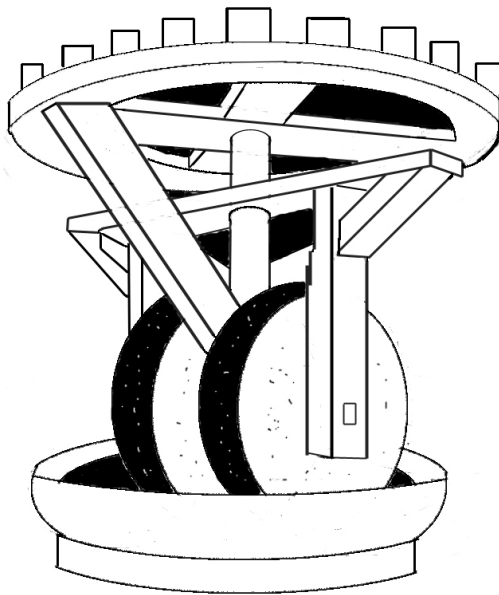


Touchpaper



The Newsletter of the Royal Gunpowder
Mills Friends Association

December 2010

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Images can be submitted either as a jpeg, tiff or bitmap. You can also submit images as a pdf. Please make your images as large as possible (or as large as your internet connection can stand!). If you scan your own images, please use a high resolution (at least 600 dpi). You can sacrifice colour for quality as we only print black and white so use greyscale for scanning if possible. If you need help, please get in touch.

Finally, please be sensitive to copyright rules.

Editor's news

Hello all

Thank you to everyone that provided contributions to this issue. I now have enough jokes to last me a good few issues, some not altogether appropriate, but please keep them coming, particularly if they are topical.

Can I thank Minnie Fenton for her excellent contribution, that you will find on page 12. I always enjoyed Minnie's writing when she submitted articles for various purposes during my tenure as Marketing Manager at the Mills. Thanks Minnie, don't stop now!

I have never created a Word Search before and, frankly, I don't intend to do it again. It was tested; I hope you enjoy the diversion and I brace myself for reports of errors.

If you attended the recent fireworks events you will know that both evenings were very successful with record attendance. A similar event is already booked for 2011 and it will be bigger than ever so I am sure Lynne and her team would welcome any offers of help from the Friends to provide stewarding. I'll remind you all nearer the time...

I am typing this with frozen fingers and I am wondering whether I will be able to travel at Christmas as planned. I hope that none of your arrangements for the festive season have been affected and that you have a wonderful holiday and send my best wishes for the New Year.

Michelle Moore

Chairman's Chat...

By the time next season opens, there will have been some significant changes to the site to encourage more visitors. The rocket exhibition will have moved from L157 to L168 (where the gunpowder boat and casting liquid lorry are currently). The boat and lorry will have moved to new locations not yet completed.

The cafe will have been refurbished. (Hurrah ! do I hear?). Other changes are also expected to have occurred. The exhibition areas will look quite different - well worth another visit.

I expect you will all have been interested to see the list of members in the last Touchpaper. The Committee hope that most of those with asterisks against their names will have by now renewed their memberships. Perhaps other Friends could help by reminding them. The Friends rely on membership subscriptions to fund some of the activities we do where there is a need to buy

materials.

As usual, in early November, the Education Department ran classes on Guy Fawkes and the Stuart period which local primary school children enjoyed. Their teachers thought these were educational as well as entertaining. Friends and Volunteers assisted by guiding children between the various buildings being used.

Very successful fireworks displays were held on 5th and 6th November.

Wishing you all a Very Happy Christmas and New Year.

John Wright

Letters to Touchpaper

Inspired or irritated? Social or technical memories? Whatever it is, we want to hear about it, so write or email—our address is inside the back cover.

Rockets On The Move

As John mentioned in Chairman's Chat our rocket exhibition will be moving to a more central location. The trustees are providing funds to enable a major makeover along with a science based activity centre for younger children located in the same building. Much of this will be in the hands of professional exhibition designers, but they will need some basic information from us about the history of ERDE / PERME for display panels. We need more information about our past contributions to propellants, motors and composite materials.

As an example we could start with the Germans who arrived here at the end of WW2 and the contributions they made to rocket engine design. Following this could be Skylark and its plastic propellant fuel, from its origins in WW2, implementation in the mid fifties, until its last flight a few years ago, along with contributions it made to the scientific community. Other displays could include the development of a stable polyurethane propellant for Polaris, applications of Stonechat, and ejector seat technology. Whiskers, Kevlar and carbon fibre are also of interest.

