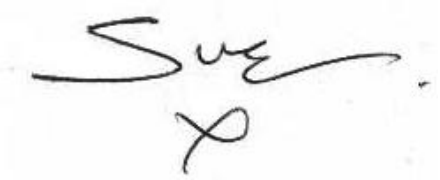
* SUE'S SPOT *

Happy Easter to you all, welcome to the bumper Spring Newsletter (more than ten pages is a bumper edition to me). As you will see from the cover, I got a medal for 20 years of newsletter after all! Laurie Nichols, who kindly made the medal, presented it to me at the January Club Video Night. Sadly I was not at my best, having had Martin rush me to Accident & Emergency less than 24 hours earlier (that's another story as they say). Had I had any idea there would be a presentation I'd have worn me posh frock for the occasion. I must thank Laurie, and also the Linkins family who gave me a bottle of wine in recognition of my years on the Newsletter. The results of the questionnaire enclosed last newsletter: 12% replied, which means that 88% of the membership are happy with what they get (I'd rather think that than believe apathy was the reason for no response). Those that did reply gave different answers and a few suggestions, so armed with these I'll carry on as best I can and hopefully improve as possible! One suggestion from the Other Half was to try an A5 booklet format for the newsletter, like many other Clubs. As it wasn't mentioned until after I'd started printing, we may give it ago next time. And I know all the margins on the articles should be the same etc. etc. and one day they will be!

So what's been happening at the Park? Fortified by bacon buttie and hot dog Sunday lunches provided by Pat Riddles, ably assisted by the ladies, the chaps completed the necessary replacement beams by the beginning of February. February Quiz Night saw Paul Clark again heading the winning team, an unbroken record for him. I'm handing over the Quizmaster status next year, Wallace and Gromit (Mike Wallace and Roger Vane) will hold the next Quiz Evening – but perhaps we should make Paul run it sometime so he won't keep winning?! Sadly the graffiti artists (actually I'd use another word instead of artists, but I'm too couth) have been active again around the Club premises, so we are equally hard at work to make it more difficult for them with various options being considered. Worse still, the Clubhouse was broken into in early March (through the window bricks). Only the small steam crane (I've looked everywhere for a photo of it – can anyone out there oblige? We can then put it on the website so people can keep their eyes open for it. It wasn't worth much – but it's the principle that counts!), which had been given to the Society a few years ago, was taken, which was a shame, but there was little damage. We were lucky, the Cygnets (Model Boat Club) had their store burnt out and everything destroyed. Still, if the little dears who do the damage don't get caught then maybe it's for best; given the so-called legal system in this country, for their sins they'd probably all be sent on an adventure holiday at our expense. We've now bricked up their entry point so they won't get in again that way. Also we've had a big clear out and tidy up, so try and keep the club premises clean and tidy please everyone!

The plans for alternative trolley storage and gauge one track are still in discussion by committee with various plans being updated each meeting. It's more a long-term project, and of course not cheap, even with our volunteers, but as soon as we are able to proceed you'll hear about it. Public Running starts at Easter, you will see further on in the newsletter we need people manning the station as well as a traffic controller. Shifts can be shared, and volunteers, especially those without a loco, can do their bit for the society so easily. Having these posts filled in advance makes it so much better for everyone – and we cannot run for the public without the station manned. The more people who help out, the happier it is for all concerned. So do your bit, stick your name down; the list is in the Clubhouse. It's not hard work, plenty of time to chat, and tea and cakes will of course be served to you during your stint. Go on!

Time for me to shut up, and I hope you enjoy reading this edition. Articles to me as soon as you like ready for the next (due out in August)!



E-mail: sueaparham@cs.com or secretary@maidstonemes.co.uk and website www.maidstonemes.co.uk

KNOW YOUR COMMITTEE

Well, here they are, a jury of twelve good men, strong and true (well, sort of) and their positions on the committee so you know the right person to report anything at the Club you're not happy about. Maybe I should carry on the baby bios (biographies) in future newletters on other members so we all get to know each other a bit better? You tell me what you'd like to see! This was requested, so here we are!

Peter Chislett, C.B.E. President of M.M.E.S. Retired R.A.F. Air Commodore (so we tend to stand to attention and salute when he approaches). Age 69 and married to Wendy with two children and two cats, lives in Bearsted (also spends part of the year at holiday home in France). Currently building a 5" gauge Sweet Pea, other hobbies include genealogy.

David Deller. Committee Member in charge of the Club steam locomotive Enterprise. Retired Heating and Plumbing Engineer (first person we turn to if anything develops a leak at the Park). Age 64 and married to Sheila, has two sons, lives in Larkfield. Currently building a gauge one D class Wainwright 4-4-0. Enjoys listening to classical music.

Adrian Gurr. Committee Member in charge of General Works. A Network Manager, he scores his half-century in early April and has two cats Annie and Clarabel (named after Thomas the Tank Engine's two coaches), he lives in Bearsted. Currently building a Merchant Navy, which has taken twelve years so far and he says he hopes it won't take another twelve to finish. Other hobbies are flying (has his pilots license, we always duck when we think he's flying over the Park) and model boats.

John Hawkins. (Sometimes known as Wobbly John, used to various nicknames as he only has one leg.) Committee Member in charge of Public Running and Safety. A Project Planner and Controller, he hits his half-century in September this year. Married to Marie with two children, a fish and a rat called Sophie, he lives in Sittingbourne. He is building a Simplex and a Type 10 Diesel. Also enjoys model boats.

Graham Kimber. Vice Chairman of M.M.E.S. and in charge of the club petrol engine Galloping Gertie. A retired engineer aged 67 he is married to Joy with two children and an old cat, he lives in Ditton. He is finishing a 2" Fowler Showman's Engine at present. Hobbies include fishing ("don't put D.I.Y.!").

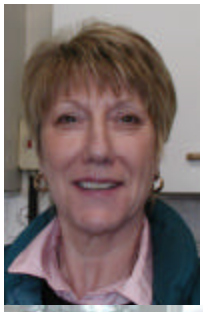
Peter Kingsford. Committee Member in charge of Safety. A retired company director, he is 70 (you don't look that old, Pete!), has one daughter and lives in Charing Heath. He is currently building a Santa Fe Pacific locomotive, and model engineering is his main hobby.

Dearly Beloved, I mean Martin Parham. Secretary of M.M.E.S. since 1978. He is a company director with a wife who is a real doll (stop laughing everybody) and two sons (the younger one also a member of the society), and two cats. He is 46 and lives in Bearsted. Has just started building an A1 Pacific (or would if Reeves would hurry up with the castings) after overhauling his existing locomotives. Another hobby is computing, and Martin does the Club Website.

