

WESSEX STATIONARY ENGINE CLUB



NEWSLETTER

APRIL 1988

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THE COACH TRIP TO LONDON

As we stumbled from our beds it was realised that the members picked up at Bath were already on the coach! Quite the reverse of the trip to the Black Country Museum which meant a 5.00 a.m. start for us.

The trip was uneventful, the usual crowded stop at Membury Services, queues, and extortionate prices. Unless of course you are Klas, Brian, Audrey and Phil who headed into the restaurant which was clearly marked NO COACHES. A very good idea until Phil asked the waitress to hurry 'as we've a coach to catch'. Oops!! Brian was 'eggstra' lucky to have scrambled egg-shell for his breakfast.

The traffic was fine - until it stopped; then it didn't really start again. We seemed to queue from the M25 on in to London. In an optimistic mood we had previously agreed to meet Mum and Jenny who were coming by train from Cambridge - 'no problem' - (except perhaps the **really** extortionate prices and the rude and offhand staff, to say nothing of the sheer boredom... Ed.) in Trafalgar Square at roughly 10.30 a.m. We reached the Natural History Museum and the Driver said 'All out'. He meant it too, even he had enough of the traffic! We eventually arrived at Trafalgar Square at mid-day, by tube, then back onto the tube again.

We had agreed when we met, to 'do' St. Paul's, a brisk walk along the Embankment and up the Dome to the Whispering Gallery, which was full of people each trying to whisper louder than the person next to them. Andy, Mum and Jenny (my future sister-in-law) don't like heights and would not venture higher. Laura, Clare and I wanted to go on up. Chris thought about it and then decided he would keep Granny company. When we had completed our ascent, the panorama of London was fantastic, sadly my camera was inadequate. We then visited Covent Garden via Fleet Street and recited 'Oranges & Lemons' as we passed by the church of St. Clements. Covent Garden consists of a wonderful (and expensive!) array of stalls, shops, buskers, drunks and a flower-girl in period costume. The London Transport Museum was very interesting and nicely laid out.

Back to the awaiting coach to ease my throbbing feet; London's pavements are so hard...! We had enjoyed a good day and, from the general conversation, so had many others. Tales were exchanged of visits to Buckingham Palace (but no tea), Portobello Road, Soho, Westminster, etc. Harrods seemed to crop up again and again in the ensuing conversations. Bob Hallam bought a Harrods Mug and a pork pie; he found that Harrods doughnuts with custard to be cheaper than those at Membury Services....! and better. (Not even available on Inter-City and if they were, the price doesn't bear thinking about....Ed)

The journey home was slightly quieter, some people slept and relaxed as the darkness came down. Robin and Jackie, the Gay family, Paul, Audrey, Phil, Klas and Brian, the Raymonds and many others whose names elude me. Roy and Carol were nearly eaten alive by a passionate little William Rogers, does he take after Christine or Don?

The WSEC has greatly improved its education after our 'cultural trip' to the Capital; for visits I love it - but to live there? No Chance!

Shirley Gale

REPAIRING GEARS (part three)

Degrease both the slot and the dovetail peg with solvent and apply 'Loctite High Strength Retainer' to both parts. Assemble the blank into the slot, tap home and leave for 15 minutes at least. Gentle heat from a 100 watt lamp will speed up the setting time.

Once the adhesive has set, the sides of the blank may be trimmed with a hack-saw and filed to

2. conform to the width of the gear. The top of the blank may be similarly profiled to match the height of the adjacent teeth. Bend a steel rule around the teeth circumference to include the new tooth and look for a good match with no gaps under the rule.

Make a template of the tooth gap, using the gear to mark out a piece of scrap sheet and filing to a good fit between two original teeth. Remember, if the gear is worn, your new tooth will have to be made 'worn' to match. Clean and apply marking fluid to both sides of the gear in the area of the new tooth and also adjacent teeth. Mark the tooth centres of the two teeth each side of the new one and, using dividers, transfer this dimension to the new tooth blank both at the outer circumference and at the root of the tooth. Also mark off the tooth width about the centre line at these points. Repeat for the other side of the gear and mark off the tooth width across the top of the blank. The marking out process is a bit empirical; it is a question of measuring several of the original tooth pitches and thus obtaining an average dimension to mark-out the new tooth, Hack-saw away the surplus material from the blank to obtain the rough tooth form. Keep well outside the line when doing this as your marking out will only be an approximation.

