# WESSEX STATIONARY ENGINE CLUB



## NEWSLETTER

February 1986

The material in this Newsletter shall not be reproduced without prior consent and due reference to the Wessex Stationary Engine Club. Opinions expressed herein are not necessarily reflective of the policy of the Club. All rights reserved.

JAMES ROBSON (pt.2, continued from the January Newsletter)

James D. Root, in his articles on the 'Cycles of Gas & Oil Engines' published in 'The Engineer' of October 1897 said 'the earliest invention of the two-cycle that I can find is Robsons'. He was correct, of course, as James Robson himself had made a most exhaustive search before taking out his patent in England and other countries. Also in 1879, Robson took out a patent (no.4501) for an improved and simplified version of the patent no.2334 engine. The claims in this patent were quoted as follows:-'the arrangement and general combination of engine, be which a charge of inflammable gases is drawn in and then compressed into a reservoir by one side of a piston working in a cylinder, and the expulsion and replacement during the backward stroke on the other side of such piston of the burnt gases of the previous forward stoke by the compressed gases of such reservoir, and completing the compression of the gases by the continued backward motion or ascent of such piston, and explosion of the forward stroke for obtaining motive power'.

Complicated reading on the face of it and quite a broad claim but it showed that Robson foresaw the possibility of performing all the operations of charging, compressing, exploding or combustion,

and exhausting in the one cylinder and in one revolution of the crankshaft.

It is of great interest that while the four-stroke engine cycle was developed by a Frenchman, M. Beau de Rochas, perfected by a German, Dr. N.A. Otto, then introduced to this country by an English Firm, Crossley Bros. of Manchester, the two-stroke Robson cycle was developed by an Englishman, James Robson, and was perfected, manufactured, and introduced to the world by an english Firm, Tangye of Birmingham in 1881. This fact, of course, is what got me interested in James Robson!

The first engines were rated by their nominal horse-power, the brake horse-power being about 30% more than the nominal. They were constructed to work on town gas, the consumption being about 35cu.ft. per BHP in the larger size and rather more in the smaller sizes. These engines were known as 'Tangye's Gas Engines - Robson Patent' and were manufactured in four sizes initially. One of these engines was awarded the Gold Jubilee Metal at the Royal Cornwall Polytechnic Exhibition in Falmouth in 1882.

In Robson's final years he was working on design of aircraft and had accumulated a vast amount of data relating to the weight that could be lifted per area of propellor. He died on August 15th 1913 in Birmingham and is buried at Lodge Hill Cemetery, Selly Oak. On his tombstone are inscribed the words 'Inventor of the Two-Cycle Internal Combustion Engine'

Michael J.C. Cannon

THE START OF SOMETHING BIG (Reprinted from WSEC Newsletter, Aug.1978)

Our way of life changed dramatically one balmy summer afternoon at Barwick Park, Yeovil Festival of Transport. I was quite happy, just sitting in the sun and watching the 'Beer in the Bucket Race' and the Cavalcade of Vintage Vehicles, whilst my husband and two sons were off wandering

elsewhere. Little did I realise what they were up to! My rapt concentration on the 1910 Steam Somethingoranother that was wheezing its way around the arena was disrupted when the men appeared suddenly and demanded my immediate presence at the other end of the field to see some little engines. Being an obedient wife as all good wives should be, I reluctantly followed and was led directly to a small green thing with steam gently issuing from a pot thing on top. 'That one is for sale' my husband said, 'and I think we can get it in the boot'.

'What on earth do we want a thing like that for?' was my immediate reply. Surely he did not

expect me to cook the spuds in it!

Of course the boys had also made their minds up and thus, yet again, I was outvoted; I decided that I had better keep my mouth firmly shut.

Our aged family pet, the Humber Hawk, was retrieved from the car park and I watched silently as the Wolseley WD 8 (as I later learnt to call it) was squeezed into the boot. We were now the proud owners of our first Stationary Engine and I was told that I could now be 'in the Club.....' The previous owners wife surveyed me as I studied the engine water hopper sticking out, still steaming, from under the lid of the boot. 'This is just the thin edge of the wedge' she said. 'They won't stop at just one'.

I see now that I was listening to the voice of experience; the next few weeks were spent dismantling, cleaning, resetting and doing just about everything that anyone does with engines. Regular mealtimes had become a thing of the past, the warning given to me at Yeovil echoed in my

ears. This was just the start of something big, a hackneyed phrase maybe but never more true.

