

**NORWICH & DISTRICT SOCIETY OF MODEL ENGINEERS**

Founded 1933

Incorporated 1967

**EATON PARK MINIATURE RAILWAY**

# ***e*-BULLETIN**

**Nov20-Jan21 - Winter**

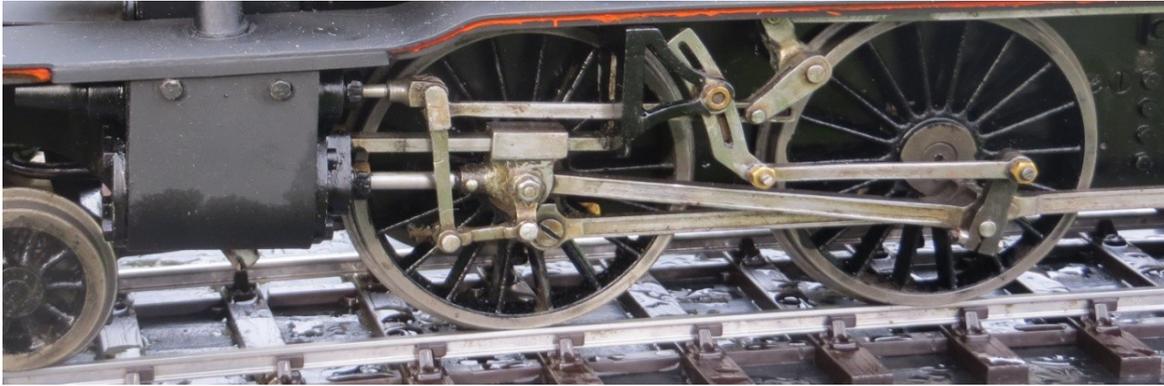


***March Hare – a member's V2***

## Cover story

### *March Hare.* A V2 in 1/32 scale, by David Beeken

Having built an 0-6-0 loco as an introduction to Gauge 1, I then chose to build a 'V2' Green Arrow, mainly because I had never built a locomotive with Walschaerts valve gear before.



I started in 2013 and soon realised that it was going to be some time before it was completed so I decided to purchase a Barrett 2P kit to give me a second engine to run. So they were built together and of course the 2P was finished first. An early decision was made to build the boiler as a meths fired type as this is what I am used to operating. The other decision was to make the job as simple as possible and purchase items that helped in the construction.



Therefore I bought the frames, the wheels and cylinder castings. The drive wheels were machined by the supplier with square axle ends and square wheel centres so as to make quartering easy.

All the valve links and coupling rods were drawn by me on the computer and laser cut by a local engineering firm.

All worked well on air and steam tests on the bench and the first full run was in the summer of 2018 without cab and cladding and to my great surprise went very well, with a run time of 35 mins. Since then it has been run about six times before painting.

The photos were taken soon after painting was finished at the start of the Covid 19 pandemic and at the time of writing I have not run it in full colour due to lockdown.

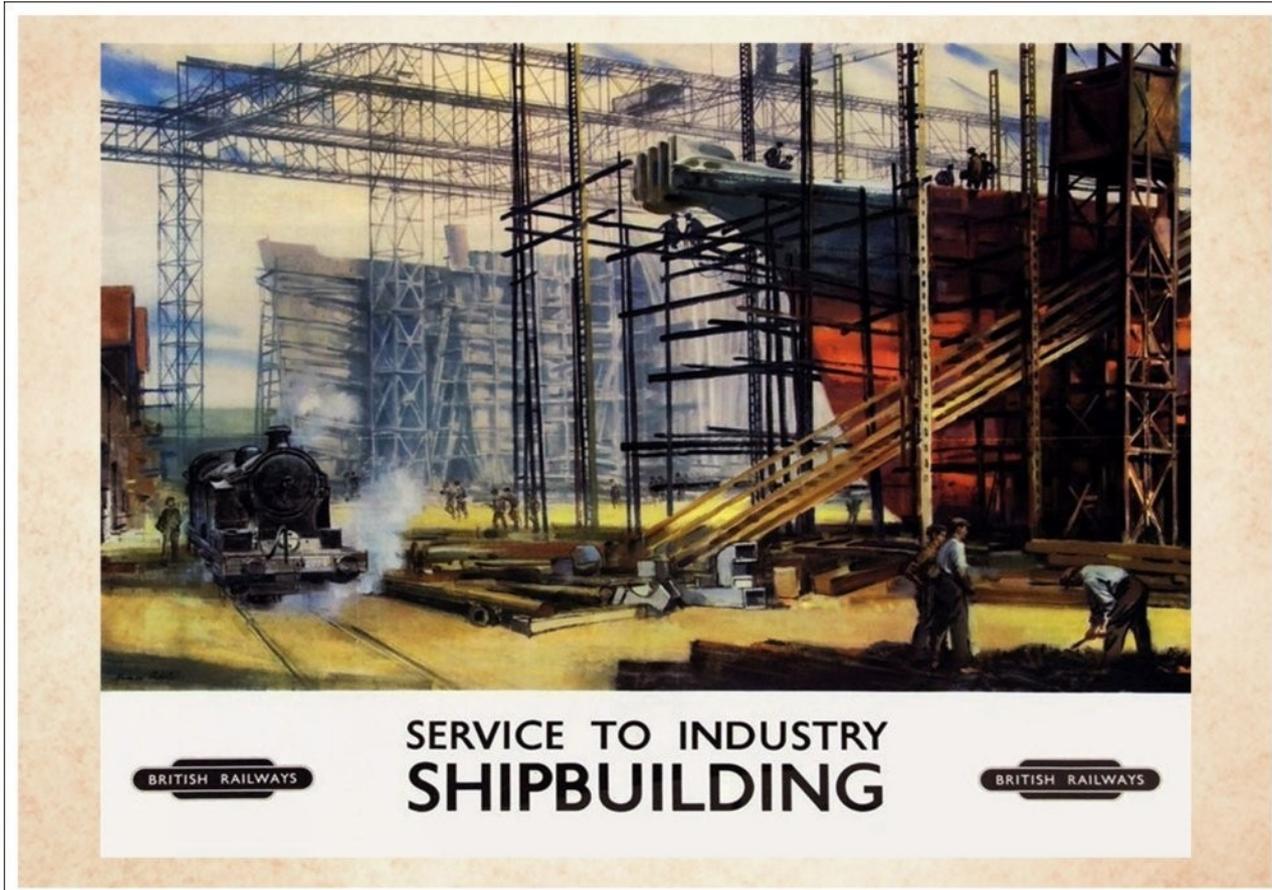
Many of you will wonder about the name, *March Hare*. I chose it because of a chance meeting a couple of years ago. I spoke to one of the Gauge 1 members who told me about the last of the V2's that were kept at March sheds. This was at the end of the steam era and the workers at the shed wrote the name on the smoke box, in the dirt. So this is my take on the story. The number may be correct as it is one of a latter V2s. The colour would have been black and it would not have had a nameplate.