Yes, me again, Sue Parham. Hon. Press Officer since 1981. Married to the Secretary, living in Bearsted, two stepsons, two cats, I'm aged 45, and a mainly retired bank manager. Not building a loco, but very proud to have and run my own 3 ½" second hand Juliet with original boiler over 50 years old. Various hobbies but no time to do any of them except M.M.E.S, devoted to looking after elderly, ill parents who live in Maidstone, so when I get free time, sadly I'm most likely to be a couch potato.

Edgar Playfoot. Committee Member in charge of Accommodation (and Rolling Stock with Geoff). He is a semi-retired company director age 60, living in Brenchley, married to Ann (who can sniff out a craft shop a thousand miles away and takes John Hawkins wife with her so they can blame each other when they spend too much). Has two children, two cats and @ 30 fish. He is currently building a Royal Scot, a Princess of Wales and a Springbok. Apart from model engineering he enjoys gardening.

Geoff Riddles. Chairman of M.M.E.S. In charge of Rolling Stock with Edgar. He is semi-retired and aged 64, married to Pat (see below); they have three daughters (including twins) and live in Argos Hill. Having finished a freelance locomotive in 2000, which he started in 1961 (to be fair had 20 year break for family duties), he has been catching up with various chores in the workshop and is considering his next project (not one to rush these things).



Pat Riddles. Committee Member in charge of Catering (makes a lovely cheese and onion pie amongst other things). Pat says she is under 56, an Office Superviser, married with three daughters, lives in Argos Hill and, of course, is married to Geoff. She enjoys gardening and sharing Geoff's hobby. She is hoping to work part-time instead of full time later this year, and so have more time with Geoff (as good an excuse as any!).

Peter Roots. M.M.E.S. Treasurer for over 30 years (so probably deserves a medal far more than me), and is in charge of providing fuel for the society. Age 67 he is single but says he's open to offers. He lives at, and runs a little shop called Mitchells Hardware in the Tonbridge Road, Maidstone (nicknamed by us Open All Hours). No locomotives being built at the moment, says his hobbies are painting and decorating, and working!

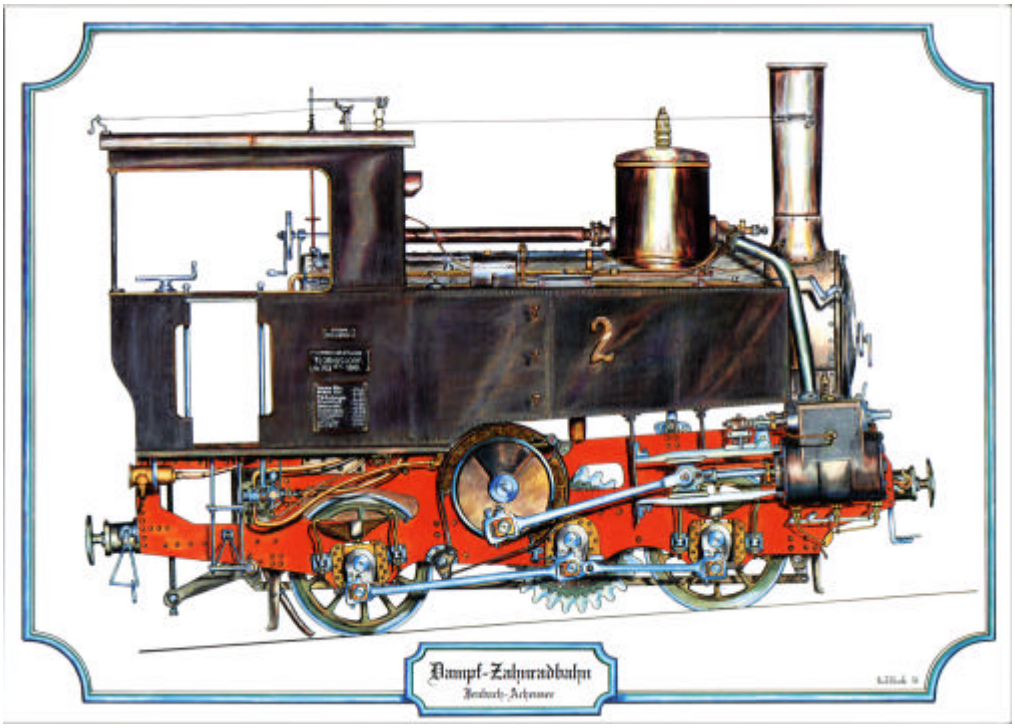
So that's everyone on the present committee. Now you know us, if you didn't already!

Sue Parham March 2002.

AUSTRIA 2001 By Brian Harris

Part 1: The Achensee Bahn

This time it was my turn to choose where we would go on holiday. After a very hectic tour of Italy in 2000, which left neither of us very refreshed, flights and coaches came low on the list for holiday 2001! Around Christmas I was under some pressure to come up with an idea. By chance I saw an advertisement for a company called Great Railway Journeys and promptly requested a brochure. To our combined surprise (my good lady wife is not of the model making, oil on the hands, or tinkering with mechanical gadgets persuasion), there were several holidays with some sort of mutual interest.



We chose Austria, because it was a one-centre holiday and had a certain amount of steam attached, which wasn't noticed in certain quarters, until the itinerary arrived. Anyway that's enough words. As Jack used to say, a picture saves a thousand words, and gives a much better idea of how good parts of our holiday turned out.

Drawing of one of the four identical locomotives used since 1889 on the route from Jenbach up to Zeespitz on the large mountain, lake - The Achensee. Normal load two fifty-seat carriages on the main ascent/ descent.

We had a special one-coach train that was despatched about five minutes after the normal two-coach service train. We promptly caught up with it half way up. I was quite amazed at all the waving of hands and shouting as our ticket inspector tried to get our diver's attention to the fact we were getting close. The journey takes about an hour and you go up about 1500 metres in height from Jenbach.

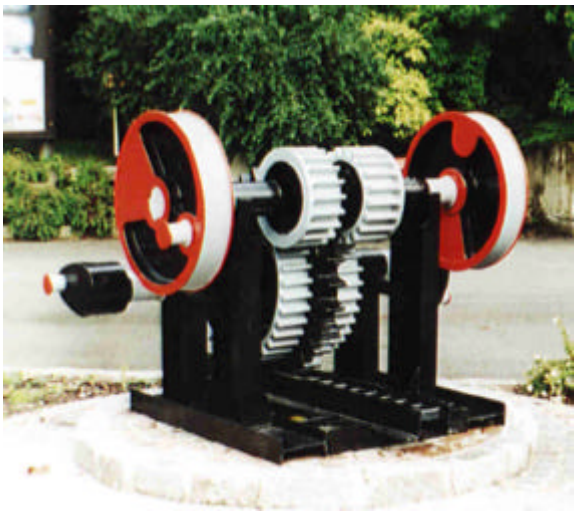
W
arming up before the climb.

Our train being assembled in the station yard.

Close-up of the works.

Ticket to ride.