There is no room in the garage now for the poor old car - even though the garage itself has doubled in size, the raspberry bed has been developed as an engine shed. I tell myself that I don't mind. I love washing oily jeans, and scrubbing oily boys; my husband enjoys me scrubbing him! Even so the best part of all if it is the rallies, where I just sit and watch whilst inhaling oily, smoky fumes and steam, mingles with the aroma of hot-dogs and beer. Who knows, I could end up as Club Secretary and, after that when I am as old as their 1913 Amanco, prhaps they'll treat me with such loving care.

Diana Emery (eight years ago!) \*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\* 'BAMFORDS LTD' of Uttoxeter (condensed from an article in WSEC Newsletter-July 1980)

Bamfords was established in 1871 and pioneered the steel plough and the cylinder mower, as well as producing high quality traditional implements and machines. Their famous line of Silver Medal horizontal engines introduced in 1920 changed little in basic design during two decades of their manufacture. The castings of the 'thirties' models show many signs of evidence of pattern repair, and the biggest modification was the transition from LT to HT ignition. From World War 2 onwards, their vertical engine range, the EV and the SV range from  $l_{\frac{1}{2}}$  to 5 horse power, and the diesels, SD types, etc. were characterised by the patent hinged crankcase. 'Remove four bolts and all the working parts are exposed for inspection' read the adverts.

Though engine production at Bamfords ceased some years ago, the competition from more lightweight power units must have been an ever present problem, their own products being robust but generally big and very heavy, a quality typical of many of their products over the years. In recent years, leading up to its demise, the company had failed to capitalise on its earlier successes and, rather than develop its own products, had turned to importing and manufacturing under licence.

In 1971, the acquisition of Jones Balers from Allis-Chalmers gave Bamfords to right to manufacture and sell under the Allis-Chalmers trademark outside the USA. This trend led to the company having an inadequate line of products with which to compete against other specialised manufacturers, which, together with the general decline in the UK market for tractors and agricultural equipment has written the closing chapters of this old family firm.

The failure of the company means the sad loss of a name synonymous with quality agricultural equipment for over a century. The valuable records of engine production are still in existence and have been preserved by Mr. Richard Bamford whose continuing interest in the former company's products mean that they are still available to the enthusiast.

The firm finally closed towards the end of 1980. \*\*\*\*\*\*\*\*\*\*\*\*\*

REMINDER

Annual subscriptions fell due on January 1st and are as follows:- Single member £5; Family (husband & wife) £6; Junior (under 18) £1. If you have not yet renewed, please do so as soon as possible as you are not covered by our Insurance Policy unless you are a paid-up member.

A regular customer of the Old Down Inn has pointed out, in the nicest possible way, that the standard of parking on Club nights leaves a lot to be desired. Before hurrying inside to sample the delights of our monthly meetings, please spare a thought for those others wishing to use the Pub and ensure that your vehicle is not making problems for others. \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

DATES FOR YOUR DIARIES

Cricket St. Thomas Rally at the Wildlife Park is to be held this year on May 25/26. Entry forms from Bill Foster, Fourways, Sandley, Gillingham, Dorset.

Selwood Steam & Preservation Society are holding a rally at Longleat for engines, tractors, etc. on 31 May/1 June. Enquiries with sae please to Mrs. B. Gregory, 62 Critchill Road, Frome, Som.Tel.63350 The same newly-formed group have organised a trip to Listers of Dursley on Friday, 4th April. The coach will leave the Forrester's Arms, Beckington at 6.30 p.m. via Bath and there will be 20 spare seats. Anyone interested please contact through Jackie Lambert on Frome 63526. Pick-ups will be en route, but anyone preferring to go independently will be welcome providing they tell Jackie of their

intentions as Listers will be providing a Buffet Supper after the tour and wish to know numbers. Please arrive no later than 7.30 p.m. at the main gate. Coach fare will be in the order of £2 per head.

Castle Coombe Rally will be held again this year at the famous racing circuit on May 10/11; contact Mr. R.M. Chivers, 29 The Common, Langley Burrell, Chippenham, Wilts.

Bath Festival of Transport at Hengrove Park, Whitchurch, Bristol is to be held on 16/17 August. Enquiries to Mr.B.A.Triggell, 32 Beaufort House, Strawbridge Road, Lawrence Hill, Bristol, or Tel.(0272)556276.

Abbey Hill Rally Yeovil is May Day Bank Holiday weekend, May 3/4.

Bleadon Steam Rally is Aug.2/3. Details from Mr. C. Henderson, 44A Alma Street, Weston-super-Mare, Som. SAE please.

