

# CRANKING

Aug 2014  
37 years of publication!

**MUST SEE**

[www.wessexsec.org](http://www.wessexsec.org)

**NEW!!!** With forms,  
photos, info, latest  
stuff. Archive.

## *The Wessex Stationary Engine Club's Monthly Newsletter*

### From The Sump

As Eric will explain at greater length within, Mary Butler is giving up the task she has long and selflessly performed for us all. Mary collected the newsletter from the printer and take enough to club night to cover everyone present. The following day, she would then address the envelopes, stamp them, fold the Newsletter and seal it into the envelope. This done, she would take them to the post. Thanks are never enough in these circumstances, but Mary certainly has mine.

It would be possible to do it a different way – for instance, the printer (in Frome) could post the majority of the 250 or so we have printed to anywhere in the UK!

The task is not especially onerous, but it does require a certain dedication and ability to do the work as soon after the last Monday in the month as possible.

It is a vital job, one that needs doing and as Newsletter editor I'd like to ask YOU to consider if you could find a few hours on the last Tuesday (et al) of the month to do this for our club.

I like Villiers MarVils. Yes, I know they are smelly little two strokes with nothing in the way of external moving parts, but there is something about their quirky looks that attracts me – and I know it does others too ;o)) Any way, long story short, I bought a Century (98cc for the incognoscente) and lavished my attention on it – even found it a gurt bronze flywheel off an Allan Scythe and had it professionally polished until it rivalled the sun. Reassembled it, checked the spark and found the HT lead was rather wanting in the insulation department. I fitted a new HT coil for good measure. Wound the rope around the pulley. No thank you.

Off to Martin Dry and now it has a spark that you can see on the TV four doors away.

Petrol ok, lots of compression, no wheezing from the crankcase, mains fine, one way flap valve in the induction tract – fine. Tried various different timings either side of the mark. No thank you.

By this time, I'm with the socket in an electric drill – it fires but will not run.

That's the thanks you get from two strokes. Nasty, Devilish devices. I hope Mr Day is spinning in his grave, because my damned engine isn't!

### Moving the Metal

#### For sale

LAST MONTH OF ADVERT!

**Pat Clifford** is having a big sale too. He has asked me to print this list. This is a garage clearance sale coupled with a waning interest! Prices deemed to be realistic but would accept reasonable offers, but no time wasters. Address:- Pat Clifford, Woodvale, Brookend, Luckington, Chippenham. SN14 6PJ. Landline 01666-840 666 Mobile 07979061644. e-mail

#### **Broom Wade Compressor Type NX No. NC1363**

( Was connected direct to the Lister D as below )

**Crossley** 2.5 BHP Enclosed Crank. Engine number 103973.

All complete and reasonable condition, Mag needs slight attention though it sparks ok. Engine oil filler repaired several times and needs a replacement. Price £200.00

#### **Lister D Spec 26 DH Number 163147.**

This Engine was Ex GWR and has Brass GWR plate on the top of the water hopper. Starting handle has a brass handle grip (This was typical of BR ) Complete with engine bed plate.

Engine is complete but needs slight attention to the governor springs. A rare Engine. Price with the compressor £250.00

#### **Lister L Spec 76 L 5HP Engine number 67266.**

Absolute original condition and used very little.

All complete with original bed plate timbers and water tank box with all the fittings. Engine will start and runs well. £350 to £400

#### **Lister D Spec 28DH Petrol/Parafine, Engine number 175971.**

All complete and running on a trolley. Price £120.00.

**Lister well Pump** Price £50.00.

**Large Lister Pump.** Needs overhaul. Price £50.00

**Ruston Hornsby** PB 3hp. Engine runs OK but timing may be out. On a trolley. £150 ONO.

**Ruston Hornsby** 4.5hp. Complete on Trolley runs OK. £250. ONO **Iron Wheels.** All at £10.00 each.

### Suppliers

#### **Recommended Bearing Supplier – very helpful!**

Solent Bearings, Unit 20&21, Test Valley Business Centre, Test Lane, Nursling, Southampton, SO16 9JW  
Phone - 02380 667100. [www.solent-bearings.co.uk](http://www.solent-bearings.co.uk)

