 8-foot diameter Aermotor could pump as much water as a 12-foot model of most other makes. The company is still in business, more than 120 years later.

The final technical development was the self-lubricating windmill, in which the gearing and other moving parts ran in an oil bath. Introduced about 1912 by the Elgin Wind Power and Pump Company, this feature was soon copied by almost every windmill manufacturer in North America. Before then, someone had to climb the tower once a week to grease the moving parts, but with the introduction of the oil bath, windmills could be left to pump unattended for anything up to a year at a time. The Aermotor Company brought out the self-oiling Model 502 in the USA in 1915. This proved not entirely satisfactory, and in 1916 it was replaced by the Model 602, which remained in production until 1933. Many parts of the Model 602 were interchangeable with its predecessor, the Pumping Aermotor, and following a successful campaign by the company to sell replacement self-oiling heads, relatively few of the earlier models were left in their original condition in America.

Rural electrification began to reduce the need for pumping windmills in their country of origin in the 1930s, but some of the estimated six and a half million units sold in the USA are still working, and indeed both new and reconditioned wind pumps are readily available today.

American railroads were quick to adopt windpumps in suitable terrain, and this included important companies such as the Union Pacific and the Southern Pacific. Watering points were set up every thirty miles or so in desert country, with storage tanks and windpumps to raise water from wells. Some models were designed specifically for this duty, the 'Railroad Eclipse' being one.

American-style windpumps were never as ubiquitous in Britain as they were in North America and in other countries with comparable conditions, such as Australia, Argentina and South Africa. However, they did become a reasonably common sight, particularly in flatter, drier areas. The Royal Agricultural Society of England organised wind engine trials in 1903, and awarded medals to favoured models. Among British firms, Duke & Ockendon ('Dando') of Littlehampton (which is still in business as a manufacturer of drilling equipment) offered a range of wind pumps, often on more than usually elaborate steel towers. Some were supplied to British railway companies, including the London & South Western (for example at Gillingham, Dorset, and Bentley, Hampshire) and the London, Brighton & South Coast (for example at Christ's Hospital and Ford). The windpump at Ford was accompanied by a cylindrical water tank of classic American appearance, and survived into the 1950s, when most of the trains on the line had been electric for years. Another British manufacturer was John Wallis Titt of Warminster, who is known to have supplied windpumps to the Midland, Great Western and London & South Western Railways. L&SWR locations included Amesbury Junction, and a couple of stations on the Basingstoke and Alton Light Railway, including Cliddesden (the windpump can be seen briefly in the Will Hay film, 'Oh, Mr Porter'). The Basingstoke & Alton examples seem to have been used to supply water to the stations and railway cottages, rather than for locomotive purposes.

Colonel Stephens did not patronise British manufacturers, but purchased American Aermotor windpumps. These had a good reputation for quality and reliability, while

mass production had reduced prices to as little as 25 US dollars by the early 1900s. Definite information is lacking, but from records in the archives at Tenterden it seems likely that the equipment was purchased through the Aermotor Company's English agent, Lloyd, Lawrence & Co. of Worship Street, London EC. Lloyd, Lawrence displayed windpumps at several Royal Agricultural Society shows, including the one at Maidstone in 1899, and it is possible that Colonel Stephens became aware of the potential of the windpump as a result of a visit to the show.

A typical Aermotor windpump has three principal components. On the top is the wheel of curved metal blades, mounted slightly off-centre, so that the pressure of the wind tends to turn it out of the wind. It is returned to face into the wind by a tail vane, which is connected to the wheel support by a governor spring, so that the angle of the wheel to the wind varies according to the strength of the wind. A brake holds the wheel stationary when required. The rotation of the wheel is converted into an up-and-down movement of a vertical rod by reduction gearing and a pitman. The reduction gearing allows the wheel to turn even in a light wind. The supporting tower is typically assembled from galvanized steel angle, rather like an electricity pylon. Loop steps are often fixed to one of the corner posts, allowing for a rather precarious ascent to a platform near the top of the tower to lubricate or repair the mechanism. Beneath the tower is a well, often quite shallow, containing a cylinder and a plunger, both fitted with check valves. As the plunger is moved up and down in the cylinder by the sucker rod, water is forced from the well into the cylinder, then from the cylinder into the plunger, and finally into a drop tube which takes it out of the well and into a storage tank. The output obviously varies greatly according to the size of the wind wheel, the difference in level through which the water had to be pumped, and wind conditions. However, under favourable conditions, windpumps like those used on the K&ESR might be expected to deliver up to about 3000 gallons a day.

