

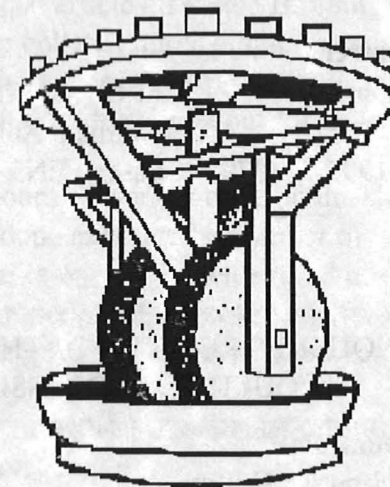
**ROYAL
GUNPOWDER
MILLS
WALTHAM ABBEY**

'TOUCHPAPER' ©

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Touchpaper

The Newsletter of the
**ROYAL GUNPOWDER MILLS WALTHAM ABBEY
FRIENDS ASSOCIATION**



**MARCH
2002**

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PLEASE NOTE: Deadline date for submissions to
the next issue is 15th May 2002



EDITORIAL

Although it's a little late, A Happy New Year to you all.

I am so glad to see that the number of articles coming in exactly fill the number of pages available. In this issue you will find the final chapter of the special article on Listed Buildings by Les Tucker. These will now be collated into a single pamphlet which the Company will sell in their shop. We will also sell by post for any members unable to visit the site so look out for news in future issues.

A tremendous amount of work is done on the site by volunteers but the amount to be done exceeds the number of volunteers. This will be especially so on re-opening when extra duties will arise. You will find a number of references to this throughout this issue. Sorry to labour the point but we really need you!

Having said that we really do appreciate the support of you all in your continued membership.

Norman Paul



ASSOCIATION MATTERS

Although the site is closed over the winter months there is still much activity by the volunteers and staff in general maintenance, improving facilities and developing new exhibition attractions. Company staff at this time is at a minimum and it is only through volunteer effort that things are progressing.

A major effort has been the fit-out of the 'Friends Building' with a good sized workshop and office/storage facility. Contrary to earlier promises the contractors did not fit an electrical supply but we have now completed rewiring the building for power and lighting.

The waterwheel project has been in abeyance while effort has been concentrated on the 'Friends Building' but work will soon commence so that, hopefully, it will be up and running by the site opening time in March. The brickwork and electrical supply for the pump is complete and now awaits the final construction of woodwork and fitting of the wheel.

A new major exhibition of small arms is being established and, once again, we are playing a major part in the building and fit out .

There is always more work than the current small band of volunteers can handle so, once again, we appeal to those of you living within the area to come and join us. Just come along on any Friday morning - you will be most welcome. However small or large your contribution will be most welcome.

The weather at this time of year can sometimes limit the amount of outdoor work and members are currently helping to catalogue the large amount of pictures, slides and other historical documentation in the archives. The knowledge and experience of those members who worked on the site would be invaluable in identifying many of the puzzling pictures of plant, machinery and people.

Another major activity is the giving of illustrated talks to outside groups and societies. A number of these have been given over the past few months and a fairly full programme has been booked for this year. This helps to raise the profile of the site and brings in more visitors.

Finally - just to remind you - we could do with more volunteers!

SITE NEWS

Despite having been closed to the general public since the end of October staff have been very active. Preparations for opening on March 16th are well under way and it is hoped that new exhibitions will bring added value to visitors in this, our second season.

During the closed period there have been group visits and, of course, the schools visits programme continued unabated. One special event in December was the 'Victorian Christmas' weekend, as advertised in the last issue, which was very successful.

For a number of reasons, not least the delayed opening last year due to the F&M crisis, money is very tight making things difficult for the staff to keep on top of all the necessary maintenance and leaving little left for development. Although grants can be obtained for major improvement projects the site has to rely on attracting more visitors to keep the site in good condition and pay for the general running costs.

Let's hope that 2002 visitor numbers will improve significantly but that all depends on so many factors, not least of which is the weather!

To give a much needed boost to finances the Company will be running a major raffle with, they hope, a large number of good prizes. Sponsorship for this is being sought from local firms but if anyone has any items that they think would be suitable for some of the smaller prizes, please contact the site on 01992 707370.

Many of you donated a bench seat for the site the other year and these are placed around the site.

Although the Company bought a number of picnic tables it is evident from last year that more of these are needed. Enclosed with this issue is a leaflet giving details of how to 'Sponsor a Picnic Table'.

Finally, we hope you will visit (revisit) the site over the coming year.