#### **Fuel Tanks and Crank Guards made.**

Tel John Hedges 01635-268359 or 07831-410473 (Newbury Area). Robin Says – "I have known John for over 30 years and he is a good engineer. He has sold all his engines and thought he would have a go at Tanks & guards and is doing quite well, "

Articles, cartoons, photos etc are always very welcome – this is not a one-man band, but an expression of all our thoughts and experience. Submissions should be preferably typed or word-processed or even handwritten, (if brief), - it is the content we're after, not the grammar or spelling, so please don't feel your efforts will be ignored. The editor reserves the right to change, edit, augment or lessen your Deathless Prose and asks all to note that opinions expressed in this newsletter may or may not represent club policy

Phone - 0117 964 6818

J. Kim Siddorn, 9, Durleigh Close, Bristol. BS13 7NQ or by e-mail to [kim.siddorn@blueyonder.co.uk](mailto:kim.siddorn@blueyonder.co.uk).



## Featured Engineer Number 4

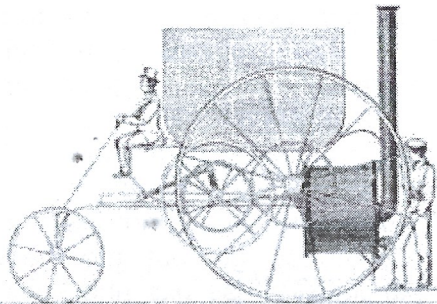
Richard Trevithick (13/4/1771 – 22/4/1833)  
From Internet Research – cont from last month



### The Coalbrookdale Locomotive

The Coalbrookdale company then built a rail locomotive for him, but little is known about it, including whether or not it actually ran. To date, the only known information about it comes from a drawing preserved at the Science Museum, London, together with a letter written by Trevithick to his friend, Davies Giddy. The design incorporated a single horizontal cylinder enclosed in a return-flue boiler. A flywheel drove the wheels on one side through spur gears, and the axles were mounted directly on the boiler, with no frame. On the drawing, the piston-rod, guide-bars and cross-head are located directly above the firebox door, thus making the engine extremely dangerous to fire while moving. Furthermore, the drawing indicates that the locomotive ran on a plateway with a track gauge of 3 ft.

### The London Steam Carriage



The London Steam Carriage, by Trevithick and Vivian, demonstrated in London in 1803.

The Puffing Devil was unable to maintain sufficient steam pressure for long periods, and would have been of little practical use. In 1803 he built another steam-powered road vehicle called the London Steam Carriage, which attracted much attention from the public and press when he drove it that year in London from Holborn to Paddington and back. It was uncomfortable for passengers and proved more expensive to run than a horse-drawn carriage and was abandoned.

#### Tragedy at Greenwich

Also in 1803, one of Trevithick's stationary pumping engines in use at Greenwich exploded, killing four men. Although Trevithick considered the explosion was caused by another case of careless operation rather than design error, the incident was exploited relentlessly by Watt and Boulton (competitors and promoters of the low-pressure engine) who highlighted the perceived risks of using high-pressure steam.

Trevithick's response was to incorporate two safety valves into future designs, only one of which could be adjusted by the operator. The adjustable valve comprised a disk covering a small hole at the top of the boiler above the water level in the steam chest. The force exerted by the steam pressure was equalised by an opposite force created by a weight attached to a pivoted lever. The position of the weight on the lever was adjustable thus allowing the operator to set the maximum steam pressure. Trevithick also added a fusible plug of lead, positioned in the boiler just below the minimum safe water level. Under normal operation the water temperature could not exceed that of boiling water and kept the lead below its melting point. If the

water ran low, it exposed the lead plug, and the cooling effect of the water was lost. The temperature would then rise sufficiently to melt the lead, releasing steam into the fire, reducing the boiler pressure and providing an audible alarm in sufficient time for the operator to damp the fire, and let the boiler cool before damage could occur. He also introduced the hydraulic testing of boilers, and the use of a mercury manometer to indicate the pressure.