Of the Colonel Stephens railways, the Kent & East Sussex was the largest user of windpumps, with three examples, at Robertsbridge, Tenterden Town and Headcorn. They were all Pumping Aermotors, possibly the 1899 model, and it is a reasonable guess that they were all put in at about the time the Tenterden Town to Headcorn line was opened in 1905. The East Kent and the Shropshire & Montgomeryshire had one each, and there was also one on the Sheppey Light, although this was installed by the South Eastern & Chatham Railway, when the Colonel's connection with the line had ceased. Curiously, neither the Selsey Tramway nor the Weston, Clevedon & Portishead seems to have employed windpumps, although on the face of it the flat landscape which surrounded the railways would seem to favour them. Details of individual windpumps are as follows.

Kent & East Sussex Light Railway
Robertsbridge:
A windpump and a rectangular water tank on timber supports were located on the north side of the line, just west of North Bridge Street level crossing. There is some doubt as to whether this pump was actually used, and, certainly, an early spare parts list in the Colonel Stephens Museum archives is labelled as referring to the Tenterden and Headcorn windpumps only. This was probably because K&ESR engines were able to take water at Robertsbridge Junction where a large water tank and a double-sided water crane of typical South Eastern Railway design were located between the down main line and the down siding. In 1906 the K&ESR agreed with the South Eastern & Chatham Railway to take water at Robertsbridge for a payment of £15 per year, and the agreement was renewed at a higher cost in 1922. By the early 1950s, only the tower of the Robertsbridge windpump remained.

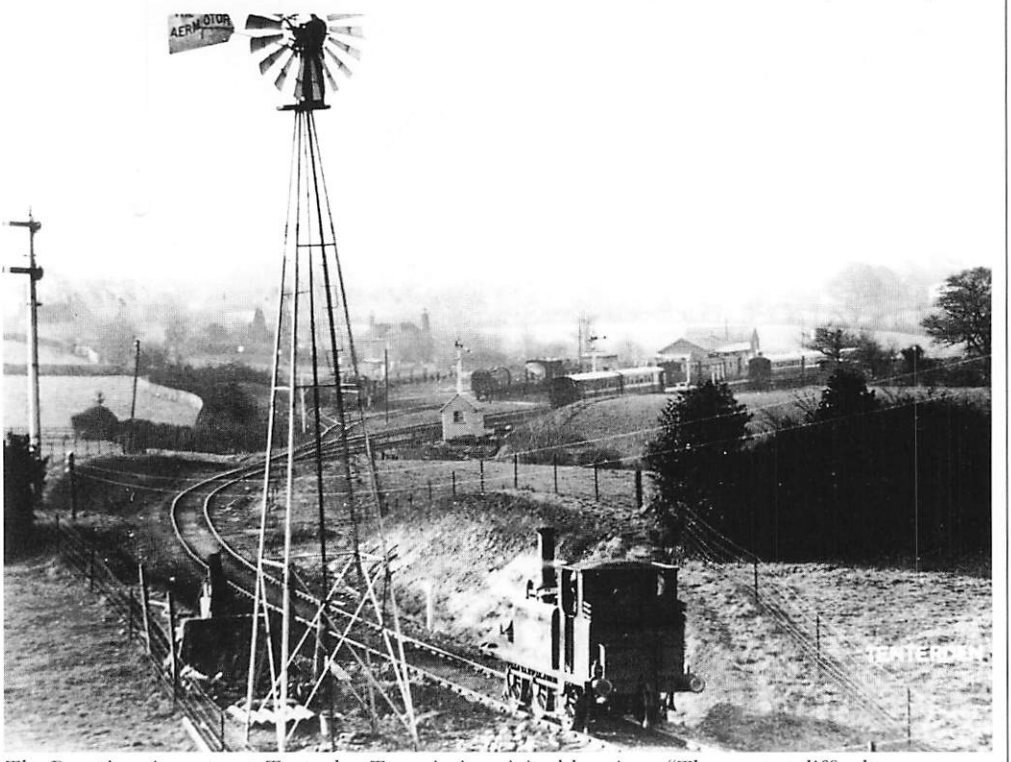
Tenterden Town:
An 8-foot Aermotor windpump was provided on the east side of the line some distance north of the station. It was quite soon moved to a point near the Headcorn end of the former second platform. The date of the move is uncertain, but Trott and Vener, well diggers of Robertsbridge, were paid for work for the K&ESR in January 1907, and it is possible that this was the excavation of the new and evidently shallow well at Tenterden. The windpump presumably supplied the

balloon water tower at the opposite end of the second platform, near where the signal box now stands. The pump survived intact until the early 1950s, and the steel tower remained a little longer.

Headcorn Junction:
An Aeromotor windpump and a rectangular steel tank on timber supports were installed a little way out of the station by the end of the headshunt. They were certainly there by 1910 and, as explained above, probably earlier. They lasted into the 1950s.