Inside the cab – pretty basic



How to get up a steep hill.

Zeespitz. The lakeside terminus and start of our cruise.

Well that's enough for the moment. I don't want to bore you with too many holiday pics. But there's more of our trip to the Zillertal Bahn, and other odds and ends of mining equipment, if you're interested?

ANORAKNAPHOBIA ***by Paul Rolleston***

It doesn't seem to matter that wherever I go, if during the course of conversation I let people know that I have an interest in model railways I am instantly stereotyped as an Anorak, 'Oh my gawd, he's a Train Spotter, a Steam Freak, keep away from him'. Neighbours, relatives, people I've worked with, customers, all seem to take delight in branding me as some sort of sad person. Does this happen to other members? Last year my next-door neighbours, Nick and Bev, went to the trouble of touring local charity shops to try to find what they thought was the classic Train Spotters Anorak. They found one and duly presented it to me on my birthday, wasn't I lucky. I'm just waiting for the right moment to wear it in public; maybe I'll wear it to the club on a Public Running Day together with matching accessories.

Although I've been labelled one so many times I'm not really sure if I understand exactly what is meant by the term when it is applied to me (and probably you lot as well), I've had a go at researching the origin of this newish interpretation of what was originally an Eskimos coat. The Internet shows 25780 Anorak addresses, but a quick surf revealed nothing that I could understand (there's some weird stuff on the net) and certainly nothing pertaining to Train Spotting or Railways. It could be useful that I find in putting pen to paper, or to be more precise, fingers onto the keyboard, for an article does rekindle otherwise forgotten memories that may help and in this case I have gone back to my very early years in the 50's when I did indeed go Train Spotting. Although I lived close to Twydall crossing gates, I would more often than not be found at Livingstone Crossing which is to the east of Gillingham Station. Along with most other schoolboy Train Spotters I thought that this was the place to be, for several reasons:

1. There was a covered bridge that not only gave shelter if it rained but it was also the place to play Blow-ups. Shall I explain? The topmost part of the bridge footway that actually went across the track, was made of wooden boards. There were holes and gaps all over the place through which the engines exhaust beats could deliver a blast that was strong enough to 'blow-up' into the air whatever we put over the holes. It was rumoured that it was possible to raise school caps into the air, but I didn't actually ever witness this. It was very much a hit and miss affair because alignment of the engines chimney and the holes was obviously critical as also was the timing of the exhaust beat. Milk bottle tops were the favourite items for this game, they were easy to get because in those days we all had our daily bottle of school milk. We waited until the coming of a steam train was imminent and then working as a team we very quickly covered every crack, hole and void with smoothed, over turned, bowl shaped, milk bottle tops. The engine arrived under the bridge and if all things were well synchronised there was an eruption of steam, bottle tops and wild cheers. At the end of a good days spotting the track below the surrounding area was strewn with milk bottle tops. Strange thing that nobody (adults) ever moaned about it, and I wonder if the engine drivers ever knew what was going on as they passed under that bridge.
2. We could watch the man in the signal box wind the huge wheel that closed the gates, this obviously meant that a train was due and we were all then on alert and there was always much speculation as to what may be coming along: Steam, Electric, Diesel, Goods, Passenger, Through Train or a Stopper. Some Spotters would rush up onto the bridge to get the first sighting of the coming train.
3. There was an adjacent shop that sold sweets and the full range of Ian Allen Train Spotter books. In those days they were 2s/6d each, and possession of one or more of these books gave a boy real Street Cred. However, most of us had improvised spotter pads made from old school exercise books.
4. If there was no sign of a train we could scamper through an alleyway to the loco sheds and take it in turns to 'Cab' an engine whilst others kept watch. Now this was a risky business and on reflection we must have been out of our minds, but we did it anyway.

Can you visualise all the above being portrayed in a cartoon sketch by Karl Giles? It would be worth framing.

In those days we could spot all sorts of railway engines and rolling stock and we did it wearing all sorts of coats like School Blazers, Duffle Coats, Rain Coats, Army Surplus Great Coats down to the ankles, anything but an Anorak. Train Spotting was considered normal and acceptable. School essays would frequently be written about trains and so many of us wanted to be an Engine Driver when we left school. I

don't know any schoolboys that want to follow that track (pun intended) these days. There was no derogatory term, spoken in contemptuous tones, pertaining to Train Spotters coats in those days. I can understand that in later years the anorak proved its usefulness and was more widely used for many other outdoor activities as well as Train Spotting. So why pick on Train Spotters and Railway Enthusiasts instead of Yachtsmen, Ramblers and others who wear anoraks? What a burden we carry.

If it were possible I would ask Kipling's Serving Men; Who, What, Why, When, Where and How (the Anorak thing started) but these gentlemen seem to have gone into hiding on this one. Shrewd aren't they. I wonder if Uncle Tommy was an Anorak, sorry, I mean Train Spotter. If I could see trains from his house then I'm sure he could. Herewith part two of that story I started in the Christmas Newsletter entitled **WHAT A PERFECT DAY:**

Early the following morning I had a six-yard skip delivered to my home for the spoil that would be dug out in order to lower the cellar floor. As I didn't have any room on the site it had to be put in my front garden and after positioning it just where I wanted it I set off for Uncle Tommy's place with the same apprehension that I felt at the end of the previous day.

When I went down the steps and into the cellar I found that it had been emptied of everything as had been promised to me earlier. It was all rubbish and had been temporarily stacked up in the back garden en-route to the local tip. One notable absence from this heap was Shergar. I couldn't find him anywhere, what a relief. So, work resumed and over the next couple of days countless bags of spoil were dug out of the cellar floor, lifted up into the window well, across the path and into my van. Each shovel full was watched carefully as it trickled off the shovel and into the bags. I really was looking for a skeleton and treasure. And again, as each bag was emptied into the skip, a watchful eye made sure that no clue escaped my attention. And when the last shovel full had been dug, what had I found, I had found nothing, absolutely nothing. No curios, fossils, skulls or doubloons. I was very disappointed, and thought that perhaps I should keep on digging beyond the planned depth, deeper and deeper until I did find something. I was getting obsessed by that time. However, I thought better of it because the building inspector who was now aware of all that had happened was making more than the usual number of visits to the site and digging deeper would definitely have incurred his displeasure. So, if there is something buried in the cellar it was too deep to be found.

Don't go away, there's more.

The following year I returned to Uncle Tommy's house to do another major job; remove a fireplace and chimneybreast from the back room. This kind of job can get quite involved, as it did, with props and steel beams and things. It also meant another skip in my front garden for all the rubble. Having done this sort of job before I knew that the volume of rubble that would have to be shifted would seem to be at least twice that of what was being dismantled, possibly even three times the volume. I was in for some hard graft, but also some anxiety. Was I once again going to disturb Uncle Tommy? Was there something sinister about the chimneybreast like someone or something bricked up inside the wall? Once the props and beams were in place I started the scary bit. Do you want to know what I found when I dismantled the chimneybreast? I'll tell you in the next Newsletter.