**A named Gresley V2 2-6-2 in York locomotive yard.** View northward, from Leeman Road as it passed beside the ex-North Eastern York (North) Locomotive Yard, where is situated nowadays the National Railway Museum. Few of the V2s were given names, so No. 60964 '*The Durham Light Infantry*' was an exception - here looking splendidly clean.

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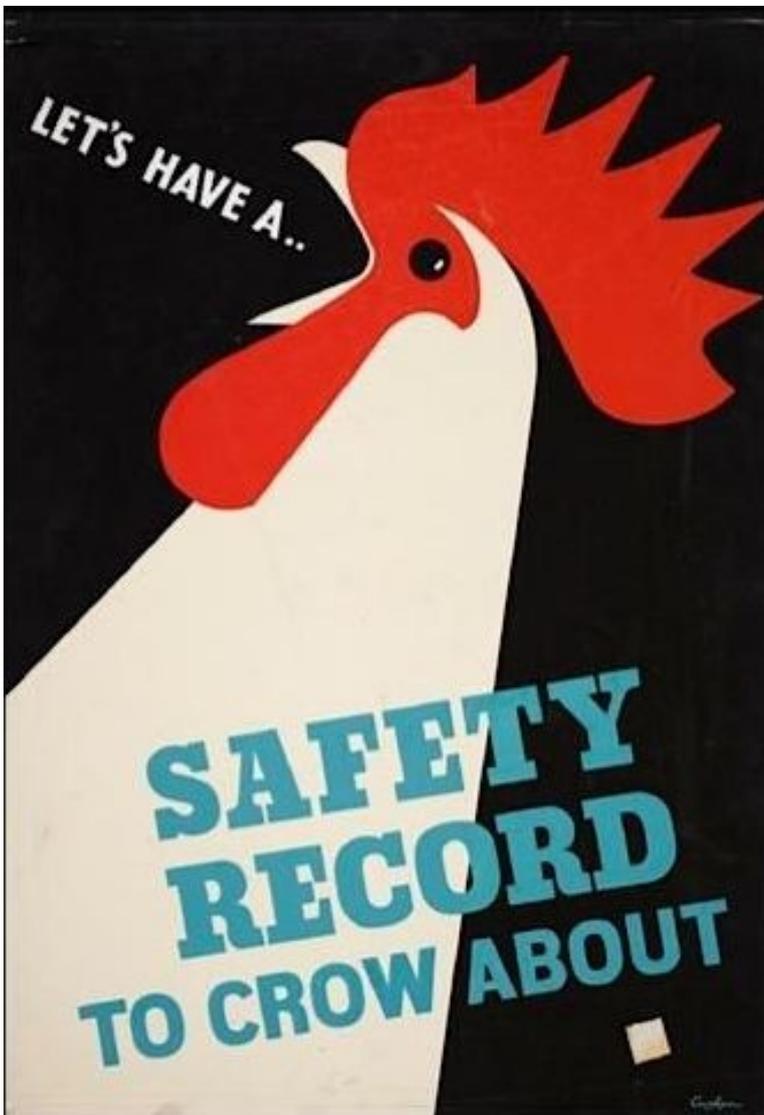
## Engineering in Art



***Service to Industry – Shipbuilding***, by Robert Hepple.

One of a series of industrial posters, titled "*Service to Industry*", produced early in the life of British Railways, to show that the recently nationalised railways could provide transport for businesses of all types in all parts of the country. The steam locomotive is included to show that the railway could come right onto the site of the industry. In this particular case the subject is Shipbuilding, and the fact that it was produced by the North Eastern Region suggests it is probably Tyneside, although it is generic enough to cover any shipbuilding in the UK at the time. This poster is one of a collection saved by a railwayman who worked at Carlisle station from the 1940s to the 1960s. The poster was never used and is in the same condition as originally received at the station for display.

**Robert Norman Hepple** RA,RP (1908–1994) was an English portrait painter, engraver and sculptor, best known for his portraits of the British royal family. He was elected a member of the Royal Society of Portrait Painters in 1948 and served as their President from 1979 to 1983. Elected as an Associate Member to the Royal Academy of Arts in 1954, Hepple became an Academician in 1961. In 1950 he designed this poster for British Railways, *Service to Industry and Shipbuilding*