2002 EVENT CALENDAR

	<u>Date</u>	<u>Type</u>	<u>Activity</u>
March	16-17	Science	Cannons
	23-24	Lecture	Science
	30-31	Family	Easter Egg Hunt
April	6-7	Event	English Civil War
	13-14	Science	Exploding Buildings
	20-21	Lecture	Architecture
May	4-5-6	Event	Glorious Revolution
	11-12	Science	Gears
	18-19	Lecture	Buildings Conservation
	25-26-27	Family	Buildings
June	1-2-3	Event	17th & 18th century Artillery
	8-9	Science	Rockets
	15-16	Lecture	Waltham Abbey
	22-23	Family	Powder Monkey Picnic
	29-30	Event	Uncle Tom Cobley and All!
July	6-7	Science	Telegraphy
	13-14	Event	Napoleonic War
	20-21	Lecture	Archaeology
	27-28	Family	Archaeology
August	3-4	Event	Victorian Empire & New World
	10-11	Science	Telephones
	17-18	Lecture	Photography
	24-25-26	Family	Animal Antics
	31- 1 Sep	Event	The Great War
Sept	7-8	Science	Hydraulics
	14-15	Lecture	Buildings Conservation
	21-22	Family	Buildings
	28-29	Event	Second World War
October	5-6	Science	Radio
	12-13	Lecture	Gunpowder
	19-20	Family	Autumn Event
	26-27	Event	Gunpowder, Treason & Plot

Site closes for the winter from 28th October

THE WILDLIFE TOWER

L136, the Grade 2* listed Remote Accumulator Tower (built in 1879) has been refurbished and is now designated as the 'Wildlife Tower'.

Renowned wildlife artist Roger Oakes transformed the top floor last year and visitors enjoyed both the created interior landscape and viewing the real thing from this exciting vantage point.

Phase 2 of the project is now under way with a study room on the second floor and a children's activity area on the ground floor.

Funding for this has not yet been secured and therefore I would like to make an appeal to all the Friends of the Royal Gunpowder Mills to help me complete this project before the new season.

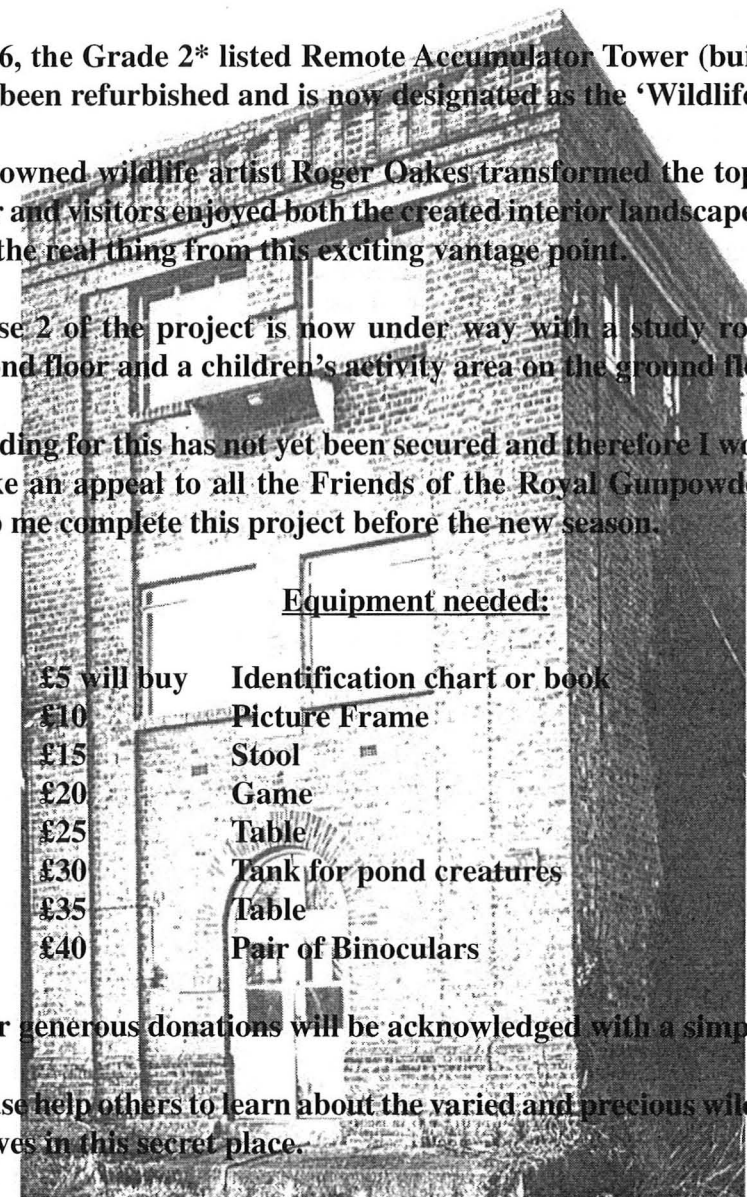
Equipment needed:

£5 will buy	Identification chart or book
£10	Picture Frame
£15	Stool
£20	Game
£25	Table
£30	Tank for pond creatures
£35	Table
£40	Pair of Binoculars

Your generous donations will be acknowledged with a simple plaque.