East Kent Light Railway, Staple:
A Model 602 self-oiling Aermotor windpump fed a rectangular water tank on timber supports at the end of the platform. It was on an Aermotor steel tower with corner loop steps and a wide base to straddle what was probably a hand-dug well. According to British Geological Survey records, the well was only about 10 feet deep. The self-oiling Aermotor was on the market in Britain from about 1917, so this example may date from soon after public opening of as far as Wingham in 1916. The windpump (though not the tank) was removed some time after 1947.

Shropshire & Montgomeryshire Light Railway, Kinnerley Junction:
A Pumping Aermotor supplied a rectangular water tank on brick pillars near the engine shed. Again, the base of the steel tower was quite wide, probably to straddle a hand-dug well. It seems likely that the windpump was installed shortly after the line opened in 1911. The wheel and mechanism were removed between 1935 and 1938, though the tower remained, presumably to disappear during scrap drives and military occupation in the Second World War. As a sidelight on the water supply arrangements of the Shropshire & Montgomeryshire, in 1930 W.H. Austen gave orders that no engine was to take water at Shrewsbury unless absolutely necessary, as



The Pumping Aermotor at Tenterden Town in its original location. "The greatest difficulty experienced by users of Windmill Pumping Outfits has always been to get local workmen to climb the 30 or 40 or more feet up to oil the Mill heads regularly" *(Colonel Stephens Historical Archive)*

The Tenterden windpump following its move *(Colonel Stephens Historical Archive)*

the company had to pay for water there, on measurement. The water tank at the Abbey Foregate station is the same one that was in use at Wittersham Road on the K&ESR and is now in store.

Sheppey Light Railway, Leysdown:
The South Eastern & Chatham Railway, which worked the Sheppey Light from its opening and purchased it in 1905, signed a contract with J. Warner & Sons in 1904 to construct a well and windpump at the Leysdown terminus to supply a large rectangular tank on a brick base. This arose from the introduction of Kitson steam railmotors for passenger trains and the secondhand 'Terrier' known to the men as 'Little Titch' for goods. Both had a much smaller water capacity than the rebuilt 'Sondes' class tank engines which were used when the line first opened. According to a (probably apocryphal) story, while the well was being bored, a harder stratum of rock was encountered and the drill was diverted sideways. The workmen are supposed to have realised this only when it emerged from the ground some distance away. Be this as it may, when work was completed in 1905 the final bill was twice the original estimate of £625. According to British Geological Survey records, the well was about 55 feet deep. No details of the windpump have yet emerged, and I have not seen a clear photograph of it. However, the depth of the well implies a larger unit than those installed by the Colonel if an adequate delivery rate was to be achieved. The water supply at Leysdown seems to have continued to present problems, as photographs taken in the 1920s show the usual 2-coach motor train set converted from the carriage portions of railmotors being hauled by elderly tender engines. Presumably the windpump was eventually superseded by a mains water supply from the Leysdown pumping station, which had a borehole some 440 feet deep, drilled in 1918.

The windpumps of the K&ESR and the East Kent have been described by authors of books on those railways as an unreliable source of water. The Pumping Aermotor designs used

on the K&ESR and the Shropshire & Montgomeryshire needed someone to climb the tower every week or so to grease the mechanism, and of course there was always a risk of this unpopular job being overlooked, leading to undue wear. Given proper lubrication, however, the Aermotor was regarded as a robust piece of machinery that required little other attention. It is also possible that the rather shallow wells that seem to have been used may have been liable to run dry in periods of drought. None the less, some of the Colonel's Aermotor windpumps gave service for several decades and undoubtedly saved on bills for mains water supply.

American-style windpumps are now quite a rarity in Britain, but one can still be seen from the K&ESR in a field on the west side of the line a little way on the Wittersham Road side of Rolvenden. This is a smaller design with only four blades, rather than the multi-bladed wind wheels used on the windpumps described above. Two Duke & Ockenden windpumps are on display in the south of England, at the Surrey Rural Life Centre at Tilford, near Farnham, and at the Chalkpits Museum, Amberley, West Sussex. I do not know of a preserved Aermotor windmill in this country, and should the resources be available in the future it would be interesting to try to acquire one for re-erection on the K&ESR.

The surviving minute books and other official records of the Colonel Stephens railways make no mention of the installation of windpumps, and many of the details above have been gleaned from the study of photographs. In this context, I should particularly like to thank Dr T Lindsay Baker, Director of the Texas Heritage Museum and author of the standard work on the subject, 'A field guide to American windmills' (University of Oklahoma Press, 1985), for his invaluable assistance. Mr J Kenneth Major of Reading has also provided many interesting details of the manufacture and sale of windpumps in the United Kingdom.

Tom Burnham

The windpump near Headcorn Junction *(Colonel Stephens Historical Archive)*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