Are there other areas or topics we could usefully display? Contributions or comments to len.stuart@iee.org or to any committee member.

Len Stuart

Canal Miscellany – addition

Owing to lack of space, the last image in the Canal Miscellany did not have an explanation This was :

This image of blast furnaces, taken in 1921, is symbolic of the time when Britain was still a major heavy industrial power.

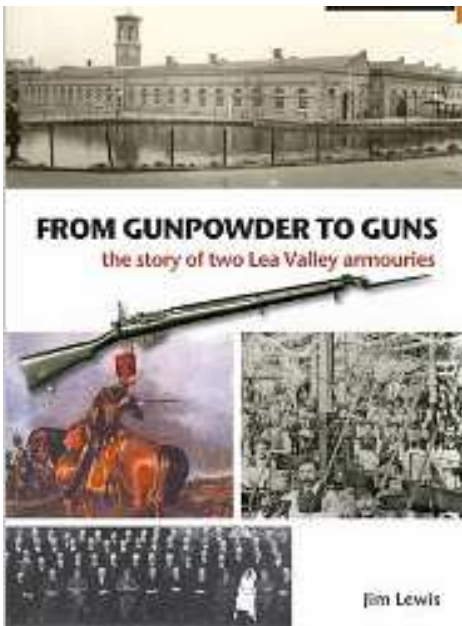
The works are Alfred Hickman's Spring Vale furnaces at Bilston, Staffs, known to locals as the 'ot 'ole.

It is of particular interest as it shows in one shot :

- The furnaces, complete with charging ramp
- The pig iron product of the furnaces, stacked on the left hand side
- Coke fuel supply boats lying in the canal arm serving the works
- Covered wharves on the right

Alfred's furnaces are now gone and the canal arm filled in .

The book review



From Gunpowder to Guns is available from Amazon at £9.99

From Gunpowder to Guns is a wonderfully readable and descriptive account of two Lea Valley armouries that were responsible for supplying weapons and explosives to British and Commonwealth forces for over 200 years. It is also the story of historical government failings that have an echo in events surrounding some of today's major military conflicts. The author reveals, for the first time, how the lack of understanding in the design, development and manufacture of weapons by high-ranking Government officials placed our armed forces in considerable danger during the Crimean War.

The book shows how the Royal Small Arms Factory, at Enfield Lock, became the first in Britain to manufacture weapons with interchangeable parts with machine tools purchased from America. The extraordinary story of the growth of the Royal Gunpowder Mills at Waltham Abbey takes us on an incredible journey from basic explosives through to Barnes Wallis's bouncing bomb, the development of rocket propellants, the exploration of space and the spin-off of modern materials used in everyday objects.

About the author

Dr Jim Lewis has spent most of his career in the consumer electronics industry, apart from a three-year spell in the Royal Air Force servicing airborne and ground wireless communications equipment. When working in the Lea Valley for Thorn EMI Ferguson he represented the company abroad on several occasions and was involved in the exchange of manufacturing technology. Currently he is a Consultant to Terry Farrell & Partners on the historical development of London's Lea Valley and a Workers' Educational Association (WEA) tutor teaching industrial history. Among his published works are *London's Lea Valley: Britain's Best Kept Secret* (1999) and *London's Lea Valley: More Secrets Revealed* (2001).

WASC 526

The Quinton Hill Footpath Battle

In the vanguard of the application of the new organic chemistry on an industrial scale, in 1872 a production unit for Frederick Abel's Guncotton was established in buildings previously part of the Gunpowder Mills saltpetre refinery on Highbridge Street. Demand from the Forces for Guncotton rapidly increased and in 1890 a much larger facility was built on land at Quinton Hill south of Highbridge Street, later to be known as the South Site, purchased in 1885. The development was welcomed in many quarters, with the prospect of increased employment and trade for the town. However some citizens viewed the situation with a more jaundiced eye. The reason – the Quinton Hill footpath.

The path was a popular link between Sewardstone and Waltham Abbey, at Quinton Hill crossing the Black Ditch and Cobbins Brook by footbridge, well used by people going to the shops and market of Waltham Abbey and on Sundays church going or enjoying the peaceful surroundings. Unfortunately it ran directly through the Government land and the War Department made application for its closure – 'stopping up' in official parlance. Doubtless they considered that the national interest must take precedence over local interests but not all were impressed. The proposal provoked considerable opposition and protest, reaching national levels.