Please help others to learn about the varied and precious wildlife which thrives in this secret place.

Gillian Norris
Education & Events Manager



IGNITING IDEAS !

This exciting new project aims to introduce the family visitor to some of the basic principles of science and technology.

The Technology Education Centre of Middlesex University is developing and producing a series of DIY kits for sale in our shop and demonstration models for general use by the visiting public.

The kits planned for this year are:

Gears	Exploding Building
Cannon	Hydraulics
Radio	Telephone
Rocket	Remote Control

It is hoped that further ideas will be added in subsequent seasons.

Igniting Ideas will provide a platform for the Royal Gunpowder Mills to introduce the work carried out at the site in the last phase of its operation as a Research and Development Establishment.

In themselves the kits are only the starting points for the exploration of the development and application of science and technology.

Perhaps you would be able to help in developing models, giving demonstrations, talks or lectures?

If you would like to be involved please contact

Gillian Norris
Education & Events Manager
at the Royal Gunpowder Mills

(Ad 2)

LISTED BUILDINGS AT THE ROYAL GUNPOWDER MILLS

by Les Tucker

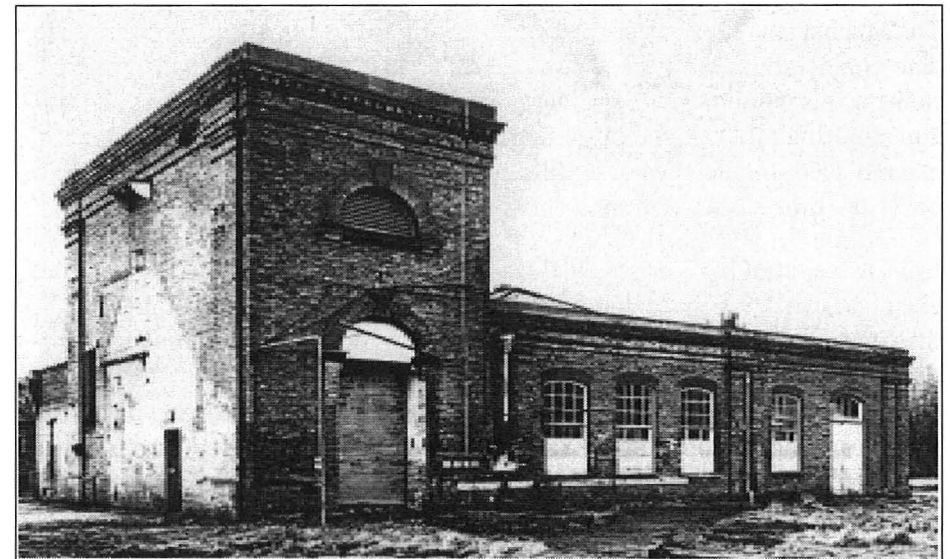
PART V THE POWER BUILDINGS

This theme of this final part of the series on listed buildings is 'Power'. The buildings covered are:

- L168 Engine House and Mechanics Shop - Listed Grade 2*
- L176 Boiler House - Listed Grade 2*
- L177 Dynamo House - Listed Grade 2*
- L136 Remote Accumulator Tower - Listed Grade 2*
- A221 The Lodge - Listed Grade 2

Power has been fundamental to all human activity; agricultural, industrial, social and over the years the Mills reflected the various forms of power as they developed from water to steam to hydraulics to electricity.

L168 Engine House and Mechanics Shop Built 1857



In the 18th century the buildings of the Millhead ran almost entirely on water power with some use of horse power. The Engine House and Mechanics Shop, situated adjacent to the roundabout at the southern end of Long Walk, supplied power to the

first application of steam power at the Mills in the mid 19th century - the Group A incorporating mills which were demolished by explosion in 1861 and not rebuilt. The Engine House survived and its Grade 2* status reflects its position as the earliest surviving steam related building on the site. The steam powered engine was a 30hp 6' stroke compound beam engine supplied by Benjamin Hick & Son, Soho Ironworks, Bolton. Initiating the practice continued in incorporating mills Groups C to G, power was transmitted to the six mills of Group A via an underfloor cast iron lined drive shaft alley.

In common with a large proportion of the Mills buildings, L168 passed through a variety of uses. Its last working function was, from the mid 1960's, as an experimental 'whisker' factory where hairlike strands of silicon carbide or nitride were produced to reinforce thermosetting resins or aluminium alloys to give high strength composite materials for weapons systems.

The Mechanics Shop is the single story western block of L168. Power for belt drives was supplied by a second motion shaft from the Engine House. The construction of the Shop reflected contemporary application of iron for fire-proofing purposes, The roof, supported by cast iron pillars and beams, incorporated trusses of round and tee iron with decorative cast iron compression members.