In 1802, Trevithick built one of his high-pressure steam engines to drive a hammer at the Pen-y-Darren Ironworks in Merthyr Tydfil, Mid Glamorgan. With the assistance of Rees Jones, an employee of the iron works and under the supervision of Samuel Homfray, the proprietor, he mounted the engine on wheels and turned it into a locomotive. In 1803, Trevithick sold the patents for his locomotives to Samuel Homfray.

Homfray was so impressed with Trevithick's locomotive that he made a bet with another ironmaster, Richard Crawshay, for 500 guineas that Trevithick's steam locomotive could haul ten tons of iron along the Merthyr Tydfil Tramroad from Pen-y-darren.

Amid great interest from the public, on 21 February 1804 it successfully carried 10 tons of iron, 5 wagons and 70 men the full distance in 4 hours and 5 minutes, an average speed of approximately 2.4 mph. As well as Homfray, Crawshay and the passengers, other witnesses included Mr. Giddy, a respected patron of Trevithick and an 'engineer from the Government'. The engineer from the government was probably a safety inspector and particularly interested in the boiler's ability to withstand high steam pressures.

The configuration of the Pen-y-darren engine differed from the Coalbrookdale engine. The cylinder was moved to the other end of the boiler so that the fire door was out of the way of the moving parts. This obviously also involved putting the crankshaft at the chimney end. The locomotive comprised a boiler with a single return flue mounted on a four wheel frame. At one end, a single cylinder with very long stroke was mounted partly in the boiler, and a piston rod crosshead ran out along a slidebar, an arrangement that looked like a giant trombone. As there was only one cylinder, this was coupled to a large flywheel mounted on one side. The rotational inertia of the flywheel would even out the movement that was transmitted to a central cog-wheel that was, in turn connected to the driving wheels. It used a high-pressure cylinder without a condenser, the exhaust steam was sent up the chimney assisting the draught through the fire, increasing efficiency even more.

The bet was won. Despite many people's doubts, it had been shown that, provided that the gradient was sufficiently gentle, it was possible to successfully haul heavy carriages along a "smooth" iron road using the adhesive weight alone of a suitably heavy and powerful steam locomotive. Trevithick's was probably the first to do so; however some of the short cast iron plates of the tramroad broke under the locomotive as they were intended only to support the lighter axle load of horse-drawn wagons and so the tramroad returned to horse power after the initial test run.

Homfray was pleased he won his bet. The engine was placed on blocks and reverted to its original stationary job of driving hammers.

In modern Merthyr Tydfil, behind the monument to Trevithick's locomotive is a stone wall, the sole remainder of the former boundary wall of Homfray's Pen-y-darren House.

*Continued Next Month.....*



## Calendar of Events

key. CN = Club Night. E = Event

Sept 29<sup>th</sup> **CN**. Quiz. Anne Kempson As Quizmaster.  
 Oct 11<sup>th</sup> Sat. **Wessex Autumn Sortout** At Cranmore Station.  
 Oct 19<sup>th</sup> **E. Robert's Open Day. 11-4.** Stationary Engines, Tractors, Motorcycles. Visiting exhibits. Museum and Displays. Manor Farm, Sevenhampton. GL54 5SW. Phone 01242 820408.  
 Oct 27<sup>th</sup>. **CN. Engines at the 1000 Engine Rally** by Kim Siddom  
 Nov 8<sup>th</sup>. E. (Sat) **"Enstone" Autumn Sale. \*\*\*NEW VENUE\*\*\***  
 Oakley Airfield. HP18 9JX. The new venue is 22 miles east of Enstone Airfield. Check the distance before you set off! info: Mrs. Anne Harris 01367 810415  
 Nov 24<sup>th</sup>. **CN. Decoys On Mendip, World War 11.**  
 Talk by Mike Chipperfield  
 Dec **No Club Night.**  
 Dec 7<sup>th</sup> Sun. **Anti-Freeze Crank-Up at Nunney Catch**  
 Dec 8<sup>th</sup>. **Wessex Christmas Party** at the Court Hotel  
 Dec 27<sup>th</sup> Sun. **Mince Pie Crank-Up** at The Court Hotel.  
*This events calendar is prepared by the editor based upon the Wessex SEC calendar produced by Brian Baker.*

## Social News

The other Tuesday Rob Armstrong suffered a fall whilst on the way back from the newsagent. Typical of Rob, he was neither much shaken or stirred, thinking as he fell "At least I'm not falling into stinging nettles!" He was patched up at the local A&E, mopped, stitched and despatched in good and sound order. He spoke very highly of the Hospital and the service. I'm sure you'll all join with me I wishing him the very best for a full and swift recovery.

