

# CRANKING

The Wessex Stationary Engine Club's monthly newsletter

January

2009

Thirty second  
year of  
publication

[www.wessex-sec.co.uk](http://www.wessex-sec.co.uk)

## From the Sump

I want this newsletter to represent all our views & I try to publish everything I'm sent by post, phone or shoved in me 'and at a crank up! I'm concerned to hear that some people feel that their efforts are not reaching the printed page & I agree that this is occasionally true. Usually it is reports of meeting night talks that fall by the wayside as I feel that they have a short life – if I can't find room for them the following month then I do think that their moment has come & gone. Further it is frequently the case that the talk was covered in Brian Baker's Chairman's Report & I see no pressing need to cover things twice – or occasionally three times! – in the same newsletter.

I must admit to human frailty & am quite literally a one fingered typist! Whilst I am quite happy to type up short notes from hand written originals, I am a fairly busy creature of the modern world & am frankly more likely to get around to scanning in typewritten or word-processed submissions using Optical Character Recognition software (the scanner reads it for you & puts it up on the screen for editing) than even the most well-written and legible article submitted in longhand. The latter will require me to sit & type it, you see.

Even so, as I am restricted to a single sheet of A3 printed A4 x 4. I constantly agonise over what I must leave either for another time or not print at all. Ever since I started doing this job, I have said to any that will listen that we need another page – not every time perhaps, but from time to time I really do need six sides of A4 to clear the backlog. Without doubt, less would get left out if I could do this.

To start with, I was prepared to print the 250 odd double sided sheets myself as a service to the club, but my circumstances changed & I am not able to do that anymore.

With due modesty, I must say that I am often approached at events by our members or by e-mail or phone & nice things are said to me about the newsletter, so I know I'm making a decent number of you happy!

The days are lengthening & I find myself fixing things, looking more interestedly at the bench I need to clear before I can actually do anything and looking forward to the burgeoning of the spring.

## Moving the Metal

### For sale

**Lister Diesel** engine driving a Fullwood vac pump. On a trolley - £120 ONO. Phone Ed on 01458 210929  
**Party Tent**, strong and robust, 6m x 3m in PVC. Used only a few times from new £195

**Victorian Cast Iron Lamp Post** by Wm Cockey of Frome. Buyer to dismantle & remove from my garden. £395.

**Howard rotovator** Kohler engine, 2 forward, 1 reverse. Good condition - £200ono.

All above contact Robin on 01373 - 463526

**Vauxhall Vectra**. 120K, top of the range, excellent order. Sold with new MOT at time of sale. £890 ono

All above, phone Eric Gay - 01225 754374

**Wanted – Barnard W110 piston**. A piston from a Austin/Morris "A" series 848cc SV engine or very early Mini would do the job.

Phone Tony 01373 464982

**WANTED** - Starting Handle for Bamford 9hp crank 2 5/8" Please ring Ron on 01749 870756

**WANTED Triumph** twin WW2 genny or parts.

**"Old Glory"**. Stack a foot high 80's & 90's – tenner.

**"Vapourising"** small stack of old 'uns - £1 each.

**WANTED "Stationary Engine"** Magazine. Now only need 16, 17, 18, 24-34, 36. Have early copies to swap!

All above, phone Kim Siddorn 0117 964 6818

### **A Wrinkle & A Nod – Robin Lambert**

Some 30 years ago, my old mate Bill and I bought a 8hp Ruston Hornsby engine. It had not run for many years & the first job was to give it a good check over and fathom out how to get it started. It was fitted with a Wico EK type magneto that was tripped by a lobe on the side shaft. We eventually got it to run then it stopped and whilst trying to find out why, we moved the flywheel only an inch and it started up again. We thought this - was - great until it dawned on us that had we had an arm or two between the flywheel spokes the consequences could have been horrendous. There must have been some petrol vapour above the piston that with the spring loaded trip on the magneto caused the engine to fire up. This sent a chill down our spines and after using and shutting down the engine we always made a point of removing the HT lead from the spark plug. Before running again any pre checks and maintenance could be done in safety.

We carried on this practice for almost 30 years.

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

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).