The Mechanics Shop was comprehensively fitted out to provide the most up to date engineering facility. A 4 ton crane, capable of lifting the heaviest edge runners was mounted on the centre pillar. Particularly impressive was an horizontal boring mill capable of turning the heavy mill runners (by this time iron had replaced stone in the latest mills) and bedplates. This brought considerable benefits - time saved, economy and closer quality control.

In 1858 Lammot du Pont, of what was to become the great American du Pont chemical dynasty, visited Waltham Abbey in the course of a fact finding tour of the European gunpowder industry. He appears to have been impressed, particularly by the younger Congreve's granulating machine and the Mechanics Shop facility. Within 2 months of return he had ordered construction of similar facilities at the du Pont Hagley Yard gunpowder factory (Hagley Yard is now a major museum of gunpowder).

L176 has been renovated and the Mechanics Shop currently houses the site's exhibition of the forms of transport used at the factory; including a powder boat, narrow gauge railway engine and a road transport powder wagon.

L176 Boiler House. Built 1857

This is situated immediately south of the L168 Engine House and supplied steam for the Group A engine. As part of the original steam complex it is Grade 2* listed.

The roof trusses are of iron with decorative cast iron compression members. There is a record of installation of new boilers in 1902 but since the Group A Incorporating building was not rebuilt after the 1861 explosion these would have only been used to power the Mechanics Shop facilities. During the time of the site's history as a research establishment the building was the 'Rigger's Shop' and store.



L176 has now been renovated and houses the site's cafe and restaurant facility. Whilst the major structural features have been retained the original large wooden sliding doors on the north side have been replaced with a glass panelled entrance for the cafe.

L177 Dynamo House. Built 1902

As could be expected, electricity was first employed at the Mills, in the late 1880's, for lighting rather than motive power. The fundamental move from steam to electricity for production power occurred from around the beginning of the 20th century. A power house was constructed on the South Site in 1905 and the main power house (A210), with 3 Bruce Peebles generators, which is a prominent feature of the North Site was built around 1908.



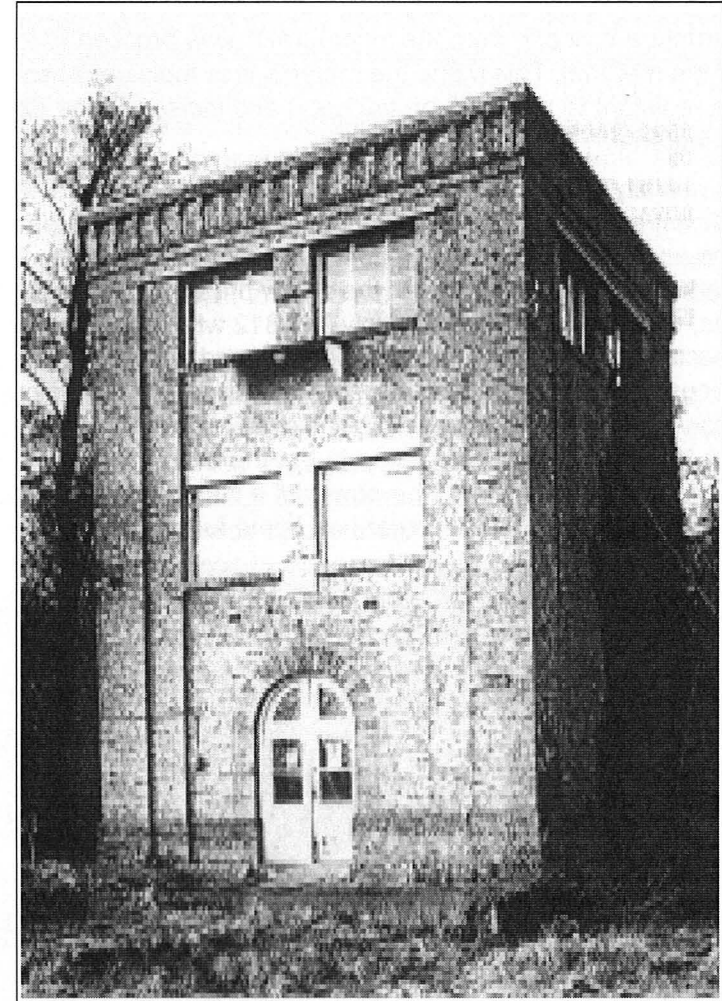
The 'Powerhouse' complex - main boiler houses on the right.

The Dynamo House, also termed the Switchboard House, abuts on to the east side of the Boiler House. It had 2 dynamos and an accumulator shelf and its function appears to relate to a change from steam to electrical power supply to a building on the original Group A Site which had become a cordite reeling house.