## Chairman's Report By Eric Gay

**Some good news first!** On the evening of Monday 28th July we had a very nice visit from Mr. John Goold, along with his Stanley Steam Car. This was brought along for two reason, one, so that John could have a look at our engines and, two, that he could explain the workings of a steam car to the engine owners that displayed their engines at the Crank Up. **But then, what a let down!** Crank up? What Crank Up? Just two members turned up with engines. In all the years that I have been a club member I have never experience such a disaster.

But all is not doom and gloom! I have arranged a trip in the New Year to John's steam workshops, (date to be finalised) refreshments will be served and those of you into rock and roll please come in 60 rock & roll outfits. Full details will be in the news letter. It will also go on the club's new Website.

**Some worse news.** Mary Butler, who has loyally distributed our news letter for many, many years, has decided that it is time for her to retire after a long and admirable service to the Wessex Stationary Engine Club. I am sure that you all want to extend to Mary your best wishes and a huge thank you for all that she has done over the years. From the committee and myself we wish you ever happiness for the future. We cannot thank you enough for the hard work you have done for Wessex over the years. There will always be a seat in the car

for you, so that you can attend evening meetings whenever you would like to.

Now, without a distributor for our news letter, **We are in need** I am sure that we have someone in the club that would like to take on this job, because if no one comes forward we will be unable to send out the news letter. I want to see our club flourish and grow, so that the members get more events, more social gatherings, and as many engine related events as can be arranged. but without your help this cannot happen. Please someone come along and help.

The committee spend countless hours trying to arrange events for YOU the members of the Wessex and we get very little response and if things progress in this way we may have no option than to fold the club up. **We Need Your Support.**

I know its early but don't forget the Christmas Party **8th December.** a slip will be put in a future news letter.

Don't forget, I sill need your input for what you would like to have at our evening meetings in 2015 so do have a think and let me or any committee member know what you would like to see and hear.

News, Views, Reports, write up, finds, and restoration reports, You want help or info get a request into the news letter, you want a spare part, or any other help just ask through the news letter, you may just find what you are looking for.

Now I know you are all poor like me so why not make some money, get out into the shed or garage and dig out those bits and bobs you no longer need and bring them along to the Wessex Sort Out at Cranmore on **October 11<sup>th</sup>.** Just think of all that lovely money you can go home with but don't tell the wife or she may just hold her hand out and that would be good-by to any profit!

## Out and about in 2014

By Robin Lambert

At last we are able to attend some of our favourite events in earnest after (being grounded) for all those long winter months, things are beginning to happen starting off with the **Shillingstone Rally** near Blandford Forum. It's a shame this event has a date clash with Castle Combe, but having attended there for many years, we thought it would be nice to try a different event last year. We enjoyed Shillingstone so much we did it again this year. The rally site is nestled between two ranges of hills, a perfect sun trap and ideal location for an event such as this.

Eric, our chairman, mentioned last month that a lot of our club members brought exhibits here and one in particular drew a audience for most of the weekend. Gary Chambers brought along his egg washing machine driven by his engine! It required the dummy eggs placed in one end and the eggs then passed along two long wet revolving stiff brushes before settling gently into a collection area, a most unusual exhibit.

Once again a good selection of stalls to cater for all tastes and there always seemed to be 20



people in the queue for ice creams. The tractor pulling always draws a crowd especially at dusk with flames belching out of their white hot exhausts.