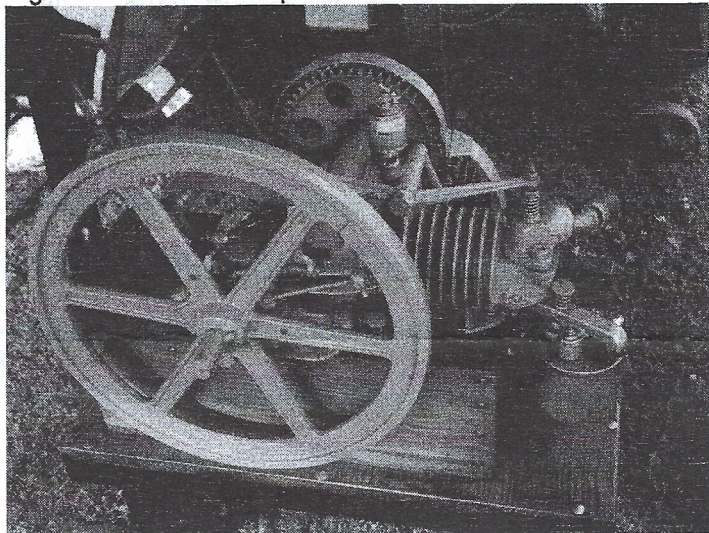


## Featured Engine No. 25

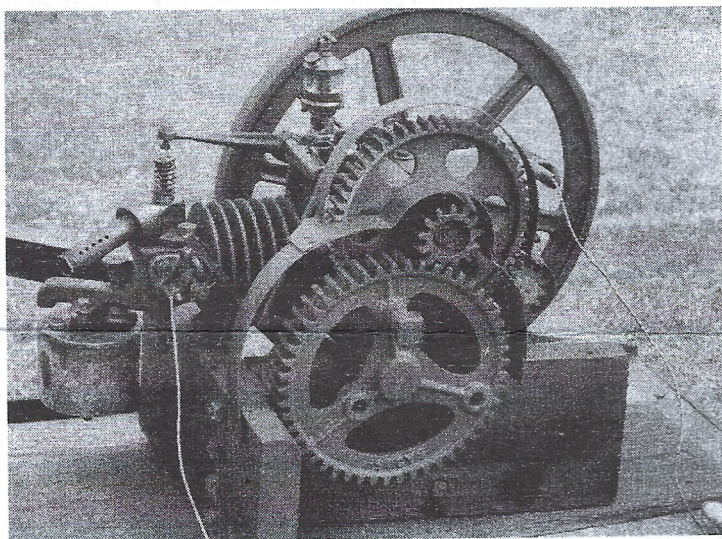
### The eight stroke "Aermotor"

By Albert Crittall

Of all the stationary engines that are rallied around the country every weekend there is one that causes a lot of head scratching by both the general public and the other exhibitors. Quite a lot of people are not sure how it operates and on many occasions some quite heated arguments have developed



The engine in question is the American "Aermotor" engine. The puzzling thing about this engine is that instead of being the usual four stroke engine, it is an eight stroke one and as far as is known, it is the only engine employing this type of valve timing.

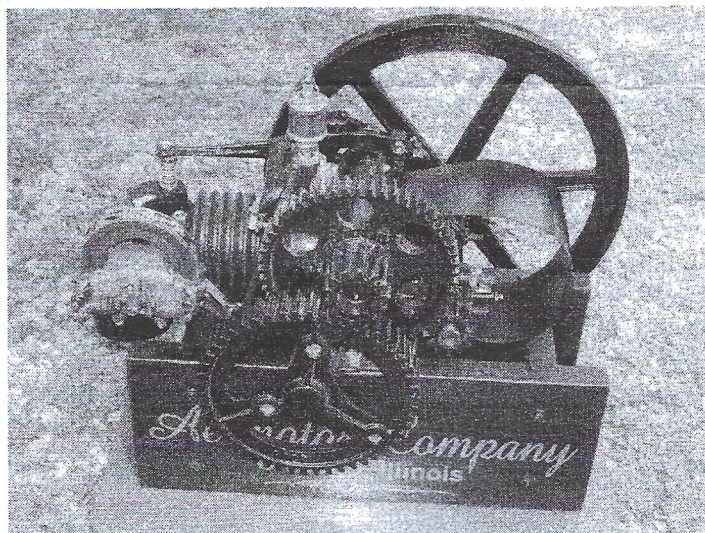


Most mechanically minded people can work out the principle of the four stroke and two stroke engines, but ask them to work out the valve timing of an eight stroke engine and you are met with a blank stare and quite a broad hint that you should pay a visit to the local "Trick Cyclist". The intriguing thing about this engine is that it fires once every four revolutions instead of, as in the Otto Cycle engine, every two.