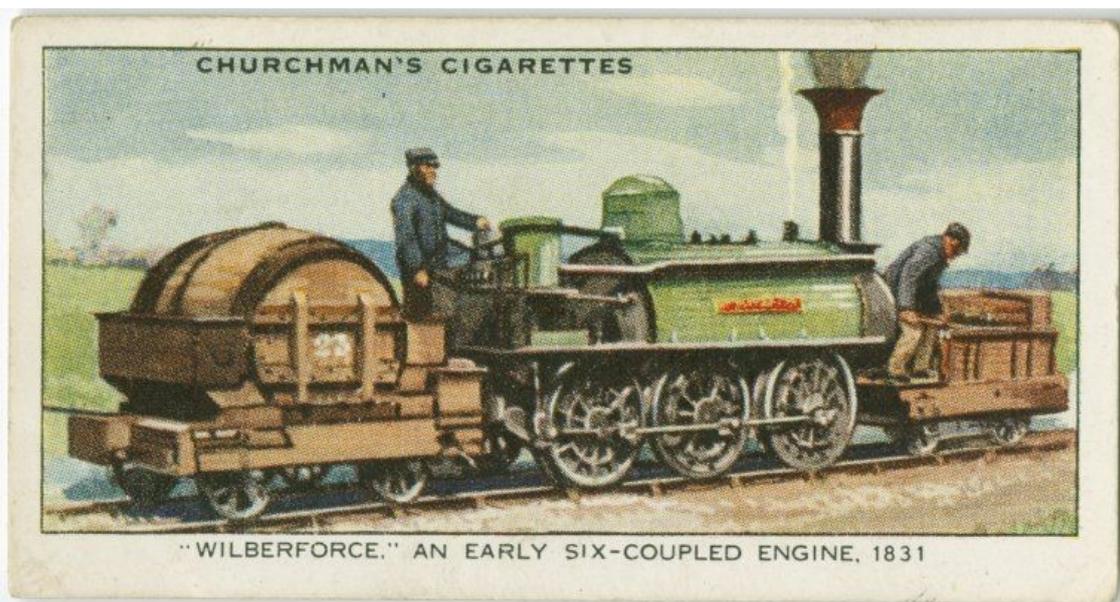


**'Let's Have a Safety Record to Crow About', Leonard Cusden, 1950s**

Leonard Cusden (1898-1979) was a British poster artist working in the 1940s and 1950s. He produced hundreds of posters for The Royal Society for The Prevention of Accidents. He also produced publicity artworks for the pre-war railways, such as *Redcar* (below)



## **The Early Days of Railways**



*Churchmans* cigarette card depicting S&DR loco No23, a Hackworth/R&W Hawthorn 0-6-0 of 1831

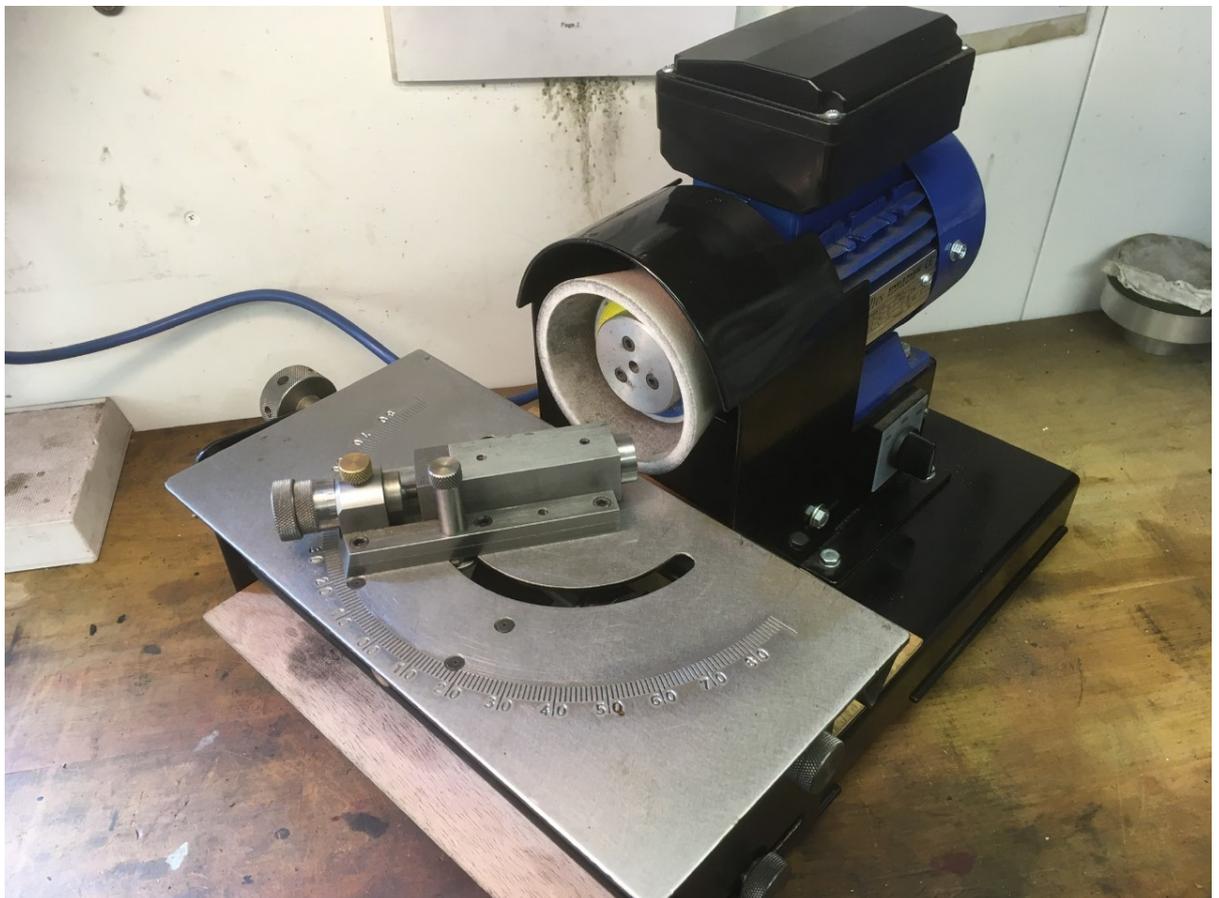
## **The Covid Diaries (Part 2)** by Pete King