Communication in the press - the Waltham Abbey and Cheshunt Weekly Telegraph (every Friday one Penny), figured largely. In the Gunpowder Mills Archive there is a faded notebook containing relevant cuttings and some hand written letters. The intriguing aspect is that it appears to have been kept by one of the principal opponents of closure Charles Saville, giving his address as the Gillwell Iron Works, Sewardstone, so how it came into the possession of the Mills is something of a mystery. The progress of the affair can be tracked through extracts from the notebook.

Aug 25 1887—The battle begins

The official body responsible for the matter and for protecting the public interest was the Waltham Holy Cross Local Board of Health and the opening shot was a notice published by the Board notifying a forthcoming application to the Quarter Sessions at Chelmsford for the stopping up of the path. Opposition to what is seen to be failure on the part of the Board quickly becomes organised, but the opposition is itself opposed.

Weekly Telegraph Oct 7 1887

Notice of appeal against closure given by Messrs. Saville, Johnson, Salmon and Cockburn.

The Telegraph had a columnist ‘ Notetaker ‘ who in the same issue sought to imply that the appellants were a group of reactionaries bent on impeding progress against the will of the majority.

‘Most people will be glad to learn that those notices are given by private individuals and not by the unanimous voice of the parishioners ‘.

He goes on to predict that any attempt to raise money to support the appeal will fail.

Weekly Telegraph Nov 8 1887—Notetaker confounded

Under the heading Public Rights Protection Committee the Telegraph writes :

‘The meeting was called to for the purpose of considering what should be done with the surplus money, after paying all expenses connected with the appeal against the closing of the Quinton Hill footpath. After a little discussion, it was agreed to deposit the money in the Post Office Savings Bank ‘.

Weekly Telegraph date not given—Victory, but for how long?

War Department, in the shape of Col Noble Superintendent of the Gunpowder Mills, unexpectedly withdraws its closure application to the Quarter Sessions .

Things begin to turn nasty. The War Department has not gone away and brings big guns to bear. The affair reaches Parliamentary level – notice of the introduction of a Private Bill by the Secretary of State for War – The Waltham Abbey Gunpowder Factory Bill

Nov 18 1887—Parliament Session 1888

'Notice is hereby given that application is intended to be made to Parliament in the next session for an Act to stop up and discontinue all or any footpaths and to abolish all rights of way upon, across or over all or any portion of the Quinton Hill Farm'.

'Human Rights' raise their head

Weekly Telegraph publishing letters of Jan 10 and 11 1888, Charles Saville writes :

'Who would believe that in this civilised country, supposed, as it is, to be ahead of any other, that we are in danger of having our rights taken from us'.

Thomas Cockburn, whom we might now call a militant, writes:

'I do hear it will be taken from us because it's in Parliament. Well, if my right of going to Waltham Abbey is stopped because it's in Parliament, I say may the Parliament House doors be thrown open that we may fetch the path out again'.

Sustained criticism of the Local Board for not standing up to the War Department.

Feb 7 1888 John Smith writes from The Plough, Sewardstone:

'I think that the gentlemen of our local Board should be as ready to protect our public rights, which our forefathers gave to us centuries ago, as ready as we were to give them our votes to return them as members of the Board'.

The controversy reaches the national press and the conflict becomes poetic.

Waltham Weekly Telegraph Feb 10 1888 reports a letter which appeared in the Daily Chronicle criticising the actions of the War Department. In the same issue the Telegraph also published a poem from 'Our Corner Shop' which opened with the lines...

*Ah, now no more I string my lute
On Quinton's fairy hill*

and ended...

*Let us swear on it, brothers, whatever betide,
That our homes and our pathway must ever be free*

Another poetic effort was received, written by a correspondent in far off Folkestone, on June 12 1888, which began...

*Ye happy bygone rambles,
How sweet your memory still,
From early childhood's gambols
On grassy Quinton Hill*

A compromise of a sort

In 1889 the Waltham Abbey Gunpowder Factory Bill was withdrawn and the War Department allowed the route of the footpath to be termed a Public Right of Way, relying on War Department policemen to stop the public from straying into production areas and it was shown as such in a map of 1894.

In 1889, apart from the guncotton factory, a substantial part of Quinton Hill was not built on. However the Factory expanded rapidly and in 1891 a nitro glycerine facility was built in close proximity to the path. As more buildings went up the route must have become increasingly unattractive and by 1908 when the Ordnance Survey published a map of the area although the route followed by the footpath was still indicated it was solely within the Factory.