Having got somewhere near the final tooth shape by using the previously made tooth gap template, it is again a question of gently filing and checking the gear meshes with its partner by looking at the tooth shape compared with the originals. The final fitting is best done with the gear fitted in its working position by revolving the mechanism at the repaired portion and checking for tight spots. Inspect the mesh to see that the new gear is taking up the drive at the same mesh position as its partners. This can be done by inserting a strip of paper between the teeth and feeling when it becomes trapped. Also check the face of the teeth for high spots which will show up as a rub mark after a few turns of the shaft; application of 'engineers blue' will assist this operation and final fitting can best be done with a flat swiss file using extreme caution.

If disaster strikes and you fail to attain the correct tooth shape, start again by removing the new tooth but don't bash it out in one go. This may damage the slot or, even worse, the gear. Make a series of small hack-saw cuts through the tooth and remove it in much the same way as cutting the original dovetail slot. (See Figure 2 attached).

A LOT OF HOT AIR

One cold Wednesday, early in March, I spent several hours in the library of Wells Journal, searching through a decade of weekly newspapers for information to help me with my current project on Mendip Motors. It turned out to be almost a total waste of a day, but two articles, neither related to the subject in hand, caught my attention, and one of them I reproduce there as an indication of what might (or indeed, might not) have been the state of the engine world today. Here then is the news as reported in the Somerset & West of England Advertiser on March 29th 1906.

RIVAL TO STEAM AND ELECTRICITY

A 'triple economic air engine', it is reported, threatens to revolutionise all those industries which depend on steam, gas or electricity for their motive power. The patentee of this engine, Mr. Thomas Marsden of Wigan, Lancashire, claims for it that it will practically abolish the use of coal or other fuel, gas, water, electricity, or oil for locomotive work.

The invention, an air engine, consists of an economic cylinder, more powerful than any other type of cylinder of equal diameter, and with two or more boilers filled with compressed air up to the pressure required in each boiler, the economic cylinder, says the inventor, will keep up the pressure of air, perpetually, if required, if once set to work, without a farthing cost for fuel. Besides all this, the life of the engine will be almost eternal, for the wear and tear of steam boilers, with their continued changes of temperature, and constant rents and cracks, will be avoided.

Unfortunately for Mr. Marsden, and the rest of the world, his 'economic air engine' did not work! What he appears to have invented was yet another kind of perpetual motion device which, since it was designed to generate more energy than it consumed, violated the laws of conservation of energy and was doomed to failure. Just as well, really, otherwise there would be no stationary engines, no Stationary Engine Magazine, no Club and this Newsletter would not be here to tell the tale!

Tom Randall

MONTHLY CLUB MEETING - March 28th

This report is being written whilst sat on a sun-lounger in my short-sleeves whilst exhibiting my fair-organ at the Gloucester County Show at Staverton Airport on Easter Sunday. A very good show, considering it was their first one. Anyway, back to the meeting report. It was gratifying to see such a good crowd of Club members to listen to my pal, and one of our own Club members, Roger Kempson, give a talk on musical boxes. He brought along about 10 boxes and a large Polyphon.

He gave us a brief history of the Musical Box which was first made around 1830 and then played each box explaining that the earliest boxes had plain rosewood cases and the later ones had elaborately designed ones. One of the later ones even had a small drum and a set of bells on; the

trouble being that these additions rather overpowered the musical box itself. (We all know that there is nothing new - sounds like modern day Pop music.....Ed.).

Roger went on to explain that the coming of the Polyphon finally killed off the musical box. The Polyphon was put into pubs and bars and was worked by putting a penny in the slot which turned the disc around. Of course, there could be plenty of discs to select, not like the musical box which only had six tunes in the barrel. Roger said that he had rebuilt all his boxes which meant that he has had to put 16,000 pins in each barrel. (See this month's cartoon on the back of this Newsletter...). Just think that years ago very young children were employed to put all these pins in by candlelight.