or *“Things to do when I get a round tuit”*

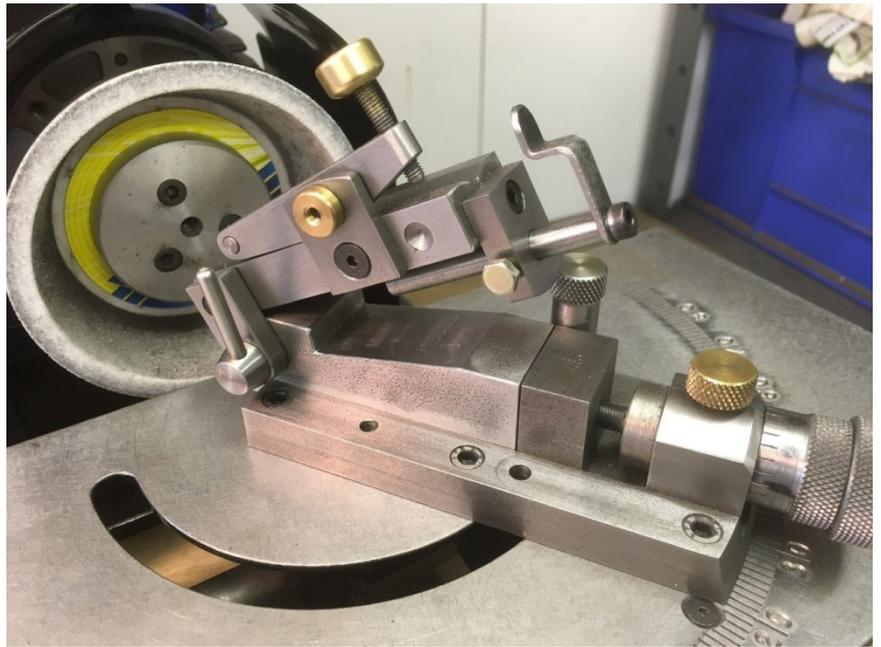
I started model engineering around 1990 when I started to build my 5” gauge Simplex locomotive. I purchased a very ancient Myford ML7 lathe and necessary tooling as I went along. The years passed and I then decided to build a 7.25” gauge Hunslet but not before I had a milling machine. I bought an elderly Centec 2B milling machine and again purchased the tooling as time progressed.

Over the years I have amassed 40 to 50 end mills and slot drills, not all purchased new, and I had always promised myself that one day I would sharpen them all to make them usable again rather than keep buying new ones. On moving up to Norfolk, 11 years ago, I purchased a Worden cutter grinder, certainly not the best tool in the world but I was determined to make a start on, at first, sharpening drills using the 4 facet method.

Worden  
cutter  
grinder s  
purchased



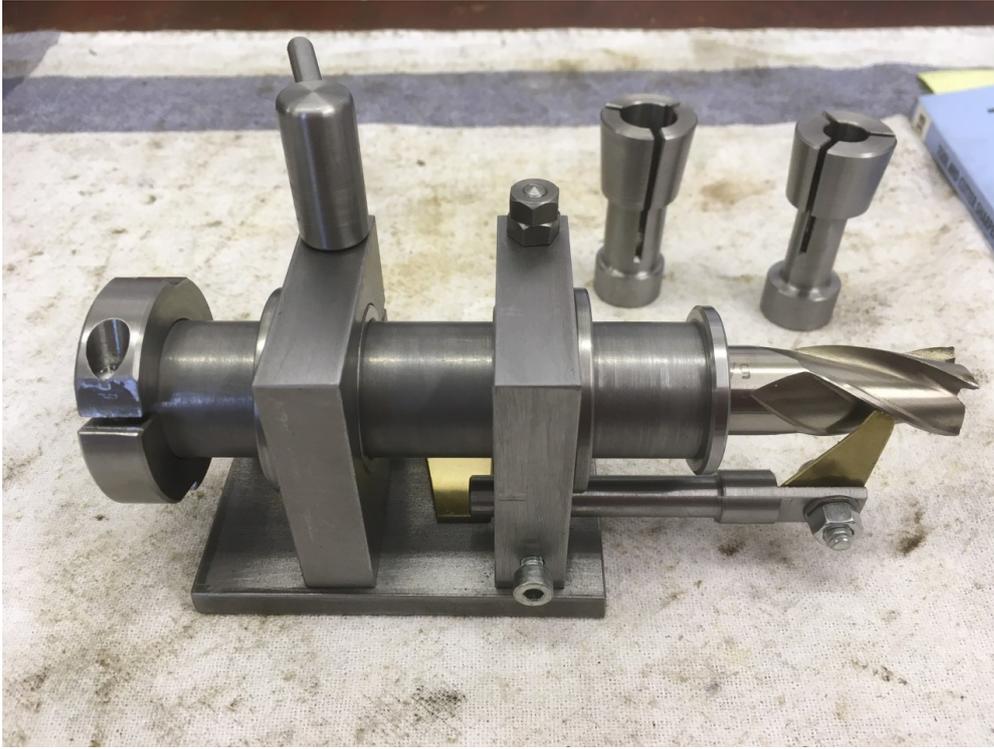
My first job was to make an attachment for holding drills and I purchased drawings from Hemingway Kits (also supply kit for the cutter grinder), sourced the material and made the jig.



It is a bit fiddly to use but with care I had a set of beautifully sharp drills and it was well worth all the effort. This was a few years ago and when lockdown came I was determined to go through a similar exercise with the milling cutters. I searched through my bookshelf which took about 2 minutes (I'm not a big reader) and took a look at "Tool and Cutter Sharpening" by Harold Hall. In the book Harold describes the making of a jig to use for holding and sharpening end mills both on their tips and side cutting edges and I thought I could adapt it to be used on my Worden.

The material was purchased and it soon started to take shape.