Finally, I now feel able to offer a definition of an 'Anorak': <u>An all embracing term for people who are involved in inoffensive activities and who display a level of dedication and enthusiasm for their activity that is beyond what lesser people would be capable of.</u> 'Nuf Sed?

THE JOYS OF SAILING – PART TWO *by Ed Nutter*

I had already decided the next sailing cruiser I wanted. She was a Cobra 750. She was a modern wide hulled design, which gave comfortable accommodation in two cabins with separate heads (toilet). She was 25' long with a beam of 9'6". I first saw her at the London Boat show. Following the sale of Mary Ann our 22ft sailing cruiser, we now had some funds to put to the acquisition of a Cobra 750.

We took a trip to the factory on Hayling Island and were given a tour of the factory and a short test sail. After much consideration I decided to order just bare fibreglass hull and deck and fit her out myself. I paid a deposit and on notification that the mouldings were ready for delivery, I drove down to Hayling Island, made an inspection and paid the balance.

The following week the mouldings were delivered to Lower Rainham. A week or two later I learned that Cobra Yachts had gone into liquidation. How very lucky we were to have received the mouldings. I had already planned the fitting out of the boat and estimated that it would take me two years. Mr Robinson of Mariners Farm was enthusiastic for me but was quick to point out all the other self build projects on his land whose owners had run out of enthusiasm in a short time.

The new boat was twin bilge keel, the keels being hollow fibreglass unballasted. The mouldings were relatively light and we manoeuvred them onto a couple of wooden sleepers set into the ground. The hull was also set level. The first job was to trim and join the deck moulding to the hull. This was done by sticking and bolting, followed by fibreglass and resin internally. Black anodised aluminium toe rails covered the joint externally.

When I decided to fit out the boat I didn't realise the amount of glass fibre work that would be required. In all I used about 30 gallons of resin and a couple of one-metre rolls of heavy chopped strand matt. Ply bulkheads had to be attached to the hull and deck. The hull and deck had to be reinforced by up to 20mm thick of additional glass fibre at stress points and after ballasting the keels the whole floor was glassed over with another 10mm of GRP.

After attaching the deck to the hull and glassing rigging stress point, I started fitting out internally at the bow and worked towards the stern. Patterns were taken from the hull and I prefabricated all furniture and fitting as far as possible and generally made preparations at home during the evenings of the week and just visited the boat on one day of each weekend. Soon after the delivery of the moulding I ordered the mast and on delivery I made a tent over the boat supported by the mast on two 'A' frames. I could now proceed with the work whatever the weather.

This boat was designed for an inboard engine and I had already decided on a Bukh 10HP marine diesel. I bought this new from a dealer at Malden. Following Cobra Yachts going broke I was now very nervous about paying up front. All purchases I now made were with cash on delivery or collection. This was before the popularity of credit cards. The engine was a significant outlay and I remember driving up to Malden with cash spread about my body, some in each sock, pockets etc. I shaped up heavy wooden engine bearers and glassed them in. I arranged with Mr Robinson to lift in the engine with his crane. The propeller shaft and engine were aligned and bolted in. One difficult job I distinctly remember with the engine installation was the propeller shaft coupling. The shaft was 1" diameter stainless steel and in order to get the bolts into the clamp coupling, half moons had to be filed into the propeller shaft with it in situ. Filing in a very cramped position at the rear of the engine was a very painful experience but one that I was pleased to have suffered following a later experience.

One summer weekend during the fitting out I spent a weekend with the Medway School of Sailing. I boarded the Schools Yacht one Friday evening, which was on a trot at Upnor. There were about half a dozen of us and conditions below were decidedly sparse. The boat was about 55' in length and had been

fitted out by the Schools owner. On a rising tide we let go under dark and sailed downriver and picked up a buoy in the Swale and got our heads down for the rest of the night.

On the Saturday we had quite a good sail in light winds around the coast to Ramsgate where we spent the night. Sunday morning dawned bright and sunny. Mooring lines were let go and motored away from our birth in Ramsgate harbour whilst making the sails ready for hoisting. Still in the harbour the boat suddenly hit the 'putty' (mud). Reverse was quickly engaged and the engine given full power. Suddenly the engine pitched increased alarmingly with the engine running free. The prop and shaft had pulled itself out of the shaft coupling at the back of the gearbox. I was therefore very thankful for the design of my own shaft coupling, which I knew was impossible to pull out. The skipper called up assistance from the harbourmaster, who sent a powerful launch but by now we were well and truly stuck with the tide on the wane. All day we were stuck on the boat in hot sunshine. The skipper refixed the shaft to the coupling. When the tide returned late in the afternoon, with little or no wind we had to motor all the way back to the Medway arriving in the early hours of Monday.

Fitting out of our Cobra 750 which we had now named Carina, continued energetically and as the two-year anniversary of the delivery of the mouldings approached, readiness was made for launching. Marinas Farm only had a very basic facilities and the crane was very archaic with barely sufficient lifting height. But after signing a disclaimer, Carina was lifted onto a dilapidated launching trolley comprising an old lorry chassis and towed about 50 metres to the slipway to await the arrival of the rising tide.