After Roger had finished there were many questions from our members and after thanking him for his interesting talk, Herb held his raffle. Ray Earle, our next month's speaker, won some wine (as throat lubricant for next month???), young William Rogers won the Easter Egg, Dot Watts won the place mats, and a certain clean-minded member won the hand-cleaner, sorry but I forgot his name! The remainder of the evening was spent with a good general 'chin-wag'. Well, now I suppose I had better hoist myself out from my chair and start the Punch & Judy Show; hopefully someone else will do a write-up of the show itself.

Brian Munt

PS. I dare anyone to ask Brian Verrall what happened to his engine at this show!!

LETTER TO THE EDITOR (Plus a few observations from a rallyfield veteran)

Through the medium of this Newsletter, I would like to thank the Club and the Committee for the gift of books presented to me at the Annual General Meeting. It was a most generous and kind gesture and one which will give me hours of reading pleasure. I enjoyed my time on the Committee - must have spent nearly 10 years on it - and although there may have seemed times of disharmony in the distant past, this Club has always pulled together with one accord. That is why I believe that the Wessex Stationary Engine Club is one of the top Clubs in the country. No one cares whether one has a Lister D or a Lenoir, a Petter A1 or a Priestman or even whether the Chairman has an engine at all, or not, as the case may be! We all have one common aim, that is, the gathering and sharing of knowledge of the Stationary Engine in all its forms.

Now we all know about helping each other and helping the Club, but how many of us ever consider the image we present to the public at large on the rallyfields? Why is it that we are sometimes tucked away in a corner, far from the main events, or numbers of entries severely restricted - or simply not even made welcome at all. Up to a point we have only ourselves to blame. Over the years I have observed people at rallies and it is interesting that even the most rare and best restored engines are hardly given a second glance if there is no information board with them; whereas people will stop and inspect even the most common engine if there is some explanation of how it works, where it worked, condition when found, etc.etc. It is little wonder that we end up the poor cousins on the rallyfield, if we don't spend a little time displaying our exhibits with pride and care. It is good to see more machinery being displayed with engines - this not only makes it more interesting for the (generally) uninitiated public but it is better for the engines as well. But here too, a word of caution - no more coloured and often frothy water!

I hope to get to at least one or two rallies this year, though possibly not with an engine, and shall look forward to seeing some of you at the Bath Festival of Steam on June 25/26. Yes, I know it's the same week as Tatton Park. I still have some entry forms for Bath so please drop me a line if you want one. My address is Conifer Cottage, Northend, Batheaston, Bath or telephone me on Bath 859536.

Michael Cannon

Editor's Note - whilst on the subject of information boards, so many such boards carry blatant spelling mistakes. If you can't spell PARAFFIN try writing KEROSENE, it is more technically correct anyway. Mis-spelt engine makes always baffle me; there it is, cast into the engine or at least on the nameplate. How often do we see STUART mis-spelt as STEWART (a rare engine indeed in the UK!) or OR RUSHTON HORNSBY (sic) or most commonly WOLSEY instead of WOLSELEY. Wolsey make gents supportive underwear and socks, not much use at sheepshearing time. Another common one is DIESEL often mis-spelt DEISEL and other alternatives. Why not write 'compression ignition' for accuracy or 'gas oil' for the fuel if you are not sure. I've yet to see FOWLER spelt FLOWER but I keep looking because I'm certain one day....!! Worst of all in my book are those who, despite being told many times, write FAIRBANKS when they mean FAIRBANKS, MORSE. Try and remember, Fairbanks never ever made an engine. Fairbanks, Morse have made tens of thousands and are still manufacturing them. Fairbanks were merely a firm who marketed other firms manufactured goods, among them some of the 'Bulldog' engines made by Bates & Edmonds.

The other common mis-spelling, seen so many, many times is CONCORD or even CONCORDE for the high-revving little French engines made by Bernard and sold by CONORD to fit the British horse-drawn Bamlett mower. Super little engine, well made and revs its guts out for a couple of horsepower. but they won't get off the ground let alone reach Mach 2.5...!

Time I stopped; why don't YOU, yes YOU, write something for a change....!

4.
WANTED

Piston rings for Villiers two-stroke engine, approx. 49mm bore

Coventry Climax engined fire pump, approx. 2" outlet. Preferably in good order but would consider something restorable. Has anyone any information as to the whereabouts of one of these units? Contact Simon Witts, Bitton Railway Preservation Group. Tel. Bath 331778.