The engine operates for the first four strokes as a normal four stroke and exhausts to atmosphere via a small open stub pipe but at the top of the exhaust stroke the exhaust valve remains open. When the piston descends on what would normally be the induction stroke, no fresh

mixture is drawn into the cylinder, owing to the fact that the inlet valve is automatic and cannot operate whilst the exhaust valve is off its seat. So a fresh charge of air is drawn into the engine via the stub pipe and is forced out on what would normally be the compression stroke. As the piston descends again another charge of fresh air is drawn in and again forced out by the rising piston. The eight strokes are now completed. The exhaust valve now closes and the whole cycle starts again.

The engine uses neither fan or water cooling and runs incredibly slowly. This results in it being very economical on petrol, which is a very important point given that these engines were designed to drive deep well pumps in the American West. This was in the period (circa 1900) when fuel and other supplies had to be transported long distances on very primitive roads, so obviously any saving on fuel was worthwhile.



When this article was first published in 1994, Albert believed that only two such engines are travelling round the Rally fields. So next time you go to a rally, have a look down the list of stationary engines in the programme and if you see the name "Aermotor", spare a few minutes to go and have a look at this most interesting engine.

Aermotor made the 8-cycle at a time when there was a variety of air-cooled designs about 1905 to the 1920s Two videos on YouTube.

<http://www.youtube.com/watch?v=YfniVth-AMA>

<http://www.youtube.com/watch?v=Hb1M3rFr2JO>

The company still exists, now located in Texas

<http://www.aermotorwindmill.com/>

The "Story of Aermotor Windmill Corporation, Chicago, Illinois" by Ken Brock in the November 1989 Gas Engine Magazine about 3 pages, mostly company history, founder, etc. The Chicago factory closed in 1958 and moved to Oklahoma. There was a nice colour photo of a fluted hopper Aermotor on the cover of GEM Sept 1987. The fluted hopper engine was a general purpose engine, where the 8 cycle was designed as a pump engine, incorporating large open reduction gears.



## Calendar of Events for 2009

March 7th . **Event.** Spring Sort Out at Cranmore Railway Station Yard.  
 March 21<sup>st</sup> **Club Visit:-** Oakham Treasures Retail & Farming Museum, Portbury Bristol. meet up at the museum 09.45am.  
 March 29<sup>th</sup> . **Event.** Spring Crank Up, Nunney Catch.  
 March 30<sup>th</sup> . Club night. Guest Speakers:- Ginger & Margaret – AUDEY PAWDEY & FRIENDS  
 April 13<sup>th</sup> **Event.** Easter Monday, Mells Daffodil Rally  
 April 18<sup>th</sup> **Event.** Engine Sort Out, Enstone, Oxon.  
 April 27<sup>th</sup> . Club night. Guest Speaker:- Richard Harris  
 BBC OUTSIDE BROADCAST PT 2 THE COLOURFUL YEARS  
 May 18<sup>th</sup> . Club night. **Members Evening:-** Bring along ten photo's or slides on any subject. There will be a prize for the best effort.  
 June 3<sup>rd</sup> . **Event.** D-Day Crank Up on Wednesday evening at the Old Down Inn  
 June 20/21<sup>st</sup> . **Event** Wessex SEC Rally at Semington  
 June 27/28<sup>th</sup> **Event.** 1000 Engine Rally, Astle Park.  
 June 29<sup>th</sup> . Club night. Guest Speaker:- Kim Siddorn  
 OCEAN STRIDING BISON illustrated talk about Viking ships & their uses.  
 July 27<sup>th</sup> . **Event** at club night. Evening Crank Up at the Court Hotel Chilcompton.  
 August 24<sup>th</sup> . Club night. Evening Crank Up at The Old Down Inn. *(Please note that club night is a week early to avoid August Bank Holiday Monday)*  
 Sept 28<sup>th</sup> Club night. Guest Speaker:- Dennis Chedghey illustrated talk on 1930's RADSTOCK  
 Oct10<sup>th</sup> . **Event.** Skittles and supper evening at The Royal Oak Corsley  
 Oct17<sup>th</sup> **Event.** Winter Sort out at Cranmore Railway Station Yard.  
 Oct 26<sup>th</sup> . Club night. Guest Speakers:- Bob Burgess, Colin Dipper TRADITIONAL ENGLISH FOLK MUSIC  
 Nov 14<sup>th</sup> . **Event.** Engine Sort Out, Enstone, Oxon.  
 Nov 30<sup>th</sup> . Club night. Guest Speaker:- Keith Shephard, illustrated talk titled A Look at the ENGINE MAKERS OF WESSEX  
 Dec 6<sup>th</sup> . **Event.** Winter Crank Up at Nunney Catch.  
 Dec 27<sup>th</sup> **Event.** Mince Pie Crank Up, Old Down Inn  
ALL DATES ARE SUBJECT TO ALTERATION