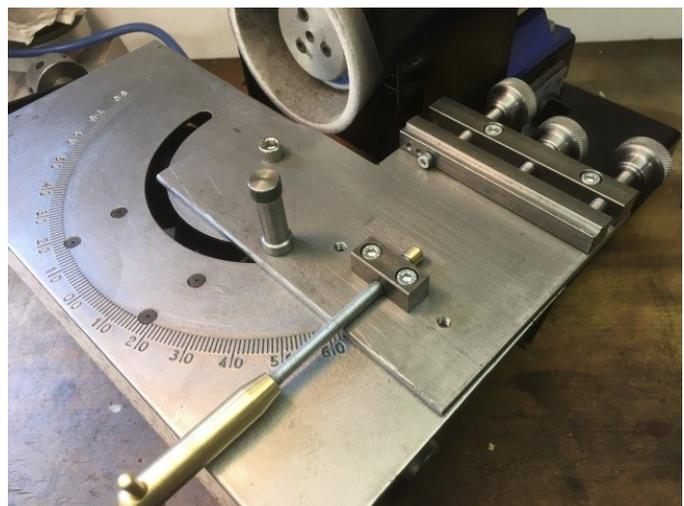


I decided to stick to three shank sizes 3/8" 1/2" 5/8" as anything smaller would have proved very difficult to sharpen.

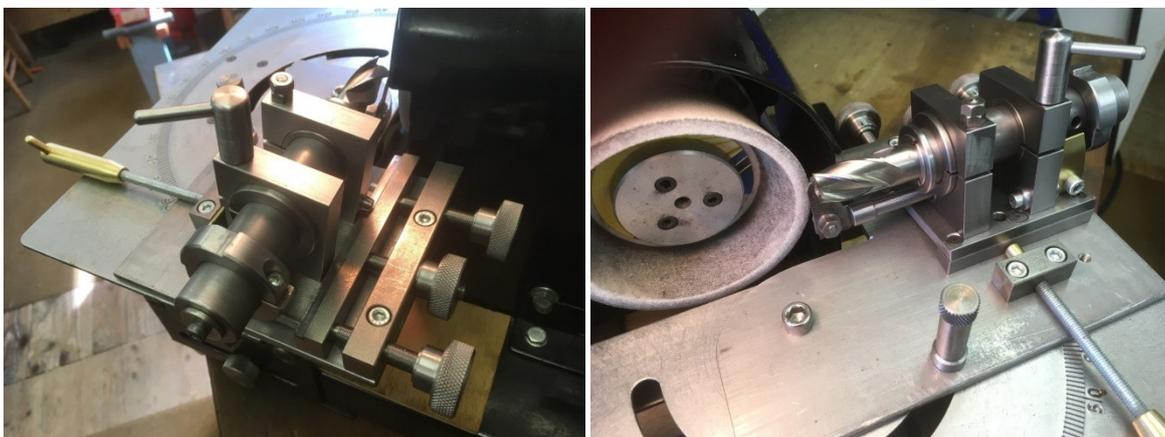
So far so good and I was happy with progress so far.

At this point it may be interesting to take a look at this [YouTube video](#) In the video Harold explains very clearly how the jig is used and he talks about "The fence" which I now had to design so that I could use it on my Worden.

The fence needed to have a method of very fine adjustment as this is how the grinding cut is incremented.



In the photographs you can see the 3 knurled knobs each controlling a threaded shaft with a 40tpi thread (.025" per turn). The centre screw pulls the "fence" onto the outside two shafts and by careful manipulation of all three very small incremental movements can be made and thus very small grinding cuts.



So all good so far until I tried to use it and found that my cutter grinder table would not tip down beyond zero degrees so I couldn't put a clearance angle on the edges of the cutters. It was not possible to modify the grinder so I had to modify the jig and it can be seen in the next photo.



I decided to tip it by 10 degrees and made the add on strip you see in the photo.

It worked a treat and with care I now have a full box of nice sharp endmills.



## **Spotted on YouTube**

### **MODEL ENGINEERING FOR BEGINNERS - PART #21**

How to machine phosphor bronze – by Keith Appleton

[https://www.youtube.com/watch?v=HPEL\\_kQXihw](https://www.youtube.com/watch?v=HPEL_kQXihw)

*Model Engineering For Beginners - Part #21 - How to machine Phosphor Bronze - (The Hard Stuff).* In this video I show how to make a bearing sleeve from a piece of phosphor bronze. There is a "Leaded" version of phosphor bronze which is easy to machine, but this stuff can be more difficult. In this video I show common pitfalls when trying to make a bearing sleeve



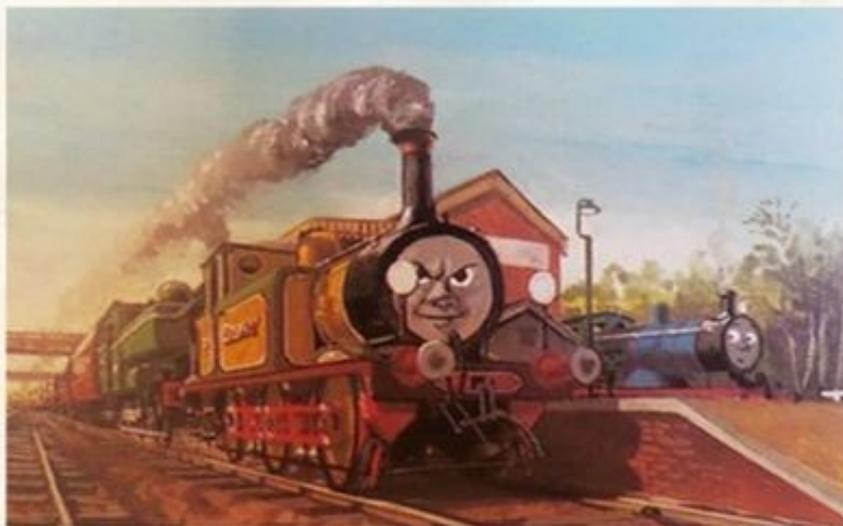
***ndsme Tours...***

**PLEASE NOTE ALL TRIPS TO EVENTS HAVE BEEN SUSPENDED FOR THE TIME BEING.**

# Thomas the Tank Engine

*reimagined for the C21st!*

“You’re two hours late, shouted Edward.”  
“Not according the new revised timetime,” whistled Stepney.  
“I like the new revised timetable, it means I work less.”