Carina is craned on to trailer

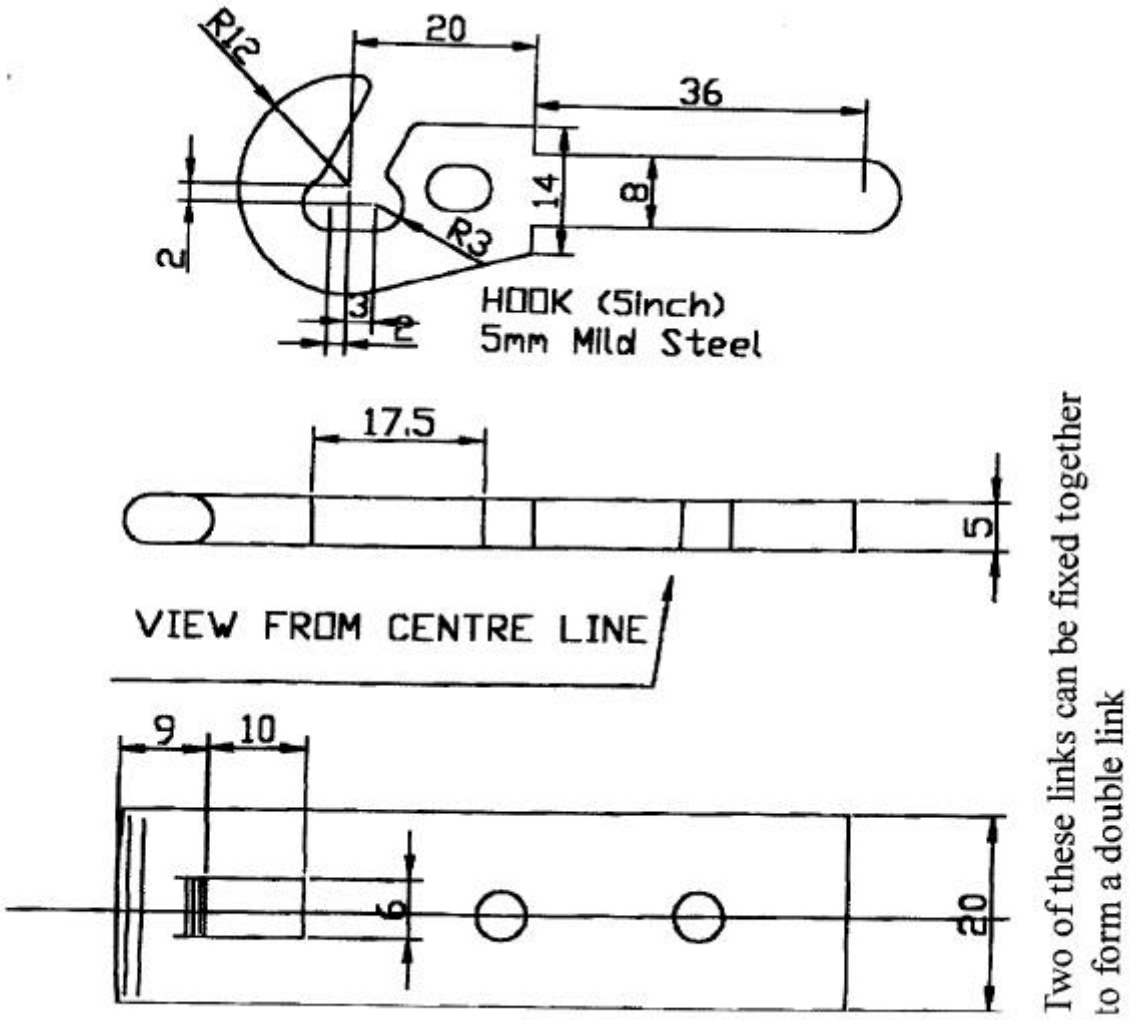

Carina approaching slipway

An hour or two later most of the black antifoul on the hull of Carina was covered including nearly all of the boot top line the height of which I had determined from the plans. The engine was started but Carina wouldn't budge. A while later with the boot top covered with water she let the water take her and we took a short trip under motor to check that all was well then picked up our mooring before the water receded.

A few weeks later I moved Carina to Youngboats yard at Oare Creek Faversham, which had pontoon berths enabling us to board the boat at all times. Later, on having Carina craned out for winter storage ashore, the crane operator told me the she weighed nearly 3 tonne. According to the plans she should have only weighed about 2.5 tonne. So she was a bit over weight hence it being necessary for me to raise the bootop paint line. She was however a very comfortable boat at sea and we had many enjoyable weekends on her.


Carina at Oare Creek Faversham

<u>CHAINS AND LINKS</u> by Laurie Nichols.



On my travels around various Model Railways, I have seen many steam, electric and other forms of engines. Some were connected to their carriages etc. by means of a chain, and others with a solid link. We all know that you cannot use a link on a normal hook, as when you stop, the link could, and possibly would, slide up out of the hook, thus causing a disaster as all the carriages you were pulling would try to climb all over you.

I have given the Chain/Link some thought recently and have come up with a design that I think will satisfy others like myself who like the links, but allows for those who wish to use chains on my rolling stock.

I don't know what the preferences are for most people, but I feel sure that a Universal Hook would possibly be acceptable to most Model Railway Enthusiasts. (Except possibly for the perfectionists).

A Hook like this may have been designed already, but I haven't seen it, so for what it's worth I send you this report.

I enclose a sketch of the Hook and Link, which I hope may be of interest to someone. I will bring a sample of the Hook and Link the next time I visit the Club.

PLAYING WITH TRAINS – 12" TO THE FOOT GAUGE

With all the bad press that Railtrack has received recently, some people may wonder why anyone would want to leave a perfectly good job to join the company. All I can say is that there is a lot going on within the Prison Service that I was no longer happy with, and I felt it was time to change. With an interest in trains and railways generally, and a job offer from Railtrack to train as a signalman, no further incentive was required to make the change. There are probably a few out there who believe, as I believed until a few weeks ago, that the modern railway is controlled from large power boxes, with flashing light displays, full track circuiting and automatic or semi-automatic signalling. To find that this was not the case came as something of a surprise.

Before starting my training, which consists of a nine-week residential course in Derby, I visited a signal box at Chartham, near Canterbury, to get an idea of what the job was about. Situated on the Ramsgate to Ashford line, Chartham is a small box that still uses a lever frame, operating semaphore signals, to control the movement of trains. Even the level crossing that the box controls is manual, in as much as the signalman has to physically push and pull the gates. I was expecting that the gates would have been controlled using a capstan wheel from within the box, but oh no. Come rain or shine, four times an hour the signalman has to brave the elements to keep the trains moving.

With the trains being signalled from one box to the next using the absolute block system, it came as no surprise to learn that the first eight weeks of the course would be dedicated to learning the absolute block system of working. Even signalmen who will eventually find themselves working in a power box have to undergo this training, as it forms the backbone and basis of the more modern systems that are now in place on the majority of lines in this country. If all else fails, it also provides a workable backup system, which can only be relied upon if the signalmen involved know how to use it.

For anyone who does not know how an absolute block signalling system works, a brief outline is called for. In the earliest days of the railway, the train companies relied upon a system known as 'time interval' to keep their trains apart and to stop them from running into each other. How this system worked was that a train was only allowed to use a piece of line when a certain amount of time had lapsed after the preceding train had passed onto the line. This worked well enough until the first train broke down, or suffered some other problem, and was promptly shunted up the rear by the following train. It didn't take to long, together with a few acts of parliament, before the train companies changed to the absolute block system, which worked on the basis that only one train could occupy a piece of line at any one time.

This was introduced when the benefits of the recently invented telegraph began to be recognised. What it gave the railways was a means of instant communication between signalmen that allowed each to enquire of the next if the line was clear between them and, if so, could a train be allowed to proceed. To enable them to do this each box was equipped with a block telegraph instrument for each line, with an associated bell. The accompanying photograph is an example of the type of instrument used in the days of British Railways, and whilst instruments did vary from region to region, they essentially performed the same function. At the bottom is the bell and tapper; very similar to a Morse code tapper. Above that is the commutator switch. This switch allows the signalman to show the state of the line for trains approaching his box (known as the box in advance), and has three positions: normal, line clear and train on line. When the switch is moved, the needle in the window directly above the switch will also move to the corresponding position, and this serves as a reminder to the signalman.