### Chairman's Report *(printed as received)*

By Brian Baker

The last meeting of 2008 at the Old Down Inn on Monday 24th November saw quite a large audience entertained by Tony Scammell giving a talk entitled "Just a Little Something." The little something's were miniature musical instruments, ranging from Grand Pianos to violins, all made to scale with beautiful woods and ivory. They were true replicas of the originals that Tony had travelled the world photographing and measuring to capture every detail, all of them works of art. Tony is a craftsman of the highest calibre and he certainly entertained all present with his brilliant presentation. The evening finished with our usual large raffle. The Anti-Freeze crank-up at Nunney on the 7th December started off

cold and frosty but when the sun came out we had a super sunny morning and quite a large selection of engines on display. The display attracted a lot of members and general public just looking around. The café was doing a roaring trade with breakfasts and cooked lunches, after which we held the raffle. By now most of the members had shut off their engines and were loading up ready to depart for home. This was one of the most successful crank-ups held at Nunney, a big thank you to all who attended. The last event of the year is always the Mince-Pie Crank-Up, this year at the Old Down Inn on December 27th. The weather was more like Siberia, very frosty and as cold as hell but sunny and bright. Despite the cold about thirty members had engines on display and a lot of members turned up just to look. (And I think to scoff the mince pies and sausage rolls.) The pub supplies the pies and rolls which the club pays for, these were handed round by our Vice-Chairman Eric and they were quickly snapped up by hungry members. We had a major problem with the landlady because we had taken up the entire car parking area and she had thirty customers booked in for lunch, despite trying to condense the vehicles we failed, and still had the landlady moaning. The only solution to this in future is to find another venue. We need a large enough space to accommodate the engine line up and the parked cars, preferably with access to an electric supply so we can heat and supply our own pies and rolls. Any suggestions please get in touch. I would like to thank the Editor and the Committee for their dedication and hard work they have put into running the club on your behalf for the past year. I would like to thank the members who have supported the meetings and events that we have organised for your entertainment. I would also like to thank the people on the fringe of the committee who do sterling work ensuring the club prospers. And finally I would like to thank the generous members who contribute to the raffles throughout the year with a vast amount of prizes. Thank you one and all. **A VERY HAPPY NEW YEAR** to you all.

### Exhibit Sheets

By Tony Davis

With last month's edition of Stationary Engine Magazine came a free "exhibit sheet" & my thoughts turn to this years rallies & crankups. How nice it would be if the well restored engines – and those just dusted & put out – were all accompanied by a card giving some history & dates of manufacture. Something to inform the public & make it more than just a large lump of iron. If anyone needs club info sheets, we still have some left over from our days behind the counter – only .15p each.

### Social news

Happy birthday to David Coats who qualifies for his bus pass on March 2<sup>nd</sup>. He might get challenged though because of his youthful appearance & black hair!



## A Day To Remember

By Officer F.

Not long ago four Senior Citizens who shall remain nameless other than Officers A, B, H, and F were invited to the residence of a gentleman known only as Captain G, to view his wonderful collection of Old Tractors, Engines and other Agricultural artifacts. His house being situated in the back of beyond half way up a beautiful wooded valley, with spectacular views across the rolling country side, needless to say it was a fascinating collection. Perhaps the display was not quite up to the standard of the museums that we have all come to know, it was nevertheless absolutely splendid.