Originally a 30v DC supply was used to power cordite machinery. With the introduction of mains electricity to the area the Dynamo House was subsequently used as a general machine shop but the main boiler houses continued to raise steam for heating and processes around the site.

L136 Remote Accumulator Tower. Built 1879

The Accumulator Tower is now a nature observation point situated just south of a lock linking the high and low level water systems at the north end of the area noted as 'Magazine Land' in the Mills guide.

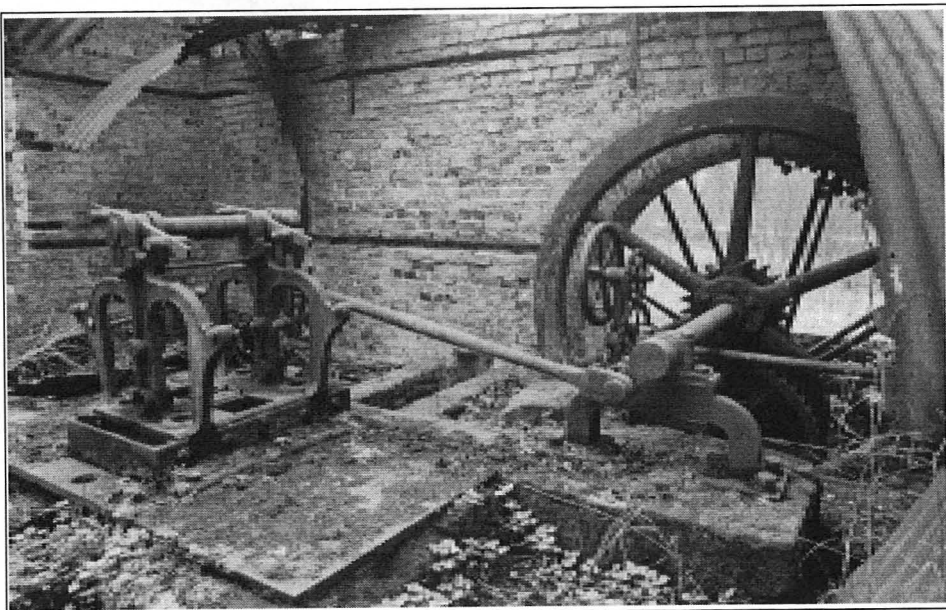


The tower represents the large scale application of hydraulic power to the pressing operation in gunpowder manufacture and the culmination of a century of progressive development of the application of this important, but comparatively lesser known, power source. To place it in context therefore a brief synopsis of this history follows:

HYDRAULIC POWER

The history of gunpowder manufacture is one of a constant quest for improvement with progressive development and addition of manufacturing processes. Pressing was introduced at a comparatively late stage - around 1780. Relatively loose structure millcake from the incorporator was pressed to increase the density of the material. This made the material less moisture absorbing in storage, more resistant to break up on transport and increased the explosive power of the material.

Presses were initially hand operated screw presses as used in a range of other applications; e.g. vegetable oil extraction. In 1795 Joseph Bramah patented an hydraulic press incorporating a hand driven water pump. The Bramah press produced an higher pressure than the screw presses and, important for safety reasons, could be operated remotely. In 1812 when an explosion in a screw press occurred the Bramah press was introduced at the Mills and a new power technology had arrived. Around 40 years later hydraulic technology took another step forward by an unique synergy. The existing Bramah presses used hand leverage to operate the water pump but in the early 1850's in 2 Press Houses (one of which still survives) the power of a water wheel was used to activate the hydraulic pump. Water power had come full circle



Existing gearing from waterwheel to hydraulic pump

From the 1860's advances in metallurgy - new steels, alloys etc. and in engineering techniques, enabled manufacturers to produce increasingly large guns which required larger charges. This however created a paradox in that the higher explosive force of pressed gunpowder in this quantity brought an increased risk of damage to the gun. A larger powder grain size was needed to enable better control and to slow the rate of burning. For this purpose, powders derived directly from presscake were developed - pellet and pebble powders up to 2" square for the largest guns. This led to the need for more powerful pressing facilities and the hydraulic story at Waltham Abbey entered a further phase of development. In the 1850's a Newcastle solicitor, William Armstrong, had demonstrated the effectiveness of his steam powered hydraulic system with weight loaded accumulator tower, comprising a vertical cylinder and ram with a cylindrical weight case. In 1869 the system was adopted for the L149 Group E built to serve a press house producing pellet powders.