BSA 120 cc s/v engine for my Howard rotovator. Desperate for such an engine in working condition. Will exchange for brand new garden spade, comfortable to lean on...! Eric Brain, 5 Greenridge, Clutton, Nr. Bristol. Tel 0761 52633.

Material for this Newsletter by desperate Newsletter Editor who is considering taking up gardening or something as an alternative and more fruitful hobby. Rally reports, new restoration projects, new engine discoveries, adverts, helpful hints, anything please, soon as possible for **YOUR Newsletter**. Eric Brain. Address as above

FOR SALE

Villiers engined rotary mower, age unknown, first offer accepted. Joe Cole, Fernwell Cottage, High Street, Wanstrow, Shepton Mallet, Som. Tel. Upton Noble 435.

FORTHCOMING EVENTS

June 4 Bradford-on-Avon Hospital Fete

June 25 Southwick & North Bradley Scouts Fete held at Southwick.

Both these events would like some engine entries in aid of their respective worthy causes so if you would like to come along and give your support contact Tony Jones, 121 Marston Lane, Frome, Som. Tel. 65189.

June 25/26 Tatton Park Vintage Rally. Just one mile from the M6 Knutsford exit Junc.19 and a super weekend, even if you consider it to be too far to transport an engine. Just pay a visit, you will not be disappointed.

July 30/31 Rushmore Steam & Vintage Rally, Aldershot, Hants. Entries close on May 12, so hurry and send SAE for entry form to Patrick Knight, TCSPS Ltd., 10 Upper Elms Road, Aldershot GU11 3ET.

Spt.3 Wellow Country Fair & Flower Show, near Bath. Relaxing atmosphere in this delightful village, camping facilities and brass entry plaques. Contact Lois Gumm, Windy Ridge, Wellow, Bath, Som. Tel. Coombe Down 83540.

Sept.10/11 Yesterday's Farming, Pucklington, Ilminster, Som. SAE to Brian Crudge, 22 Stoke Road, Taunton, Som.

CLUB EVENTS

May 14/15 Bristol Docks Rally in the heart of Bristol's historic Dockland just off the City Centre. Contact Tom Randall, Welton Hill Cottage, West Road, Welton, Midsomer Norton, Bath, Som. Tel. 418926.

May 23 Engine Slide Show by Philip Thornton-Evison who is responsible for many of the excellent quality photographs in 'The Stationary Engine'.
NOTE: This is not the last Monday in the month due to the Bank Holiday.

June 18/19 Annual WSEC Rally, again at Cheddar Football Ground, just out of Cheddar on the main A371 Wells Road. Entries to Mrs. S. Gale, 18 Church Lane, North Bradley, Trowbridge, Wilts. sae please.

June 27 Club Evening 'Crank-Up' at the Old Down Inn, Emborough. A mini-rally so bring an engine, the more the merrier. This has been a very popular event over the past years; what better way to spend a summer evening.

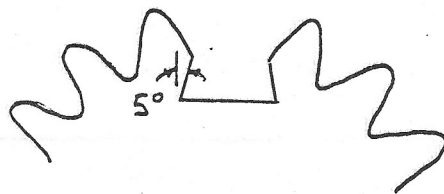


Fig 4 Open out slot sides to a 5 degree taper

w dimension should
be wider than
gear wheel being
repaired

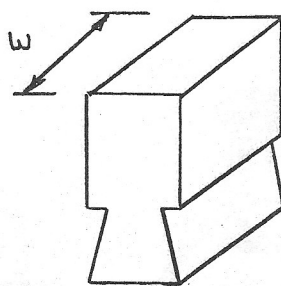
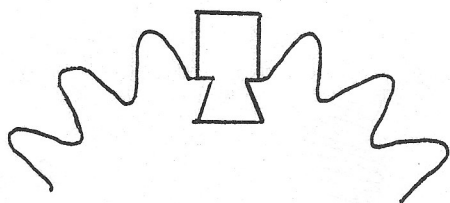