After a welcoming cup of tea and a large slice of fruit cake, supplied by Mrs G the grand tour started with a visit to one of the large tractor sheds, this was so full of all the various makes there was no room to swing a mouse! We went on to view the engine shed, the interior of which was so dark we could barely make out what was what until officer 'A' managed to produce a torch from somewhere. All I can say is there were some unusual lumps of iron with flywheels on, the largest one, which I was told was an oil engine that had to be started on compressed air. Officer 'B' piped up from the gloom of the shed, "I think we should start it up."

Captain 'G' went off to fetch a tractor with a compressor on the back whilst Officers A and B oiled up the bearings and piston etc and then pulled the huge flywheel over to the starting position, the air supply was connected Officer 'A' played with various levers and blow me with a loud WOOSH it started up, for such a large engine it ran so smooth with only a gentle chuff from the exhaust.

After rummaging about in various other sheds Captain 'G' the owner suggested to officers A, B, H, and F that he would like to start up a large Petter oil engine that had not been started for over ten years, so we made our way down to the shed where this was kept. After clearing away large amounts of tins and miscellaneous iron work that lay in front of the shed, I saw this black upright engine. I know nothing about engines, so Officer 'B' explained that this was a Hot Bulb Petter Atomic two stroke Diesel - I was none the wiser to say the least. Officer 'A' and Captain 'G' started tinkering with the pipe work and priming pump and after turning it over a few times on the large starting handle a voice from within the tin shed was heard to say "I reckon it will go".

A blow torch was lit and the flame was applied to the long tube on the top of the engine. I was totally mesmerised by this procedure, but was assured by Officer 'B' that this was necessary before the engine could be started.

Officer 'A' using the flaming torch and with Captain 'G' cranking the handle they proceeded to go about their ministrations & occasionally large puffs of gray smoke issued from the large hole on the top of a big round iron pot situated on the side of the engine. After some time, the frequency of the puffs

increased as did the volume of grayish black smoke that by now was beginning to fill up the inside of the shed. The puffs of smoke were interspaced by a large yellow flame.

"I reckon it will go soon" came a voice from within the shed, followed by "I think we should drain the crank case of excess fuel first". The response was "just a bit more heat and it will be running". Again, the frequency of the puffs and flame increased until finally a voice shouted "its going"

There was by now more smoke in and around the shed then any one could possibly hope to see at a Bee Keepers Convention, what started as a nice gentle thump, thump, thump gradually became somewhat faster until the sound resembled that of a World War One Lewis Machine Gun.

Officers A and G had by now totally disappeared from view, miscellaneous oaths and other exclamations could be heard above the sound of the tortured machine, the old gal running flat out as if there was no tomorrow. Officer 'F' said to 'B' "are these old engines supposed to go as fast as this" his reply was muted by the sound of a large explosion followed by the muffled words "Christ almighty" and b\*\*\*\*y h\*\*l" plus other unprintable obscenities, the old engine was heard by now to be slowing and then it finally stopped, silence reigned once again.

As the gray-black fog thinned, A & G slowly emerged from the shed, "shaken but not stirred" would be an apt description of their encounters.

Needless to say the engine was now in a totally different position in the shed from where it started, covered in oil & black sludge & an unknown viscous solution. Lying on the floor beside the machine was the large round exhaust pot which had dissociated itself either by explosion or excessive vibration from its mother. What a sad sight it was.

When the question was raised as to what happened, Captain 'G' now agreed that we should have drained the crankcase and that the hungry engine was feasting on the excess fuel even though the main fuel supply was shut off.

The sight of the two oil splattered ancients emerging from that shed with looks of "worried yet triumphant" on their faces was something that I shall never forget and the phrase "Last of the Summer Wine" somehow seems to strike a cord here.

The expression lessons must learnt is well known, perhaps the one that comes to mind would be, "Always beware of old ladies that have not been aroused for over ten years"

## Vintage Working Weekend

Breamore Countryside Museum - 9/10<sup>th</sup> May

As last year, this interesting weekend near Fordingbridge, Hampshire, SP6 2DF is open to members of the Wessex SEC. Please contact Eric Gay for details on

Stop Press News!

Happy 16<sup>th</sup> birthday for the 26<sup>th</sup> February to Junior Member Carl Stevens from all his family.