The accelerating pace of armaments development brought still increasing demand for press facilities and raised the problem of the safety hazard of separate steam engines being distributed around the site - not an economic use. Again, hydraulics provided the answer. Armstrong had further demonstrated the ability of the accumulator tower system to act as a centralised storage and distribution source powered by one steam engine with a supply of pressurised water by a system of pipes to wherever required. In addition, separate remote accumulator towers could be incorporated, linked to the central point to store, regulate and boost supply. In 1879 the L149 steam facility was converted to gunpowder incorporation but the accumulator tower retained as the nucleus of a centralised hydraulic distribution system to serve new press houses producing pebble powders. At the same time L136 was built as a supporting remote accumulator tower.

Large charge technology progressed further with the introduction of prismatic powders, based on earlier American studies. These were pressed hexagonal shaped prisms about 1" high perforated with holes to facilitate gas transmission on burning. Further press houses, termed moulding houses, were built to produce these grades and the L149 and L136 hydraulic system was extended to power them. Moulded prismatic powders represented the peak of gunpowder development and pressing or moulding was the fulcrum of their manufacture. In turn, therefore, hydraulic technology, as represented by this surviving accumulator tower occupies a key position in the progress of the technology of the Mills.

A221 The Lodge. Built early 19th century



Situated on the eastern boundary flanked by the River Lea. Built of yellow brick with a slate roof it is redolent of military quarters seen in the older parts of garrison towns such as Aldershot. There were various alterations and extensions, e.g. the front entrance porch was added around the middle of the 19th century. Continuing the theme of power, if the buildings above represented the

technical the Lodge represents the administrative. It was the senior officer's residence, ranging from; Clerk of Cheques in 1821, Captain Instructor in 1859, Staff Officer in 1897 and becoming the Director's residence after WWII when the site became a research establishment.

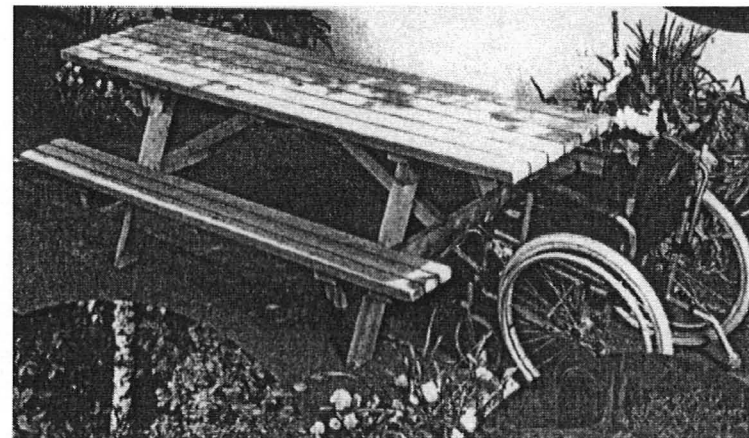
Of archaeological interest in the spacious gardens is what now appears to be an almost surreal sight in a domestic setting - a WWII brick built octagonal gun site with indented circular base plate marking in the concrete, probably indicating that staple of British light anti aircraft defence - a 40 mm Bofors quick firing gun.

The technical history of the Waltham Abbey Mills is not only about explosives but also the spectrum of the other technologies involved in their manufacture. The power buildings reflect the trends in power technology in the wider industrial world, from water through steam to electricity and, in particular, the remote accumulator tower is a reminder of the importance of hydraulic power in a wide range of applications and of the Mills' position as an unique surviving example of the application of this power in an unique context.

This concludes the coverage of the 21 listed buildings on the Waltham Abbey North Site. Further series will include commentaries on other important structures within the Scheduled Ancient Monument area, much of which is not currently open to the general public.



SPONSOR A PICNIC TABLE FOR THE ROYAL GUNPOWDER MILLS



You may all have seen our request for 'sponsor a seat' that was made before the site opened last year. The response to this was so successful that we have now been approached by both visitors and Friends to run a similar request for sponsoring a picnic table. The tables that we currently have on site have been much appreciated by our school groups and the general public - all of which have enjoyed eating their packed lunches out on the grassed area of Queens Mead. In the course of our first year of operation it is apparent that we really need more of these and we are asking people to consider sponsoring new tables.

The style of table needs to be in keeping with the current tables on the site. The picnic table shown in the illustration is an 8 seater with disabled access. You can sponsor this table for £135, which will include a small plaque engraved with the person's name donating it.

