

## WESSEX STATIONARY ENGINE CLUB LIMITED

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\*\*\*\*\*\*\*\*\*\* EDITORIAL \*\*\*\*\*\*\*\*\*

As I write this month's newsletter it is only about eight weeks away from our annual rally at Clutton. I would like to appeal to members to turn up and give the committee a hand setting up the rally field as you did last year. We shall commence setting up on Monday 9<sup>th</sup> August at the field at 6-30pm. If any member can help please turn up, if you have a van or trailer, that will be put to good use helping move the kit from the farm where it is stored, to the field. Last year many hands made light work and it was the easiest setting up we had since the rally started.

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I recently spent four days at the Royal Bath and West Show exhibiting my newly restored 6 hp Petter "M" that was given to me at last year's show. The chap who gave it to me came looking at the engines again this year and was absolutely over the moon when he saw the Petter and the transformation that had taken place, his words were "it won't be scrapped now will it?" he had gave me the engine because he was afraid it would be scrapped if anything happened to him. The Petter, which was on it's first outing since restoration ran perfectly for the four days, the only problem was I could not run my H3 Lister pump because the driving pulley on the Petter is a massive 14 inches across, this made the pump go so fast it was jumping off the ground. I am currently looking for a smaller pulley. (See adverts). The Stationary Engine section at last years show was members from the WSEC, and there were 17 engines driving numerous pieces of machinery. This year there were only 7 engines as Tony Carter the section steward was let down by the Sedgemore Club who had agreed to put on an engine display. The moral of this tale is if you want a decent display of large interesting engines you have to go to an engine club, Namely the WSEC. Included in some of the first visitors to look at the engines were WSEC members David and Doreen Edgington who stopped for a chat. The show this year broke all attendance records, and people were going past looking at the engines for the entire time the show was open over the four days. Hopefully the show organisers will admit they made a mistake this year and invite the WSEC to once again put on a decent engine display. The May meeting at the Old down Inn was a bit different to the usual one as we had no guest speaker, but a night's entertainment put on by the committee. The first part was an array of objects laid out on tables that members had to identify. There were about 45 of these "objects" ranging from a vintage vulcanizer to a tool for removing fuses from a modern car. The members were supplied with pens and paper to record their answers and the one with the highest score stood to win a ten pound note. With 22 correct answers the tenner was won by our Junior Reporter Jonathon Hockedy, well done Jonathon. After our usual grand raffle we then had a show of various photographs that members had brought in shown on the club's epidiascope, this proved to be quite a popular form of entertainment and we hope to repeat it at the August meeting, but next time we will limit the amount of photographs to ten per member so every member has a chance to see their photo's on screen. I hope members will give the committee the same support as they did last year in setting up the rally, it certainly made light work of it with many willing hands. B.J.B.