Bath Festival of Steam, June 28/29. Details from Malcolm Fleet, Cheddar 743291. Closing date

'Yesterday's Farming', the excellent 2-day event with a countryside flavour organised by the South Somerset Agricultural Preservation Club will be held this year at Manor Farm, Long Sutton on Sept.6/7. Details, entry forms, etc. from Brian Crudge, 22 Stoke Rd., Taunton, Som. Please include

Swindon Machinery Pres. Society's 'Nostalgia Weekend' is June 7/8 at Lydiard Country Park. Entry Forms etc. from Brian Harvey, 154 Cheney Manor Rd., Swindon, Wilts. Tel.(0793)692877). A SAE would be appreciated.

### WSEC EVENTS 1986

WSEC EVENTS 19	86 The second of the process of the second o
24 February 15 March	Annual General Meeting at the Old Down Inn Grand Wessex Jumble Sale at At. Petter's Church Hall, Westfield, Norton Redstack Doors open at 2 p.m. Help and jumble urgently required on the day or
22 March	Skittle Evening versus the South Somerset Ag.Pres.Club at the Brook House Interesting Versus the South Somerset Ag.Pres.Club at the Brook House Interesting Skittle Evening versus the South Somerset Ag.Pres.Club at the Brook House Interesting Skittle Evening versus the South Somerset Ag.Pres.Club at the Brook House Interesting Skittle Evening versus the South Somerset Ag.Pres.Club at the Brook House Interesting Skittle Evening versus the South Somerset Ag.Pres.Club at the Brook House Interesting Skittle Evening versus the South Somerset Ag.Pres.Club at the Brook House Interesting Skittle Evening versus the South Somerset Ag.Pres.Club at the Brook House Interesting Skittle Evening versus the South Somerset Ag.Pres.Club at the Brook House Interesting Skittle Evening versus the South Somerset Ag.Pres.Club at the Brook House Interesting Skittle Evening versus the South Somerset Ag.Pres.Club at the Brook House Interesting Skittle Evening versus the South South South South State Interesting versus the South South South South State Interesting versus the South
24 March** 20 April	Royal Enfield and their Products. a take by Royal Enfield and their Products. a take by Wessex Car Boot Sale at Cheddar School (opposite the Fire Station). Free to Wessex Car Boot Sale at Cheddar School (opposite the Fire Station). Free to Wessex Car Boot Sale at Cheddar School (opposite the Fire Station). Free to Wessex Car Boot Sale at Cheddar School (opposite the Fire Station). Free to Wessex Car Boot Sale at Cheddar School (opposite the Fire Station). Free to Wessex Car Boot Sale at Cheddar School (opposite the Fire Station). Free to Wessex Car Boot Sale at Cheddar School (opposite the Fire Station). Free to Wessex Car Boot Sale at Cheddar School (opposite the Fire Station). Free to Wessex Car Boot Sale at Cheddar School (opposite the Fire Station). Free to Wessex Car Boot Sale at Cheddar School (opposite the Fire Station). Free to Wessex Car Boot Sale at Cheddar School (opposite the Fire Station). Free to Wessex Car Boot Sale at Cheddar School (opposite the Fire Station). Free to Wessex Car Boot Sale at Cheddar School (opposite the Fire Station). Free to Wessex Car Boot Sale at Cheddar School (opposite the Fire Station). Free to Wessex Car Boot Sale at Cheddar School (opposite the Fire Station). Free to Wessex Car Boot Sale at Cheddar School (opposite the Fire Station). Free to Wessex Car Boot Sale at Cheddar School (opposite the Fire Station). Free to Wessex Car Boot Sale at Cheddar School (opposite the Fire Station). Free to Wessex Car Boot Sale at Cheddar School (opposite the Fire Station). Free to Wessex Car Boot Sale at Cheddar School (opposite the Fire Station). Free to Wessex Car Boot Sale at Cheddar School (opposite the Fire Station). Free to Wessex Car Boot Sale at Cheddar School (opposite the Fire Station).
28 April 19 May** 14/15 June	Arthur Clapp Midsummer Crank-Up at the Old Down Inn Midsummer Crank-Up at the Old Down Inn
30 June 28 July	Evening Meeting - yet to be confirmed  Guess the Object  A short Evening - bring along your slides etc or give a talk on your favourite
18 August** 29 September	Don't miss this one! A talk by the irrepressible raconteur, terry Sangster, Don't miss this one! A talk by the irrepressible raconteur, terry Sangster, Preservationist, entrepreneur, ex Villiers sales director, racing driver for Ford,
11 October 27 October 1 November 24 November 7 December	Coach Trip - details to follow in due course  Evening meeting - to be confirmed later  Evening meeting - to be confirmed later  Social evening at the new Chilcompton Village Hall  Social evening at the new Chilcompton Village Hall  Hot Air Ballooning, talk by Major Christopher Davey  Hot Air Ballooning, talk by Major Christopher Davey  The 'Anti-Freeze' Rally - and adventure for the hardy! Another Mini-Rally at the