**If you would like to sponsor a picnic table please contact:
Lynne Lennard on 01992 707330**

or e-mail at: llennard@royalgunpowdermills.com

**or write to: Lynne Lennard, Royal Gunpowder Mills,
Powdermill Lane, Waltham Abbey, Essex EN9 1BN**

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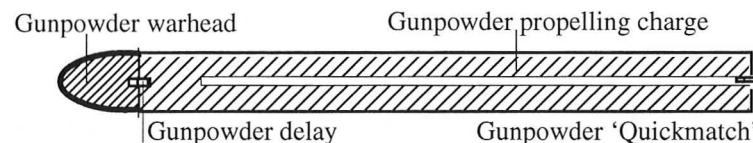
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FURTHER THOUGHTS ON CONGREVE ROCKETS

Following on from Bryan Howard's article on Congreve rockets in the December 2001 issue, here are a few further thoughts:

Congreve rockets demonstrated the great versatility of gunpowder. The rockets were presumably ignited by a form of quickmatch based on gunpowder. The propelling charge was, of course, pressed gunpowder and when the latter burnt out it ignited a delay, made from gunpowder, which subsequently initiated the warhead composed of gunpowder in a thick steel case. The steel case confined this gunpowder charge sufficiently to ensure that it detonated. So, we see that the entire system, from ignition to propelling to delay to explosion was entirely dependent on gunpowder.



Gunpowder delays are still used in modern systems because they never time out early, unlike electrical delays which very occasionally may do so.

All the above presupposes that, as Bryan said in his article, the rocket survived its probably damp environment and its transport to the battle.

Congreve should perhaps have done more environmental trials! A good example of a sectioned Congreve rocket can be seen in H7, the site entrance building.

John Wright

YET MORE ON ACETONE RECOVERY

Arthur Wilson's article in the Dec. 2001 issue made me wonder if acetone recovery really happened during WW2 in spite of the 2 buildings R621 and R626 that were always referred to as the 'Acetone' Recovery Buildings', sited on the south side of the P1 water stoves. By the 1960's these were empty shells used as unheated stores. Ron Treadgold has shown me a reprint of a 1923 map of South Site and it shows Building 527 to the west of R621 and R626 and appears to be the WW1 acetone recovery plant. I began to wonder how much recovery went on as I followed up Les Tucker's article on the Bisulphite process. Acetone recovery involved several stages:

Absorption of the acetone rich vapour into sodium bisulphite solution, forming a complex followed by filtration and washing of the insoluble bisulphite compound. Heating the complex with dilute acid to regenerate acetone and distillation. Were all processes carried out in one building? We shall probably never know unless someone who worked in the area can recall what really did take place.

During the past year many visitors have asked about the South Site and the RSAF and we welcome any personal memories from past employees.

Bryan Howard

BETTER GUNCOTTON ?

During the war, chemists of all persuasions were drafted into the factory to operate as shift chemists. I was working at night in the guncotton laboratory when two examiners from the Patent Office were drafted in to run the gun cotton factory. They provided some company during the long night shift since they had an apparently inexhaustible supply of stories about curious inventions which were the subject of patent applications. One such concerned the invention of a sponge rubber cuff (left or right handed) for use while eating winkles! One night we were discussing the production of guncotton and the fact that our product contained 13.2% Nitrogen. One of the pair had read somewhere that it was theoretically possible to nitrate up to 14.6% Nitrogen and he decided to try! The best way, he reasoned, was to take some 'standard' guncotton and re-nitrate it. In vain did I try to tell him that it didn't work like that he just wouldn't not listen. I was only a lowly lab. assistant and he was a CHEMIST!).

A supply of guncotton was arranged, a dipping pan filled and the experiment started. The resulting decomposition produced enough brown fumes to fill the dipping house and stop work. The chemist and I were in the laboratory when Ernie Monk (the principal foreman) arrived. I learned a lot of new swear words that morning.

Jim Jeacocke

GUNCOTTON AND THE BLACK DITCH

After nitration and stabilisation cotton linters were 'pulped and to do this they were suspended in water and, effectively, ground exceedingly small. This slurry was then 'moulded' into cylinders, about the size of a large can of fruit, in presses which extracted the water. The water went through filters and was discharged into the Black Ditch and thence to the river. The guncotton factory operated for the best part of 60 years and eventually, as part of the closure programme, the water was let out of Black Ditch which then dried up.

I was with Tim Gravener, the safety officer, when one of his danger building visitors came in to ask if Tim could arrange for him to have a few sackfuls of the "lovely fine tilth" for use on his allotment. Knowing the history of Black Ditch Tim asked him to bring an handful of the tilth and then proceeded to ignite a little in his ashtray. The subsequent fire and residue ash suggested that the 'tilth' was about 50% guncotton - the microfines which had passed through the filters and had been deposited due to the sluggish flow. A rough calculation indicated that there was a substantial number of tone of guncotton in the bed of the ditch and as a matter of urgency Tim arranged to have the ditch re-flooded.

Jim Jeacocke (again)

HOW WE GOT LONDON WEIGHTING

Reference on the final page in the December 2001 issue to the common boundary with RSAF prompts the following tale:

Few, if any, of the 'new breed' of scientists who enjoyed the benefits of increased salaries through the additional 'London Weighting Allowance' know how it came about and this is what happened.

To be eligible for London weighting at least part of an establishment must be within 12 miles of the King Charles's statue in London. RSAF just crept in but the RGPF did not and it rankled with us.