### THE GREAT ALASKAN HIGHWAY - PART THREE - BY ERIC GAY

The worst seasons of all were the spring and autumn. In spring the frost coming out of the ground caused tremendous heaves or corrugations, and in the fall rain turned the road into a sea of mud. The trailers towed by the Kenworths were 40 foot Aeroliners, the big problem at first were the acute curves on the mountain passes, and it was only just possible to get a forty foot trailer round, and this situation continued until the 1960's. When the road was finally finished it was decided that the cost of getting all the machinery back to the USA was just to much, so most of the cranes, trucks, bulldozers and other equipment were driven into the muskeg where it promptly sank and disappeared forever. It was a black day for Alaska, Good Friday 1964, Alaska witnessed one of the largest natural disasters, an earthquake registering 9.2 on the richter scale, a second quake hit a litle later in the day and this was registered even higher, it was the worst earthquake ever to hit anywhere in the world. It created a tidal wave that reached the incredible height of 230 ft. Coastal towns as far away as California were flooded as a result of this giant tremor, and the towns of Crescent City and Eureka were completely devastated. Massive amounts of aid were poured into Alaska, particularly into Anchorage following the quake. The area was soon overwhelmed with trucks hauling in vital building materials and supplies. This project coupled with a general increase in tourism saw significant improvement along the highway in the latter part of the 1960's. It was in 1973 that the next major act in the highways life began, this was the year that a start was made on building the Alaskan oil pipe line. This was to run from Prudhoe Bay on Alaska's northern shoreline to Valdaz in the south. The project required enormous amounts of equipment, much of which was trucked up the highway from places as far away as Texas and California. The pipe line runs for 800 miles with parts running both above and below ground. Many trucking companies made their fortunes hauling materials in this boom time. Weather has always played it's part along the highway, and at one time 130 miles of the road was just washed away, this would be like losing the M4 from Bristol to London. During the 1980's one major project was the hauling of fuel for the mines at Cassiar, this was taken from the port of Stewart, south of Sagway, the return haul involved carrying loads of hazardous asbestos from Cassiar to Stewart. Although Alaska is best known for it's huge oil and gas reserves, it is also brimming with metal bearing ore such as lead and zinc, and the White Pass and Yukon Company was one of the first companies to capitalise on this fact. The company was made up of four divisions, shipping, rail, pipeline and trucking, this ensured that they controlled much of the transportation in the region. The company also owned and operated the vital rail link between Sagway and Whitehorse,. Over the years the White Pass and Trucking Company used a variety of powered equipment including Kenworth, Western Star and Freightliners. In 1977 and early 1978 they introduced Columbia built two trailer B train units capable of carrying 61 tonnes, which meant a huge increase in productivity. New Kenworth tractors powered by the mighty Cummings KT-450 engines driving through a Fuller RT0 14-515 deep reduction, overdrive gear box to Rockwell rear axles were also acquired at this time. These outfits were still limited to trips between the mines at Faro and Whitehorse where their loads would be transhipped to rail for movement on to the port of Skagway. At about this time the Klondike highway was finally completed in the early 1980's. Also at this time the Cyprus-Anvil mine ceased operations and the White Pass Company lost the valuable contract. In the latter half of 1980 the Cyprus-Anvil mine reopened and a new trucking company took over the hauling of the ore with brand new tractor units made by Volvo as well as Western Star, but in the summer of 1993 the mine was forced to close and the Alaska trucking Company was forced to close too. All it's trailers being specifically for carrying ore, the mine never reopened again and no company has ever replaced it. Meanwhile the White Pass and Yukon Company had changed it's name to White Pass trucking and restricted their operations to hauling fuel between Skagway and points within the Yukon. They used some very large trucks being Kenworth C-550 8X6 rigids hauling four axle drawbar trailers known as "Big Bertha", these trucks were able to haul over the roughest of terrain courtesy of the twin steer set up and three axle drive. White Pass also used tri-drive Kenworth Tractors hauling B-train tankers for regular road work. In the coldest and harshest conditions big orange fluorescent lines would be painted on the tyres and wheels of trucks operated by the White Pass Company so that the drivers could look in their rear view mirrors and see that the wheels were turning or not because the brakes could freeze on and there were no way of knowing when driving over frozen snow, but even in blowing snow the drivers could see the orange lines and would know if the wheels were moving or frozen solid. However with all their long term experience of trucking in the frozen north even the White Pass trucking operation has come to an end and the company has now disappeared. There are no doubt many more stories about the Great Alaskan Highway waiting to be told, but like all things, Martins wonderful video, slides and talk on this great adventure in the history of Alaska Highway came to an end, and I can only express our thanks to Martin for all the trouble he went to too to make this evenings entertainment such a great success, not to

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mention how he travelled back to his home to collect another TV when the one that we provided failed to work with his video equipment. I have compiled this write up from my own and Martins notes and I hope it does justice to the great evenings entertainment we all enjoyed, and with the bonus of the great WSEC raffle, thank you to all who donated prizes

PS. Since I have been editor. (10 years) and probably since the club began, this is the longest article a member has submitted for publication in the newsletter. Well done Eric, but please don't do many this long as it is just approaching midnight as I finish this, the third and final part.

### \*\*\*\*\*\*\*\* GET WELL SOON \*\*\*\*\*\*\*\*\*

Cecil Giblett recently had a fall and damaged his hip. This hip had already been replaced with an artificial hip and Cecil had to undergo another operation to replace it with another new one. Cecil is still in hospital as I write this report and was feeling rather poorly. We wish Cecil a speedy recovery, and as soon as he is up on his feet from this setback he has to go in hospital again for the other hip to be replaced. Another member who has just had a replacement hip is Colin Baker. Colin had his operation on Friday afternoon, on Saturday he was up and walking, and on the Tuesday he was home. What a remarkable recovery, it just goes to show the marvellous advance of the medical profession. We wish both of you all the best of health in the future and I'm sending you entry forms for the London Marathon.

### \*\*\*\*\*\*\* BIRTHDAY GREETINGS \*\*\*\*\*\*\*\*\*

The club would like to wish committee member Martin Feeney many happy returns of the day on reaching the big 40 on the 3<sup>rd</sup> of July. Have a great day Martin and remember this, you will never be 39 again.

### \*\*\*\*\*\*\*\*\*\*\*\*\*\* NEW MEMBERS \*\*\*\*\*\*\*\*\*\*

The WSEC would like to welcome the following new members to the club. Mr N FOWLER from Westfield Radstock, Mr P LYE and Mr ROS FREEMAN from Shepton Mallet, Mr M JUNGE and 2 Junior Members from Gillingham Dorset, Mr D PRICE from Potterne Devizes. We hope your membership will be a long and happy one.

### \*\*\*\*\*\*\* EVENTS FOR YOUR DIARY \*\*\*\*\*\*\*\*\*

SATURDAY 3<sup>rd</sup> JULY Holcombe Fete and Engine Rally. Ring Tony Davis for details on 01373 464982.

SATURDAY 10<sup>th</sup> JULY. Engines wanted at Burrington House, Burrington Coombe Village. Turn up at around 12 o clock for a fete opening at 2pm. Ring Brian Reed on 01934 852766 for further details.