At the box from which direction the train will be approaching (known as the box in rear), the needle in the top window will also move, and this confirms to the signalman there the state of the line. The sequence of events to signal a train over one section of line between two signal boxes would go as follows. The signalman at the box in rear would use the bell to first of all call attention of the signalman at the box in advance. Once this had been acknowledged, he would then send a code of bell rings to ask if the line was clear for a specific type of train. Providing the signalman at the box in advance was able to accept the train, he would acknowledge the bell code, and move the switch on his block instrument from the 'normal' position to the 'line clear' position. Once the train passes the signal box in rear, into the section, the signalman there would send a 'train entering section' bell code to the box in advance. The signalman there would again acknowledge this bell code, and move the block instrument switch from 'line clear' to 'train on line'. Once the train had passed the box in advance, the signalman there would send a 'train out of section' bell code to his colleague in the box in rear, and place the block indicator switch back to 'normal', ready to accept the next train. This procedure would, of course, be repeated from box to box. As an added safety precaution, most boxes were unable to clear their signals to allow a train to proceed into a section until they had received a 'line clear' on their block instrument from the box in advance. These are just the basics of absolute block working, and were covered in the first week or two of my course. Subsequent weeks have covered some of the more obscure bell codes used for things like: - blocking back inside home, shunting into forward section and working in wrong direction.

Other topics covered have taught me how to open or close a signal box. Apparently it involves more than opening/closing the door and turning the key! How to deal with SPADS (signals passed at danger – very topical), and how to deal with emergency situations. Clearing points – very important; unfortunately they have a habit of moving, depending on what the weather is doing, and what type of distant signal is being used. Also bridge strikes, obstruction of lines, defective equipment, engineering works, single line working, AWS (automatic warning system), ATPS (automatic train protection system) and much more besides. And to make sure that all of this was sinking in, six exams throughout the last eight weeks; with a 70% pass mark, just to keep the level of pressure up. Fail any of the exams and I would be out of a job!

This photograph shows the inside of the signal box at Snodland. Some of my training has been taking place here to allow me to put into practice the things I have been learning on my course. Above the levers on the right is the instrument shelf. On the left of this is the block instrument, which is a different design to the British Railways one depicted above, and which has a bell separated from the main instrument. Apparently this design of instrument was/is quite common throughout the Southern Region. In the middle of the picture is the booking table. This now stands in a gap in the lever frame, which was created when several levers were removed from the box several years ago. There was a time when the box would have been in charge of a number of goods sidings, and the missing levers would have operated the points and the signals associated with these sidings. The track diagram is much simpler now, and even though there is still a couple of trailing crossovers either end of the station, these are no longer controlled by the box.

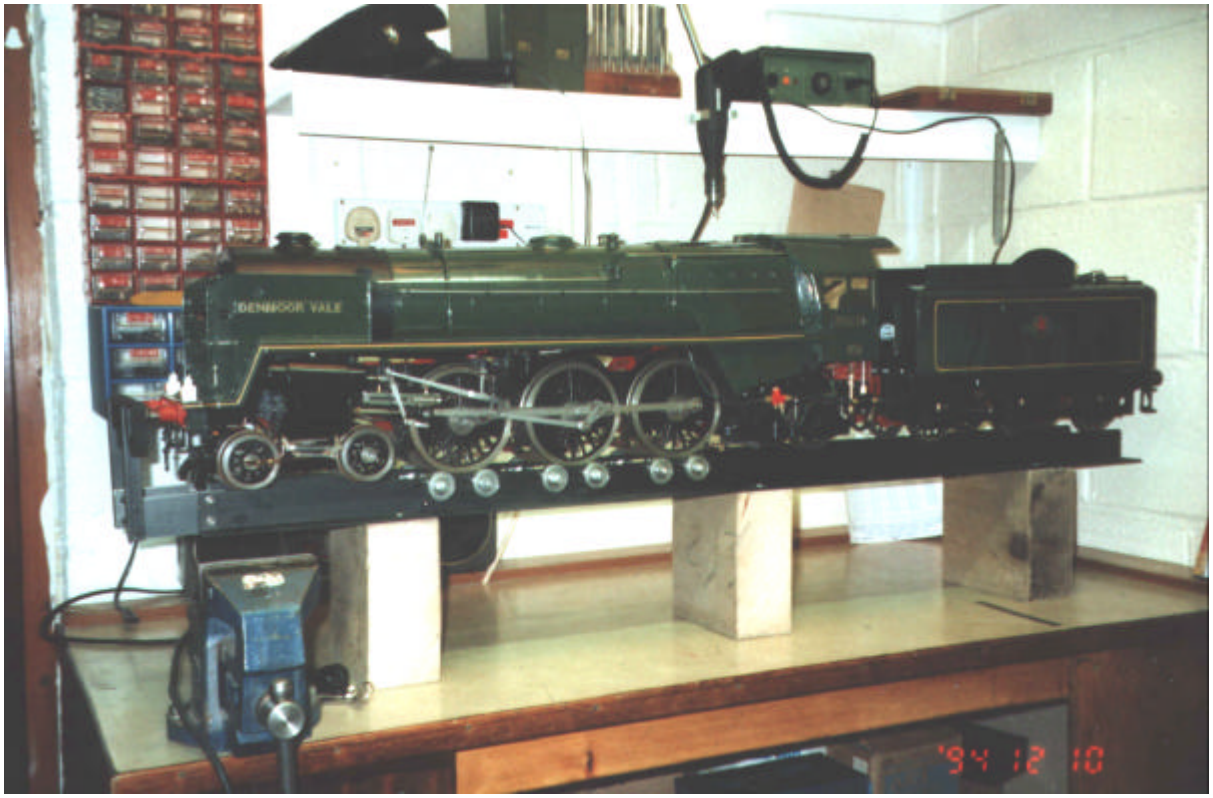
All that remains of my training at Derby now is one more week to do a track circuit conversion course. When I finish my training I will be working in the signal box at Rainham, which is in a track circuit area, and works quite differently to the manual box at Snodland. No photographs of that, but if there is sufficient interest, and Newsletter editor allowing, maybe I can do a future article outlining some of the differences between a manual box and a track circuit box.

Derek Waldron 3rd March 2002.

A HOME TEST BED by Dennis Mortimer

I live 35 minutes from my club and find it frustrating to set steam up only to find that I have not cured the latest problem.

The result – a Home Test Bed. Place on garden path or bench and raise steam. Away you go!



The above photo shows a 3 ½" Pacific under test on the object described. The first requirement is to purchase twelve identical roller bearings. Size is not critical though diameter should be common to all. Also required are two identical angle iron (pity old bedsteads are in short supply!), steel tubing, maybe second hand conduit – plus some steel studding. To suit bearings plus nuts to suit (B & Q or Texas). Important points are secure anchorage fore and aft (your loco may have an unexpected kick). If you use correctly profiled wheels there will be no problem.