**New membership rates for 2021-22.** As these were frozen for over a decade the committee have bowed to pressure from the membership and instituted a modest increase for next year. All categories will rise by £5 with the exception of *Associate of a Member* which will rise by £3. When compared with other SMEs these rates still represent excellent value, thanks to the contribution made by the railway to society funds.

## NDSME directors (committee) and officers as at Dec 2020

Company Sec.	J McDonell	Chair	vacant
Treasurer	C Eve	Publicity	M Rhodes

Other directors: , B Fane, P Moore (estates), J Horrex, P King (PW) R Hendrick, B. Fraser, R. Wells

Other officers: R Montgomery (Rolling stock), ,Meetings organiser M Fordham (*pro tem*)

Hard copy bulletin distribution: - P Moore

There are other roles that need filling. Contact the Company Secretary if you are interested. Email [clubsecretary@ndsme.org](mailto:clubsecretary@ndsme.org)



### **Forthcoming Events**

-PLEASE NOTE THAT ALL MONTHLY MEETINGS HAVE BEEN TEMPORARILY SUSPENDED UNTIL FURTHER NOTICE, IN ACCORDANCE WITH HM GOVT DIRECTIVES. WE ARE INVESTIGATING WAYS THESE COULD BE HELD OUTDOORS NEXT SEASON



### **RAISED TRACK GROUP**

Just a reminder that the first Saturday of each month is allocated specifically to 5" and 3.5" locos on the raised track. Other Saturdays are also general members days for running locos privately on either of the two tracks.

## Where is this? Solution for last time.



Surbiton has been considered as one of the finest modernist stations in Great Britain<sup>[</sup> and is a Grade II listed building. The station was completely rebuilt in 1937 by the Southern Railway with two island platforms with Southern Railway designed canopies. The buildings were designed by James Robb Scott in an art deco style. Scott (1882-1965) joined the L&SWR in 1907 and soon became the Chief Architect for the successor SR. He

was responsible for other modernist station designs such as at Exmouth, Wimbledon, Richmond and Durrington-on-Sea. His most famous work is the Victory Arch at Waterloo

*Right* – main facade in classical art deco “Odeon” style. There is a similar but smaller facade on the other side of the station.



## **Fun on the Net**

### **Some one-liners**

A friend got to the final of the local model railway competition. He lost on points.

I never liked the troll who lives under the local railway bridge. He's my arch enemy.

I went to a railway fancy dress party. Everyone was wearing platforms.

Got a couple of railway buffers going cheap. It was an end of line sale.

I've always liked one-liners. That's why I'm a fan of monorails.

Ticket inspectors. You've got to hand it to them...

What's the difference between a teacher and a railway security guard? One trains the mind, the other minds the trains...

I know someone who tried to run away after camouflaging a railway. He tried to cover his tracks.

I miss the old days of railway when the driver had plenty of esteem.

A driver took a train for a service, but the vicar said it was blocking the aisle.

A train track and a motorway walk into a bar. The train track says "*A pint for me, please, and one for the road*".

## **On a more serious note**

The below article has been flagged up by Chris Poore. It first appeared in *Model Engineer* and is reproduced with their, and the author's, kind permission...

### **Prostate Cancer and Model Engineers**

by Roger Backhouse

Why a medical article in *Model Engineer*? Simple, model engineers are nearly all men and often aged over 50, vulnerable to men's most commonly diagnosed cancer. This article looks at how model engineers diagnosed with prostate cancer managed.

As is often the case with many cancers, the earlier prostate cancer is caught, the more successful the outcome can be.

I am a model engineer who had prostate cancer and as an occasional volunteer helping Prostate Cancer information stands it's noticeable men rarely ask questions. Wives and partners show most concern. Recent high profile cases like Stephen Fry and Bill Turnbull have raised awareness, yet too many men fail to take action leading to late diagnosis and unnecessary deaths. One in eight men will be diagnosed with prostate cancer in their lifetimes. For black men, the proportion is about one in four.

The prostate gland is walnut size and its main job is to make semen. Sitting underneath the bladder it surrounds the urethra carrying urine out of the body. Cancer can develop when cells start to grow in an uncontrolled way. Some cancers grow slowly and are not aggressive but sometimes they spread and need treatment.

Urinary problems are a common sign of prostate difficulties but don't necessarily mean cancer. However, the risk of the disease

increases with age and particularly in over 50s, and also if there's family history of prostate cancer. One York model engineer comments *"there is often little in the way of symptoms until cancer is ensconced and doing damage"* , a common experience.

Diagnosis usually involves a rectal examination by a GP and then a blood test to determine PSA (protein specific antigen) levels. Raised PSA could be an indicator of prostate cancer but isn't a totally reliable test. For instance, vigorous exercise such as cycling in the 48 hours before a PSA test can cause a raised PSA reading. (Prostate Cancer UK is helping fund development of more reliable tests.) The next stage may be an MRI scan to identify areas that could need further investigation. There will be a biopsy carried out under local or general anaesthetic to determine size and aggressiveness of cancers.

### **Peter's experience**

Peter Wardropper is a long standing SMEE member and has had perhaps the worst experience of prostate cancer. He says *"The more people who know about prostate cancer the better, and the more chance there is of early treatment"*.

Well known for prize winning models including a *Jenny Lind***[photo]** he's also been the auctioneer at SMEE's sales! Now aged 68 Peter trained as an engineering apprentice at the National Physical Laboratory and then helped develop scientific instruments including the Anglo- Australian telescope. After teaching he became self employed working on car restoration, also rebuilding motorcycles including a Norton and Velocette.



He went for two-yearly PSA tests from the age of 60 after a friend was diagnosed. There was no family history of prostate cancer. Like many men his PSA levels increased with age and at 64 he noticed he needed to pass water more often and quickly, a possible sign of problems. (though not a certain indicator of cancer - many older men have enlarged prostates and associated continence problems). Following a further test he was referred to a urologist and after a biopsy under a general anaesthetic was found to have an advanced and aggressive cancer. A bone scan showed this had spread to lymph glands but not to bones.