In terms of the sentiments expressed and reaction against big Government the campaign against closure was quite 'modern' in character. Where it differed was in the absence of mass demonstration.

Perhaps the last word should go to John Smith who in 1888 wrote

'I do not see there is the least hope of getting it again, even if for some reason the powder mills are taken away'.

Now the mills are gone and once again the public can roam on Quinton Hill on many paths.

Les Tucker

Message from the Treasurer

At the end of this year I am handing over the job of Treasurer to John Cook. I have held the post since the sad loss of Norman Paul, in December 2007, and feel it is time for a fresh pair of hands. I hope John will enjoy being Treasurer as much as I have.

I am happy to report that, unlike VAT, there is no increase in the membership fee in 2011, and very much hope that you will all be able to renew. When sending in your renewals, to John, please make sure that you give your current residential and email addresses. If either changes during the year, please advise John.

We are always keen to keep in contact with our members and would appreciate knowing if, sadly, we lose one. You can contact Michelle Moore, Touchpaper Editor, or any committee member.

The AGM / Social Day / Reunion was a great success this year so we are planning to repeat it on 6 May 2011. The cost will be £7.50 per person and will include a buffet but no bar. You are very welcome to bring your own alcohol, but tea, coffee and orange juice will be provided. It is a great opportunity to meet up with old friends and new and I hope to see many of you there.

The AGM commences at 11am, with tea and coffee, swiftly followed at 12 noon with the Social Day / Reunion.

John Cook can be contacted at
63 Lakenheath
Southgate
London
N14 4RR

Email: rgm.fa@virginmedia.com

I wish you all a Happy Christmas and a healthy 2011.

Daphne Clements

Once the replica gunpowder mill was completed earlier this year, the friends decided to repair the powder wagon that stood on the concrete hard standing, next to Woolwich the steam loco, since it was looking a bit shabby....

The Powder Wagon Saga

In our wisdom we thought it would be better to move it into the adjacent workshop out of the weather. A quick push by us old pensioners and it literally fell to pieces. See the remains...



This of course left us with a dilemma, it having been claimed that the powder wagon was a genuine artefact. How could we now restore it since the timbers were completely rotten? The only part we saved was the roof and even that was a bit dodgy.



We have a number of questions so any information from any ex-employees would be welcome here.

- Was it a genuine old powder wagon pushed on rails by manpower?
- Did anyone see it when ERDE / PERME was open?

We know it had road wheels on it at some stage and that these were replaced by a bogie from the Bicton railway about five or six years ago. The base was block board covered with old Ministry brown lino and the first reference to block board I can find is in 1939 so it is not that old.

The conclusion we reached is even if it was genuine it was like HMS Victory where only about 10% is original so we have rebuilt it yet again! Even this wasn't without problems since all of the original timbers were imperial sizes such as 5x3" and 4x2" and with proper joints. However we have persevered using metric timbers, drinking much coffee, and you now have a proud new sort of genuine powder wagon for display.

N.B. There are two more wagons in the woods for restoration, any offers?

The 'Gotha' Summer of 1917

Although Waltham Abbey never actually suffered from any bombing raids by the aircraft, the appearance of the 'Gotha' bomber in the skies of South-Eastern England and the greatly more effective results of their attacks brought about a dramatic change in local arrangements for air-raid precautions.

In June 1917 the whole system of raid reporting was revised and warnings given to the public for the first time by the use of explosive rocket launch 'maroons' from the station.

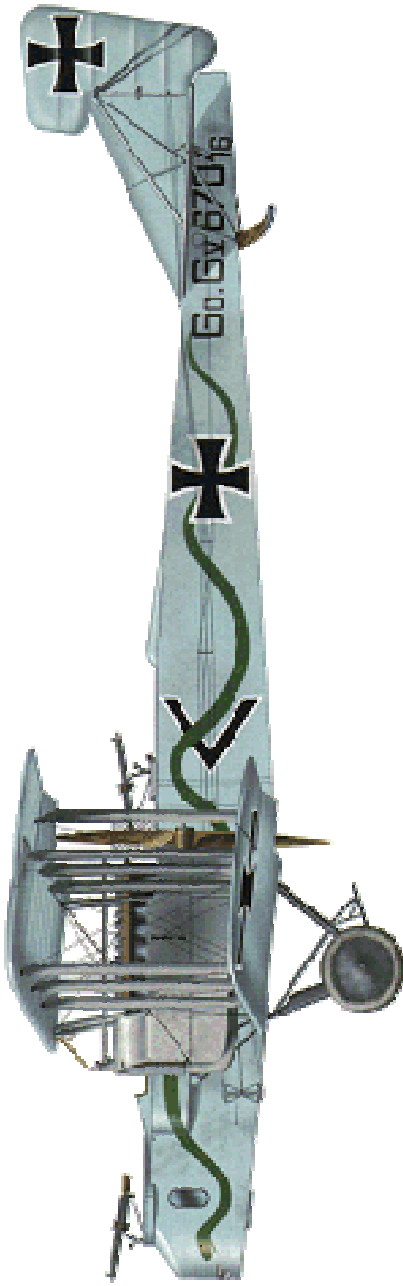
In addition, officers toured the town, wearing warning placards—the all-clear was sounded by bugle—the buglers were supplied by lads of the Boy's Brigade, Salvation Army and similar bodies.