The following weekend 24-26<sup>th</sup> May we spent all three days at the **Selwood Rally**. Situated on the edge of Southwick village, the site can be rather difficult in respect of traction. and the tow rope had to come out again as the ground was soft and gave me and a few others problems. I fact, at the end of the event, I watched a giant six wheel drive ex army Scammel recovery truck grind to a halt, leaving deep ruts in the field. It did manage to get away again after dropping off its showman's type trailer and moving forward to more stable ground. It then reeled in its trailer with a wire rope. Despite one or two of us getting into difficulty, this was a nice weekend, lots here to see and the usual three day car boot sale just outside the rally field to visit before the 10am start up.

Full credit must be given to Pearl and Steve Francis, who have organised this event for many years and I can look back over thirty odd years and the many different locations where this event has been held. Perhaps the most memorable being at Rode Bird Gardens.

A special thank you from me to William for towing me to stable ground with his four wheel drive Audi. I would not have believed a car could pull a camper **and** trailer on soft ground.

On the move again to **Tatworth** near Chard situated on the Dorset/Devon border. This is always a one day event this year on Sunday 1<sup>st</sup> June but you can pull in on Saturday if you wish and watch all the vintage tractors line up and set off at 5pm for a 3 hour road run. This year around 50 tractors took part, many pulling trailers laden with passengers who no doubt found a watering hole en route.

The weather here was great which helped make this a successful day and was also complimented by a lot of our club members who brought along some nice exhibits. Normally this event is the week before the West Bay Rally, but this year it had got out of step, so we had to go home (shame) instead of getting lost for a few days in Dorset.

Well we did eventually get to **West Bay** for this event held on 14/15<sup>th</sup> June, but not before a few days hanging about in the Weymouth area.

Chatting to some committee members, the show was close to being cancelled owing to the wet conditions of the show ground. It was a brave decision to put the event on, as even the car parking fields only had its mown grass bailed up and collected on Friday evening!

Next to me in the engine line was Mike Snook who had his latest restoration project on display in the guise of a 1920 1.5 hp Pilter. This really was a fine restoration with so much work required. It is a credit to Mike's engineering skills over so long time.

There were 110 engines listed in the programme and there were very few missing. There is so much here to see at this perfect location which

is a leisurely walk to West Bay harbour and the other way into Bridport.

### Trailer talk

By Kim Siddorn

For some time now I've had the remnants of a trailer tent trailer kicking about the place. It is pretty well ideal for our purposes as it has a wide wheelbase, torsion rubber suspension, small wheels and brakes both load & handbrake. It is plated at 400kgs, so should readily absorb most engines one might cart about the place. To save the Imperialists like me from reaching for the calculator, that's (round figures) 880 lbs, 62 stone or just under eight hundredweight.

I finally got a round tuit and stripped off all the plywood, tailgate, fibreglass box sheeting etc, etc. The brakes are cable operated & can be trimmed to appropriate length before putting a deck or engine

The frame was then laid bare & proved to be a rather flimsy looking oblong steel channel section welded to a pretty massive deep V section axle box. I angle ground off about a foot from either end, the final overall length being dictated by where it will be stored.

The end frames I then refitted to the open ends of the fore-and-aft channel sections. I drilled a pilot holes at the right angles where they met & opened these out to accept 10mm studding. This had nuts positioned inside the channels which were tightened both top & bottom using four nuts on one stud, if you follow me. It is certainly solid as it is, but welding will augment this.

The drawbar was now far too long & I took nearly two feet off it, cutting the welded brackets off and cleaning them up for repositioning. A good friend makes his living welding important things together, so I simply repositioned the brackets & pop riveted them into place for welding. This has not yet been done!

This was done about five years ago and new tyres were obtained and the frame painted a fetching shade of deep red.. With my hip giving me increasing gyp, I've decided to sell it and as I had some space to fill hereby advertise it!

**Offers around £60, ready to tow away in its unbraked form. Kim Siddorn, 0117 964 6818**

**Kim Said This** - It might be said that this sort of article is self-serving and a perk of being the Editor. I don't deny it, but I'll say two things: 1. Nothing gets left out that would otherwise fill this space. 2. If anyone else would like to write something about an item they have for sale, an opinion they hold, a thing they saw or even wild gossip about the Martian enclave that lives in the rusty old Vostok third stage at the back of Fred's Flight shed in Lunar City on Farside - get scribbling!

This is not exclusive space, you can help fill it too!