MONDAY JULY 26<sup>th</sup> Crank Up at The Court Hotel Chilcompton. Prize for the best restored and the most unusual engine. Lets have a good turn out for this very popular event. Usual raffle for club funds. Prizes would be appreciated.

SATURDAY-SUNDAY 14<sup>th</sup>-15<sup>th</sup> AUGUST. WESSEX STATIONARY ANNUAL RALLY AT CLUTTON. Barbeque in the evening with free beer and cider. Hot dogs and burghers at reasonable prices. Usual grand raffle.

**SATURDAY-SUNDAY-MONDAY AUGUST.** East Somerset Railway at Cranmore. CRANMORE 44 REVISITED. Commemorating the 60<sup>th</sup> anniversary of Normandy. For further details ring 01749 880417.

SATURDAY -SUNDAY 21<sup>st</sup>-22<sup>nd</sup> AUGUST. South Somerset Agricultural Preservation Clubs YESTERDAYS FARMING RALLY at Manor Farm, Puckington, Ilminster. For details ring 01823 490619.

# THOMAS NEWCOMEN'S INVENTION FOR RAISING WATER BY FIRE

There are many delights to sample along the South Devon Coast, beaches, caves, model village, zoo, river and sea trips and the steam railway. There is one delight for engine enthusiasts which is worth seeking out. Many visitors travel on the Paignton to Kingswear steam railway which goes along the coast and then follows the beautiful Dart Estuary. A short ferry ride which gives you a stunning view of Dartmouth and the Naval College building, which dominates the high ground, There are many striking old buildings in the town to admire, then make your way to the Royal Avenue Gardens, and a modest engine shed built in 1963 to house the Newcomen Memorial Engine. Towards the end of the 17<sup>th</sup> century the need for better and cheaper means of removing water from coal and other mines in various areas of Great Britain became pressing. These mines working earlier from outcrops, had over the years been taken ever deeper, and the principal coal mining areas of Stafford, Warwickshire and Tyneside were particularly troubled. Many mines had been drowned out and abandoned, existing pumps simply could not cope with the water. Although steam and its effects had been much experimented with in attempts to produce useful power no practical pumping engine was devised until partial success was achieved by Thomas Savery's "The Miners Friend" (Patented 1698). This device could not raise water from the deep mines. In the very early years of the 18<sup>th</sup> century Thomas Newcomen (1663 – 1729) an ironmonger, born in Dartmouth, and his assistant John Calley developed an engine which employed a vacuum created by condensing steam from a pressure only just above atmospheric. He employed a vertical open topped cylinder in which a piston moved. This piston was connected by chains to the end of a massive rocking beam, to the other end of which was chained to the pump rods that went down into the mine. Steam was admitted into the cylinder from the boiler placed below, and the weight of the pump rods activated the beam so that the piston moved towards the top of the cylinder and drew in steam. At this moment water was sprayed inside the cylinder and a vacuum created into which the piston was forced by atmospheric pressure, rocking the beam and thus creating a stroke of the engine. The power of Newcomen's engine was limited by the level of contemporary technology, and the ability to cast large cylinders and supplying them with adequate steam. The invention was of prime importance and became an immediate and outstanding success. After the first successful engine was built in 1712 near Dudley Castle, West Midlands there was a very rapid take up of the invention throughout the country> It's use spread to continental Europe by 1720. Although there were a number of detailed improvements to the Newcomen's 'Atmospheric' or Fire Engine as it was known, there was no essential change of principal until James Watt developed the separate condensers and closed in the top of the cylinder. This was some 64 years after Newcomen's first success, by which time saw some 600 engines had been built in Britain. The engine on display in Dartmouth as a memorial to Thomas Newcomen is a direct descendant of Newcomen's first machine. A small engine of 22 inch cylinder, very similar to that of the 1712 Dudley Castle engine, but made of iron and not brass, it is unlikely that it dates from much before the end of the 18th century, but displays many of the features of the early engine. It's wonderful to see this preserved engine, whose invention aided the rapid rise in industrial activity which lead to the industrial revolution.

MARGARET SIMMONS.

WANTED WANTED. A driving pulley for a 6hp Petter M. Three hole fixing to flywheel. 7" to 10" diameter. Ring Brian on 01749 342671 if you can help out.

As a follow up to the excellent letter by our Vice Chairman Eric Gay in the April issue of the Stationary Engine Magazine, the club shop now has three different types of exhibit log sheets for sale at 15p each. All have club logo, badge and exhibit log sheet printed at the top. No 1 is the standard exhibit sheet, with make, type, fuel, year, manufacture, history, owned by at the bottom, for engines etc. No2, as No 1 but missing fuel, for pumps blowers, mills, generators etc. No 3, with logo, badge, and exhibit log sheet at the top, as the original, with spaced lines down to the bottom, and owned by at the bottom, ideal for static displays and exhibits. If anyone would like their details put onto an exhibit sheet, I will do it for free in hand written block capital lettering. Let me have all the details to Tony, phone number as below. Perhaps this year we could have all exhibits with all information out front rather than the usual 50%, I know our junior reporter J.P. would be over the moon. For club shop ring Diana on 01373 464982.