On the morning of 7th July 1917 one formation flew over the town at 10:20am but no bombs were dropped. This in spite of the Royal Gunpowder Mills factory showing clearly below the flight path. The main reason for this omission was that each of the raids was directed at pure terror and also of the prestige of hitting London.

Two airship raids took place on Waltham Abbey—one in April 1916 and the other in October 1917. Neither caused a great deal of damage and there were no casualties!

In both these cases the target was the Royal Gunpowder Mills factory. A miraculous escape indeed!

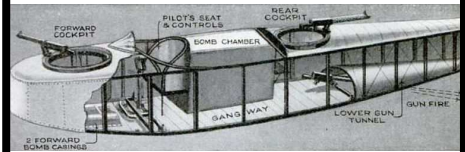
Minnie Fenton



The Gotha G.V

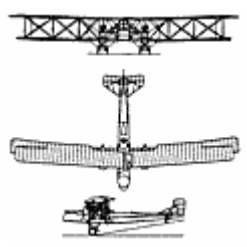


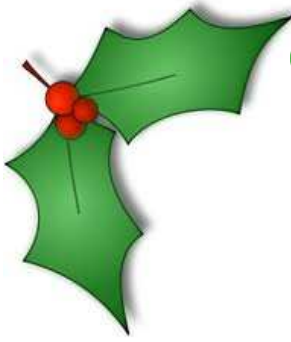
Role	Bomber
Manufacturer	Gothaer Waggonfabrik AG
Designed by	Hans Burkhard
First flight	1917
Introduced	August 1917
Primary user	Luftstreitkräfte
Produced	1917 to 1918
Number built	36



Internal layout of the Gotha G.V.

A **maroon** is a type of rocket that makes a loud banging report (noise) and a bright flash. It is used as an alarm or warning, for example the British Royal National Lifeboat Institution uses these rockets to call the crew when the lifeboat needs to be launched.





Christmas Word Search



A	A	B	B	E	Y	E	K	A	C	S	A	M	T	S	I	R	H	C	C
Y	L	H	A	G	L	E	Y	P	D	L	L	I	M	R	E	D	W	O	P
E	E	B	L	E	E	N	E	U	L	O	T	O	R	T	I	N	I	R	T
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F	F	R	A	N	K	I	N	C	E	N	C	E	N	X	H	O	E	P	U
A	F	U	Q	Y	X	D	L	L	I	M	E	S	R	O	H	U	L	F	W

1. ABBEY
2. ABEL
3. ACCUMULATOR
4. ALDER
5. AQUEDUCT
6. BALLINCOLLIG
7. CANAL
8. CHARCOAL
9. CHART
10. CHRISTMAS CAKE
11. CONGREVE
12. CORDITE
13. CORNING
14. CRACKER
15. DINITROTOLUENE
16. FAWKES
17. FORT HALSTEAD
18. FRANKINSCENSE
19. GOLD
20. GOSLING
21. GREEK FIRE
22. GUNCOTTON
23. HBT
24. HAGLEY
25. HORSEMILL
26. INCORPORATION
27. LOCK
28. MEADS
29. MILL
30. MYRHH
31. NOEL
32. OARE
33. PETREL
34. PICRIC ACID
35. POLYBUTADIENE
36. POWDERMILL
37. PRESS
38. PUDDING
39. RAVEN
40. RDX
41. SALTPETRE
42. SKYLARK
43. SNOW
44. STEAM
45. STOLLEN
46. STREAM
47. SULPHUR
48. TRINITROTOLUENE
49. TURKEY
50. WALTON

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Deadline date for submissions to the next issue is 28th February 2011.