Old Down Inn \*\* Denotes that this meeting is not the LAST Monday in that particular month due to National holidays

THE JANUARY MEETING - 'Doing it the Dutch Way'

This evening gave us a first class insight into how rallies in Holland differ from our in the UK. Club member Brian Lovell, armed with a magazine full of slides kept us entertained for the first hour with his holiday/rally visit to foreign shores, travelling from Dover to Zeebrugge. With three lorries loaded with several tractors and stationary engines, Brian and his friends made their way via Antwerp and Utrecht to Pony Park, Slagharen, a journey of some 546 miles through what looked like an extremely interesting route. The rally site looked like a giant Battersea Fun Fair set in over 100 acres of surrounding countryside and, amongst all the rides and shows, one area was set aside for all the Vintage exhibitions. Over 200 tractors and a nice display of stationary engines made a very

All this travelling was very thirsty work so we then stopped for a break and our usual monthly raffle. Prize winners were:- Exotic Erotic Plant, Mr. Alan Sweet; Calculator, Mrs. B. Munt; Screwdriver (Bamford size), Tom Randall; and Bag of Potatoes, P. Roberts.

Glasses having been refilled, Brian went on to show us a cine film of the same rally with a look at the Big Dipper doing a complete loop, which drew gasps from our audience, and also a giant swinging boat which actually went up and right over the cross-bar; made me feel queezy, just watching. Then came film of more tractors, some rarely seen in the UK were Porche, Hela, Deutz, Lanz, Hanomag and Bronz, whilst the stationary engines included many well-known British makes plus some Dutch,

This was a most interesting evening and enjoyed by a packed-out room. many thanks again to Brian for putting on the show; we certainly hope to see him again sometime in the future for more

Robin Lambert

\*\*\*\*\*\*\*\*\*\* FOR SALE

Two Lister D-types, good magnetos and complete. £15 each. Ron Torr, Tel. Oakhill 840413

One Phoenix Water Pump complete but needs a Coburn engine to drive it. £25 ono. David Brown 4-cyl magneto, good working order. £40 ono. Bill Coombs, Tel. Oakhill 840868

Lister Junior 3 hp industrial engine driving 110 volt generator, trolley-mounted with lighting board, ready to rally £125; Triumph 21 motor cycle engine/gearbox, 350cc, complete. Eng.no.21/H4257, £45.

Portable two-burner cooker and grill, caravan type, on cupboard which contains the cylinder. Ideal for rally caravan and in as new condition, £20. Apply to Ray Earle, Middle House, High Ham, Langport, Som. Tel. 251758 (This ad arrived in TWO days - by second class mail....! Ed.). WANTED

Genuine collector requires anything pertaining to Gloucester or Somerset Regiments. Postcards depicting soldiers of these regiments, badges, button, metals, anything. Contact Bob Purnell, Avoca, Church Road, Old Church, Nailsea, Near Bristol. Tel. 857454

One pair of stabilisers for motocycle.... 'I can't stay on the bloody thing'. C.M. Harrison, Tel.Frome

Desperately, by Editor, Wessex Stationary Engine Club. News, Views, Articles on restoration, Sales, Adverts to help sustain this monthly publication. As you see, I have taken the unprecedented step of reprinting articles from earlier Newsletters; without this there would have been next to nothing to make up a reasonable edition. The Club exists for YOU it's members; please help in return even if you have to write under a pseudoname. I have NOTHING at all for the March Newsletter! Send to Eric Brain, 5 Greenridge, Clutton, Near Bristol. Tel (0761)52633. STOP PRESS

Coleford Scouts Rally to be held Bank Holiday Monday, 5 May 1986 on the playing fields, Coleford, near Bath, Somerset. Entry forms from Mr. D. Hodges, Grove House, Coleford, Bath, Tel.Mells AND

DON't forget our Jumble Sale, March 15th, 2 p.m. St.Petter's Church Hall, Westfield, Norton-Radstock, near Bath. Helpers and jumble, bric-a-brac, etc. welcome from 12 noon at the Hall. Please