Peter was given six doses of chemotherapy which he says was not as bad as feared and then daily radiotherapy for over a month. He now has hormone therapy via an implant every 12 weeks and the cancer appears to be under control.

Peter adds that *“it does no harm for any man over 50 to have blood tests for PSA”* but notes that some GPs are still reluctant to recommend them.

He praises his wife and sons for their support coping with treatment. Peter found information from Prostate Cancer UK *“straightforward and pertinent”* including details of a better diet which he'd not previously considered. Lifestyle changes with more exercise and healthier eating may reduce risk of cancers and can improve recovery chances.

Although hormone therapy reduced his strength it hasn't stopped Peter rebuilding a *Maisie* model to a Brighton Atlantic design, and other workshop projects. He says *‘Model engineering was my saviour and it's important to keep as fit as possible and enjoy the things you do’*.

## **A Bradford model engineer's experience**

A member of Bradford Model Engineers, who wishes to remain anonymous, previously had treatment for an enlarged prostate, so had regular PSA tests. Then he noted blood in his semen. Investigation with a biopsy and an MRI scan followed. The biopsy enabled assessment of the size and aggressiveness of the cancer, the "Gleason score", suggesting treatment was required.

After discussing options he opted for surgery to remove the prostate. ("Radical prostatectomy" in medical language). Surgery is a common method of treating prostate cancer that hasn't spread outside the prostate gland. This was carried out at the age of 70. Most surgery is now either keyhole or robotic assisted laparoscopy used in his case. Hospital stays and recovery are now quicker than in the days of open surgery. (Other options sometimes offered are radiotherapy or "active surveillance" - having a biopsy annually to see if the cancer is growing.)

He was in hospital for two nights and says it took four months to get back to normal strength. (For many men the time is less.) He says "there were no real side effects" though there was some incontinence to start with. His PSA is monitored every six months and has remained at very low levels since.

He advises men over fifty to be aware of any change in bladder habits such as difficulties passing urine or blood in urine. Though in many cases the cancer may be small or slow growing and not need treatment it should be monitored.

## **Kevin's experience**

Kevin Dick is a member of *York Model Engineers*. Serving with the Royal Engineers for 23 years, he's now been a model engineer for 14 years, building his own tooling and with the help of club members learning model engineering skills. He now has the confidence to build a *Sweet Pea* design and bring back to life

an ex-club steam locomotive. Working under Richard Gibbon's guidance he's making his first try at boiler making.



Now aged 73 he was diagnosed at age 71. He'd asked for a PSA test at the Well Man clinic he attended and when told he didn't need one asked his GP for a test. This showed high PSA levels and he was fast tracked for further diagnosis. A biopsy confirmed cancer.

Kevin was offered a choice of treatments - this is quite usual if cancer has not spread outside the prostate. These were surgery, twenty sessions of radiotherapy or brachytherapy (the implanting of radioactive "seeds" in the prostate which are later removed). He opted for radiotherapy.

Radiotherapy had side effects - it was uncomfortable but successful. Part of his treatment included hormone injections to reduce testosterone which he says caused side-effects including hot flushes. However, this treatment helps effectiveness. His PSA levels are now almost undetectable.

From his experiences Kevin says it is important to press for a PSA test if you suspect prostate problems, confirming Peter's view. Men over 50 are entitled to PSA tests even if some GPs are reluctant to offer them. He continues helping at York Model Engineers as well as his own projects and when not model engineering keeps fit playing bowls.

## **Support**

Another member of York Model Engineers, who wishes to remain anonymous, was shocked by a registrar's suggestion that he might need surgery, though a Macmillan nurse was on hand to give support and advice. Like diagnoses of cancer suggestions for surgery or other treatment can be traumatic. Thankfully surgery has not been needed so far. Whilst some men are reluctant to see doctors for fear of what they might find this delays diagnosis and treatment with the prospect of worse problems. Men should be prepared for emotional outcomes they might not have expected but there is support available. Model engineers with prostate cancer say not to despair on hearing a diagnosis or recommendation for treatment.

John Burton joined his local support group APPLE (Association of Prostate Patients in London and Essex), based in the London Borough of Redbridge. APPLE was founded to inform, educate and support those with prostate cancer. As a younger man when diagnosed (48) he can talk about side effects such as sexual dysfunction and incontinence in a confidential environment.

Besides monthly meetings with speakers, APPLE holds fundraising events and raises awareness through community activities and talking to varied groups from construction workers to bowls clubs. John has also done 1 to 1 phone chats with men about his own experience of prostate surgery and recovery.

Whilst treatments have negative effects John says even after-effects like incontinence and impotence can be treated successfully. Early treatments are far better than a spreading cancer.

Despite the impact of the Covid-19 pandemic, prostate cancer research is resuming with major fundraising initiatives. Treatment and care are improving as are survival chances. Model

engineering societies often run fund raising events so why not consider making prostate cancer a “good cause” for your club?

## **Help and advice**

Anyone with concerns about prostate cancer may contact Prostate Cancer UK's Specialist Nurses in confidence on 0800 074 8383 or online via the Live Chat instant messaging service: [www.prostatecanceruk.org](http://www.prostatecanceruk.org). The Specialist Nurse phone service is free to landlines and opens from 9am to 6pm Monday to Friday, and 10am to 8pm on Wednesdays. The charity also produces excellent information booklets available in print or online.

There should be at least one urological clinical nurse specialist in a hospital urology department, They are highly informative about prostate cancer and easier to contact than Consultants.

The National Federation of Prostate Cancer Support Groups campaigns under the name *Tackle Prostate Cancer* and also produces useful literature notably their *Prostate Cancer Information Booklet*. See [www.pcaso.org](http://www.pcaso.org) helpline 0800 035 5302 . Most areas have a prostate cancer support group, so if diagnosed with prostate cancer you need not be alone.