The method of using ball races is as follows:
Find bore size of rollers. Turn threaded studs from studding to bore size of roller less .010" for loctite. Drill through center to suit your coach bolts with clearance drill. Turn plugs on bore diameter to one sixteenth longer than thickness of ball race and a thou or so smaller in diameter to allow for loctite. Drill through center to allow for your coach bolts.

To assemble place roller bearings on two strips of .010 shim on a flat surface and allow to set. The slots in the angle iron are made to the same width as the square heads on your coach bolts. Make the length of the slots to suit your own wheel arrangement.

This is the basis of a scheme that is adaptive. Setting it up on raising blocks allows for the borrowing of the bathroom cabinet mirror to view what is happening underneath. Its use at home should save some miles.

Copy of newspaper article sent in by Marie Hawkins:

ROUND LIKE A SHOT *by Tony Gladstone*

Going to bed the other night, I noticed people in my shed stealing things. I phoned the police but was told no one was in the area to help. They said they would send someone over as soon as possible. I hung up. A minute later I rang again. 'Hello,' I said, 'I called you a minute ago because there were people in my shed. You don't have to hurry now because I've shot them.' Within minutes there were half a dozen police cars in the area, plus helicopters and an armed response unit. They caught the burglars red-handed. One of the officers said: 'I thought you said you'd shot them.' To which I replied: 'I thought you said there was no one available.'

NEW MEMBER

We welcome John Linkins as a Junior Member; he is a student from Ashford pictured here with dad Richard and grandfather Ken (also MMES members) outside granddad Ken's workshop. It's nice to see a family tradition being carried on – perhaps his younger brother Alex may want to join in time as well!

(Thanks for picture provided by mum Dorothy Linkins)

ENTERPRISE - THE CLUB LOCO

Reminder to everyone using the engine: If you are the one cleaning it down after a run, please do this properly, with a paraffin wash out and dry.

RUNNING YOUR LOCOMOTIVE

Please remember to write in the Running Log whenever you run at the Park, to take care, be alert, and remember safety of you and others is of paramount importance. Keep an eye on the track at all times.

OUTINGS ANYONE?

If you are interested in a steam train outing on the Cathedrals Express, or in a coach trip to the Midlands Exhibition in October, then please let me Sue know. Unless I have about two dozen people interested, it's not worth arranging anything. Unless *you* want to arrange visits, of course…

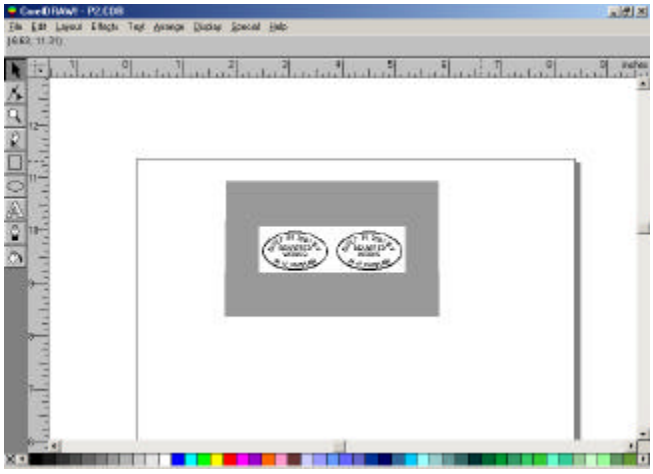
NAMEPLATES by Martin Parham

It is nearly 30 years since I described in this newsletter the process I used to produce etched brass nameplates. I thought it was probably about time that I wrote again to describe how the process has evolved over the years with the aid of modern technology. At that time I used rub-on lettering and lines put directly onto the brass sheet, which was then placed into the dish of Ferric Chloride to etch the area away around the letters.

Since then, the process has been greatly improved by the use of a computer to produce the image to be etched; however this does involve a lot more equipment. All the materials used can be easily obtained from electronic component suppliers such as Maplins, and are sold for the production of printed circuit boards.

The main items required are: A UV light box, a spray can of positive photoresist, some developer, etching chemicals, a measuring cylinder and thermometer, plastic dishes and rubber gloves and of course, a computer, printer and transparency paper. If you have all of that, the rest is easy.

To start with, the image of the plate has to be produced as a transparency. This can be done on a PC using any of the desktop publishing programs currently available. I tend to use "Corel Draw"



as this program allows text to be flowed to any shape and is ideal for laying out curved plates or oval works plates. With the thousands of text fonts available on a PC, it is easy to find one that is a match for the lettering required. Generally, I draw the plate at full size, although it can be drawn larger and scaled down to the required size at the printing stage.

Another option for a more complicated plate is to take a digital photograph of the original full size plate where possible and convert the image, using photo-editing software to a clear black and white image and scale this to the size of the required plate.

Having created the image of one plate on screen, it is copied alongside for as many plates that are to be produced, leaving about 1/8" between each plate for cutting. The layout of plates is then surrounded by large areas of solid black, again leaving about 1/8" for cutting. This will prevent large areas around the plates from being etched unnecessarily.

Print out a copy of the image on paper to check for size and make sure that you are happy with the layout. Then print onto a piece of transparent film such as used for producing overhead projector images. I use a laser printer with the setting on the darkest image,

however it can be printed using an inkjet printer set to the darkest ink setting. When the transparency is held up to the light, the dark areas should not allow light to pass through. If there is any doubt, print another and carefully stick the two sheets together. This should ensure a very dark image.

We now need to prepare the brass plate. Cut a piece of brass sheet about ½" larger all round than the image on the transparency. Drill a hole in each corner of the plate a suitable size to grip a small plastic rawlplug. Prepare the surface of the brass to be etched by cleaning it with fine wet or dry paper. Turn the plate over and spray the back with any sort of paint to prevent it from being etched. When the back is dry, turn it over and in subdued lighting, spray it with the positive photoresist. The plate must be allowed to dry for about 12 hours in complete darkness. This time can be reduced by drying it in a warm atmosphere. The plate will now be a pale green colour.

We are now ready to expose the plate. In subdued lighting, place the transparency in the UV light box, face down. Put the brass plate, photosensitive side down onto the area of the image and close the lid of the box. Turn on the UV lights for about 4 minutes.

Mix up a developer bath of one part Sodium Hydroxide to four parts water in a suitable plastic tray. This solution must be kept at 20ºC, or it will not be effective. Take the exposed plate from the light box and put it immediately into the developer. Within seconds, the areas of the plate exposed to the light will darken revealing the image of the letters. Wearing rubber gloves, rub the image on the plate until you can see the brass shining everywhere that it has been exposed to the light. Rinse the plate immediately under running cold water to stop the development. You should now have the image of the letters in green and the background in shiny brass. If the image is not clear or is damaged, the only course of action is to clean all the resist off and start again.