Fig 5 tooth blank



top view

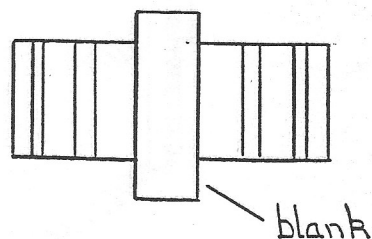
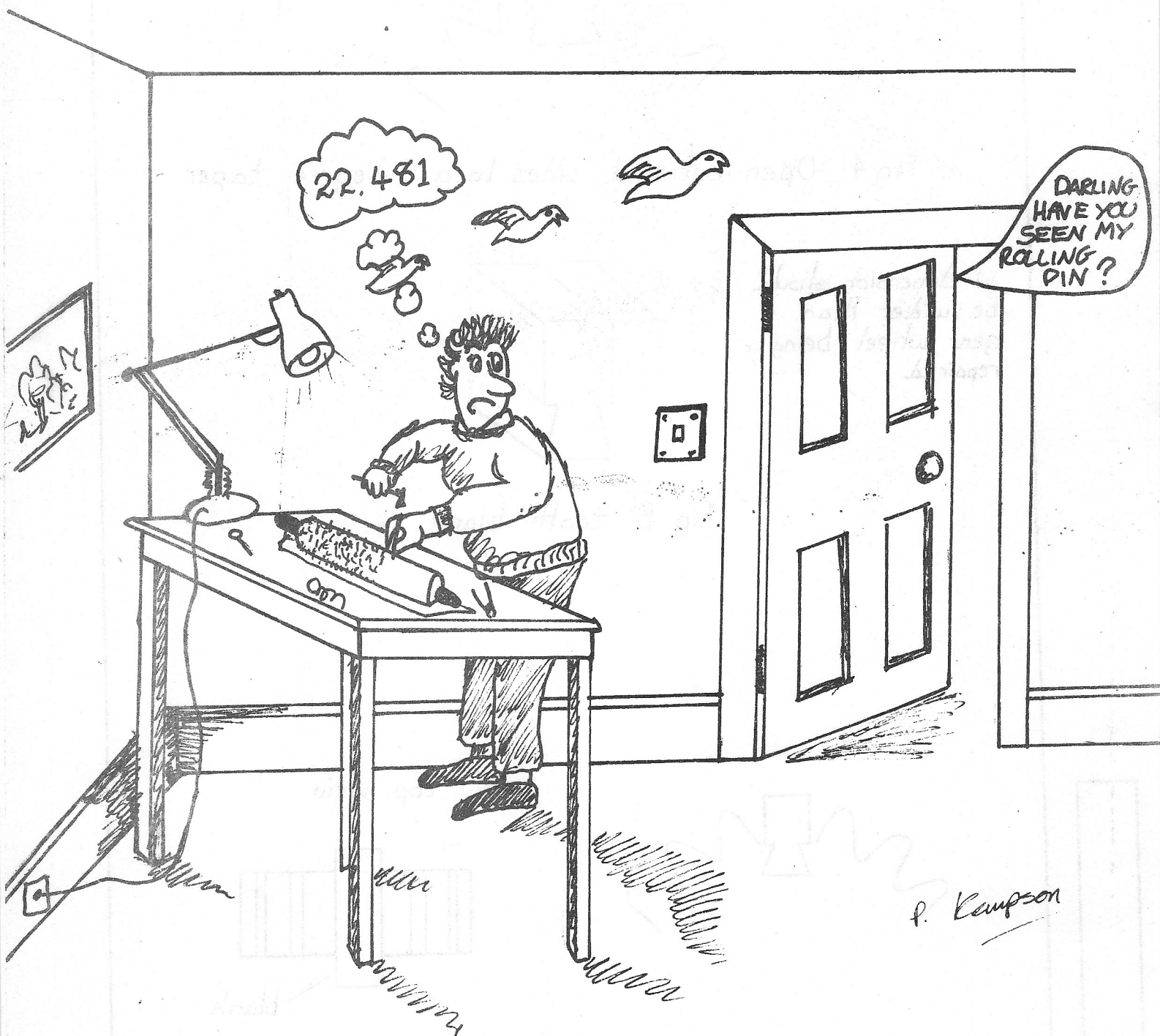


Fig 6 Tooth blank fitted into gear wheel

AND FINALLY.....

The cartoon on the back of the March Newsletter seems to have started a trend. This month's cartoon was kindly supplied by Philip Kempson, vis-a-vis his Dad's interesting talk on Musical boxes at the March Club meeting.....



P. Kempson