Roger Backhouse

### **NOTICE – ACCESS TO THE EATON PARK SITE**

**ACCESS CODE FOR THE MAIN SLIDING GATE HAS CHANGED. THIS NEW ACCESS CODE IS ON YOUR 2020-21 MEMBERSHIP CARD**

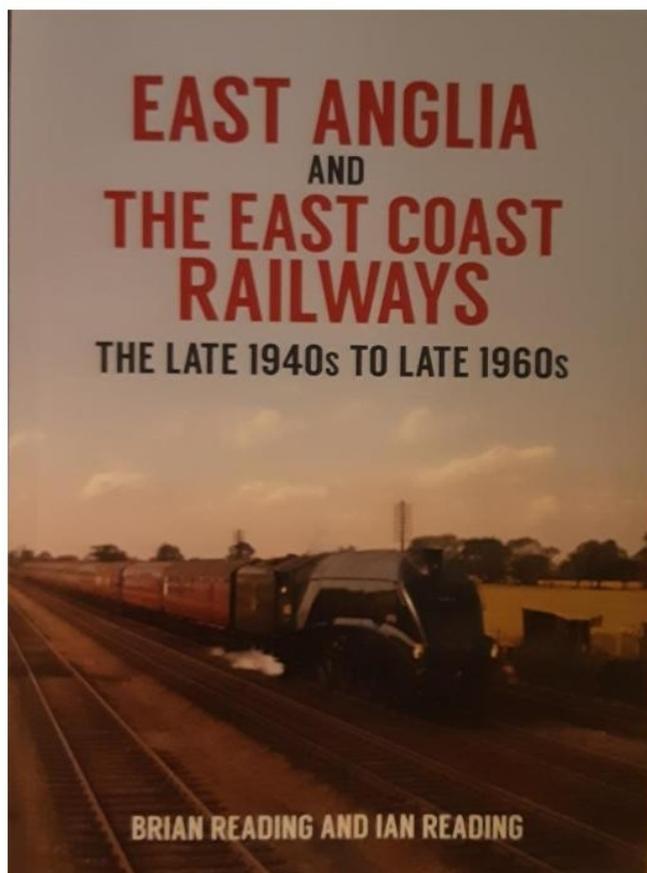
**THE ACCESS CODE FOR THE MAIN BUILDING HAS NOT CHANGED AND REMAINS THE SAME AS 2019-20**

## ***A Decade ago!***

*Die Zeit verfliegt, tempus fugit* etc. It really does go quickly. Here are some snaps taken by Mike Fordham in 2010. Who do you recognise?







**NEW BOOK  
BY NDSME  
MEMBER  
BRIAN  
READING**

***East Anglia and the East Coast Railways -The Late 1940s to Late 1960s***  
**by Brian Reading**

in the 1940s 50s and 60s Brian was a prolific railway photographer and he has just published the first of four books of his photographs of steam locomotives of the steam era in East Anglia and on the East Coast main line as far as York.

All photos have never been published before and are first class quality thanks to the technical ability of his son, The 1950s and 1960s was a time of profound cultural and technological transformation. With images and vivid recollections, we journey back to post-war East Anglia and the East Coast Main Line with many locations changed beyond recognition. Tracksides, at busy stations, and in and around depots, an evolving mood is revealed in pictures

People, machines and landscapes are crystallized on film for future generations; reawakening memories for those who lived through this time of change and offering a fascinating insight for those who are too young to have been tracksides during this intriguing period of railway history.

This is a brilliant nostalgic book and captures a very different era of the big railway to what we have now.

Available direct from [www.amberley-books.com](http://www.amberley-books.com) or bookshops.

ISBN 978-1-4456-9966-0 £14.99

# **CORONAVIRUS EMERGENCY**

**The DIRECTORS (COMMITTEE) HAVE SANCTIONED LIMITED USE OF THE EP SITE WHILST CONFORMING WITH DIRECTIVES FROM H.M. GOVERNMENT. MEMBERS SHOULD CURRENTLY ONLY ATTEND EATON PARK IN ACCORDANCE WITH GUIDANCE ISSUED BY THE COMMITTEE AND BY H.M. GOVERNMENT**

**Please note that there should be no more than six persons in the clubhouse at a time. The door should also be left open wherever possible**

**Monthly members meetings have been suspended until further notice and we are currently considering how they may be held next year. Limited public trains may operate on Sundays. Check [ndsme.org](https://ndsme.org) for any updates**

## **News from the Clubhouse**

Messrs R. Wells and B. Fraser have been “sworn in” as new directors.

A Chip&Pin/contactless card reader is now up and running for payment of fares etc. Members may also be able to use this for payments to the society, eg memberships, coaches etc The cost to us is approx 1.6%.

The committee decided that six persons is to be the maximum capacity of the clubhouse for the time being.

Geoffrey Moore had his membership status upgraded to Standard.

New wheelsets for the passenger carriages were authorised. These have since been collected by P. King and these will be fitted as part of a rolling programme of replacement.

It was decided, following suggestions from some members, to increase membership fees by £5 (full and reduced) and £3 (Associate of a Member)

Regarding the A3, options were discussed and the views of members who responded were considered. Six months have been allowed for an A3 support group to form and take on running and maintenance for the loco. An Activity Log book is provided at the signing in point and all A3 related activity should be recorded therein together with participants. At the end of six months, the committee will decide how to proceed in the long term.

## **STORAGE OF PRIVATE ROLLING STOCK AT EATON PARK - GUIDELINES**

- Limited storage of private owner stock may be offered subject to conditions
- At the discretion of the directors and subject to any availability of space.
- Subject to owner removing stock on demand
- Owner must arrange their own insurance
- Such stock should be available for public carrying during the season

## **Tailpiece**

For some time now, it has been apparent that the existing sit- astride guard's trucks were no longer suitable for all members. Some were experiencing trouble using them. The seeds of possible replacements were thus planted back then and in 2020 Pete King (chassis and running gear) and Barry Fane (bodywork and fittings) decided to put them into practice. This is the first of two new step-in vehicles and it is quite an



improvement on the old trolleys, two of which were cannibalised to provide parts. These two vehicles will provide a whole new degree of comfort for members who do stints as passenger guards. So, fair play to the both of them!

###