From this point there is no change to the process from what I used to do 30 years ago, namely put the plate into an etching solution and leave it until it has etched the exposed areas of the brass to a suitable depth. Strong Ferric Chloride solution is still available although these days it is better to make up a solution of Sodium Persulphate, which is available in crystal form. The crystals are added at a rate of 200gm to 1 litre of water at 50ºC, which is stirred until the crystals are totally dissolved. The advantage of this solution is that it is completely colourless and slowly turns pale blue as the copper is removed from the brass plate. This makes it very much easier to see how much the plate has been etched while it is still in the solution.

Put plastic plugs in the four holes in the plate to act as legs to hold the plate off the bottom of the etching dish. Then carefully place the plate face down in the dish so that it is completely covered by the solution, tilting the plate to make sure that there are no air bubbles trapped on the face. By standing the plate face down it allows the

debris left from the etching process to fall away from the plate and gives a cleaner image. Leaving the plate face up gives a rougher surface to the etched areas but this can sometimes be useful when a more cast effect to the background is required on a larger plate.

The depth of etch required is dependant on the size of letters or thickness of lines on the plate because as soon as the surface of the brass starts to etch, it starts to eat into the sides of the letters as well causing them to be undercut. So for very small letters on a works plate, it would be best not to go much more than about 10 thou deep, but on a larger nameplate you could go to 20 thou or more. I find that if the etch bath is left on a radiator to keep it warm it will etch at a rate of about 5 thou per hour.

When you are satisfied with the depth of etch, remove the plate from the dish and wash it off in water and dry the plate. The individual nameplates can now be cut out from the plate and their edges filed to shape. When the plates are complete give them a couple of coats of spray paint and allow them to dry thoroughly. Give the tops of the letters and borders a scrape across with a steel rule to remove the paint, polish with metal polish and your plates are finished.

Do not expect to get the desired result first time. There are several variables that will affect the result: the thickness of the coating of resist, the age of the resist (it has a limited shelf life), the strength of the UV lights and the temperature of the chemicals. But if you keep trying you will achieve the desired effect.

UNDERSTANDING ENGINEERS *sent in by Dave Fenner*

Understanding Engineers – Take One
Two engineering students were walking across campus when one said, "Where did you get such a great bike?" The second engineer replied, "Well, I was walking along yesterday minding my own business when a beautiful woman rode up on this bike. She threw the bike to the ground, took off all her clothes and said, "Take what you want". The second engineer nodded approvingly, "Good choice; the clothes probably wouldn't have fit".

Understanding Engineers – Take Two
To the optimist, the glass is half full. To the pessimist, the glass is half empty. To the engineer, the glass is twice as big as it needs to be.

Understanding Engineers – Take Three
A vicar, a doctor and an engineer were waiting one morning for a particularly slow group of golfers. The engineer fumed, "What's with these guys? We must have been waiting fifteen minutes!" The doctor chimed in, "I don't know, but I've never seen such ineptitude!" The vicar said, "Here comes the greens keeper. Let's have a word with him". (Dramatic pause.) "Hi George, what's with that group ahead of us? They're rather slow aren't they?" The greens keeper replied, "Oh yes, that's a group of blind fire fighters. They lost their sight saving our clubhouse from a fire last year, so we always let them play for free anytime". The group was silent for a moment. Then the vicar said, "That is so sad. I think I will say a special prayer for them tonight". The doctor said, "Good idea. I'm going to contact my ophthalmologist friend and see if there is anything he can do for them". The engineer said, "Why can't these guys play at night?"

Understanding Engineers – Take Four
There was an engineer who had an exceptional gift for fixing things all mechanical. After serving his company loyally for over thirty years, he happily retired. Several years later the company contacted him regarding a seemingly impossible problem they were having with one of their multi-million dollar machines. They had tried everything and everyone else to get the machine to work to no avail. In desperation, they called on the retired engineer who had solved so many of their problems in the past. The engineer reluctantly took the challenge. He spent a day studying the huge machine. At the end of the day, he marked a small "x" in chalk on a particular component of the machine and stated, "This is where your problem is". The part was replaced and the machine worked perfectly again. The company received a bill for $50,000 from the engineer for his service. They demanded an itemised account of his charges. The engineer responded briefly: One chalk mark $1. Knowing where to put it $49,999. It was paid in full and the engineer returned to his peaceful retirement.

Understanding Engineers – Take Five
What is the difference between a Mechanical Engineer and a Civil Engineer? Mechanical engineers build weapons. Civil Engineers build targets.

Understanding Engineers – Take Six
Normal people believe that if it aint broke, don't fix it. Engineers believe that if it aint broke, it don't have enough features yet.

Understanding Engineers – Take Seven
An engineer was crossing a road one day when a frog called out to him and said, "If you kiss me, I'll turn into a beautiful princess". He bent over, picked up the frog and put it into his pocket. The frog spoke up again and said, "If you kiss me and turn me back into a beautiful princess, I will stay with you for one week". The engineer took the frog out of his pocket, smiled at it and returned it to his pocket. The frog then cried out, "If you kiss me and turn me back into a princess, I'll stay with you and do ANYTHING you want". Again the engineer took the frog out, smiled, and put it back into his pocket. Finally, the frog asked, "What is the matter? I've told you I'm a beautiful princess, and that I'll stay with you and do anything you want. Why won't you kiss me?" The engineer said, "Look, I'm an engineer. I don't have time for a girlfriend right now, but a talking frog, that's great".

Another year, very much the same as previous years. The Wednesday afternoon playtimes are thriving and Sunday running remains as popular as ever with the public, but, as always, we are at the mercy of our "English Weather'

As you will note from the treasurers report, the takings from the track were down. This was due to some rainy days during the summer but particularly to several Sundays of abysmal weather at the end of the season.

A major expense was the replacement of the clubroom roof. The old felt roof had leaked and brought down part of the trolley store ceiling. The new roof, which is glass fibre and has a longer life span than felt, was completed in the fine weather just before Christmas. The work to remove the remaining damage and replace the ceiling will be ongoing.

Completion of the track replacement was accomplished by the start of the running season in March 2001 and this winter we have been busy casting and replacing new beams. It will be necessary to continue with this in winters to come.

As you know, from the autumn 2001 newsletter, the idea for a new trolley store, incorporating a gauge one track on top, is under discussion and would be, of course, dependant on council approval. Gauge one is becoming more popular and hopefully will encourage new and younger members into our club.

Last season saw a good number of engines running on most Sundays but disappointingly, out of a membership of ninety-three, we had problems manning the station. It is necessary to have someone taking the money and someone to supervise the loading. Without station staff we cannot run the service and without the service there is no revenue.

Thanks go to all who helped throughout the year and we look forward to a successful new season.

Geoff Riddles
March 2002.