Just after the war the Minister (who it was and what he was Minister of escapes me now) decided to pay us a visit, expressing a desire to meet representatives of the Staff Side and wanting to know if there was any particular topic we would like to discuss. We immediately replied - London Weighting.

Tim Gravener, the site safety officer, was chairman of what was then the IPCS and I was chairman of the Whitley Committee so we were deputed to do the job. We made a 'recce' of the boundary fence with the RSAF and found a gate, which was locked. Try as we might we could not find who had the key so we made the best case we could based on the fact that there was a gate which, theoretically, could be opened.

Came the great day and we took the Minister to the boundary fence when, to our utter astonishment, we found the gate open - by whom we never did find out. The Minister needed no convincing that RSAF and RGPF were one site and, on the spot, instructed his minions to implement London Weighting forthwith. Of course, it may well be that, knowing that we wanted to make an issue of London Weighting, it had already been debated at high level and decided that we had a case, thus allowing the Minister to make a grand gesture - we didn't mind as we got what we wanted!

This also meant that our conditioned hours were reduced from 44 to 42 but that's another story.

Jim Jeacocke

*That's all from the 'Jeacocke Corner' this issue.
Many thanks Jim for all your contributions.*

TOUCH

Phil Lodge Main Lab 1939-43

Phil died peacefully on 24th January 2002 in the Queen Alexandra Hospital, Portsmouth, where had been cared for these last few years. We were both lab assistants during the wartime days of the Royal Gunpowder Factory. Along with Graham Tant, a group of us cycled together from Chingford, Walthamstow and Leyton. Most of our time at RGPF was spent in the 'Measurement Room' with cordite and NG headaches, or in the CE (Tetryl) lab acquiring the familiar yellow pallor! Very occasionally (as a special privilege) one of us would be called upstairs in the Main Lab to help with washing and drying glassware - in the heady presence of real chemists such as; George Whitbread, Ted Hitch, Jim Jeacocke, Norman Blay, et.al. By late 1943, Phil had left the Factory anwas at the Tungsram Radio Valve works

in Tottenham. Unfortunately his 'number came up' in the "Bevan Boys" draft and he spent the rest of the war in South Wales. We met up again when he joined me in the metallurgical lab at De Havillands in Edgware.

To end this saga I would add that Phil had, by comparison, very high standards of behaviour and sartorial appearance, even to wearing a collar and tie to and from the pit in South Wales. This practice he eventually abandoned, due he said, to the all pervading coal dust - though I still believe it was the comments of his fellow miners.

Members might be interested to see this photograph, taken in 1943, of the Main Lab staff of the Waltham Abbey Royal Gunpowder Mills.

Ron Treadgold



Ron Treadgold Mrs Taylor Allan ? Jack Hilling Jack Seaward Cyril Povey Phil Lodge George Sewell Harry Jakes Paul Neville
Norman Kember Norman Blay John Costen George Whitbread Les Cole Larry Larnar Jim Jeacocke Harry Burr Cyril Barnett
Percy Smith John Cleary Alec Baynes Percy Knapman Colin Hague Ted Hitch
CHEMIST
IN CHARGE
FACTORY
SUPERINTENDENT

BYTES

Peggy Denty

Sad to hear that Peggy Denty, who was a long serving employee of the Mills (1947-1979), died on Christmas Day 2001. The funeral was at Cheshunt on January 7th 2002.

Geoff Allen

Passed away on 10th January 2002 at Norfolk
Geoff was a member of the MoD Police at the Mills (1982 -1991)

ACETONE SOLVENT:

Further to recent correspondence on acetone, Ron Treadgold recalls that in the early 1940's the L165 Mineral Jelly Store was also used as an Acetone store. It was stored in approx. 500 gallon tanks and collected, as required for cordite incorporation, in conical necked aluminium containers with a leather cap retainer cord, each container holding about 3 gallons.

Les Tucker

CHANGE OF ADDRESS:

Ex-colleagues may like to know that, following retirement from RO Bridgwater, Mike and Davina Evans have moved back to their home country in Caerphilly.

WANTED:

More volunteers

CORRECTION:

Before I get deafened (even more than I am now) by howls of derision I would like to correct an error in the last issue on the article about the 'Black Hole' in Newton's Pool.

It gave the size of the guncotton primer charge as 1g. This of course should have read 1oz. A 1g charge is only one twenty eighth of a 1oz charge and would be difficult to lash to a detonator- quite apart from it's negligible initiating ability.

I thought I ought to rectify this as there are still a number of 'old timers' to whom it would stick out like a sore thumb.

Jim Jeacocke

Partly my fault for misreading the article and partly Jim's for his handwriting - Sorry! Ed.

PLEASE REMEMBER

DEADLINE FOR THE
JUNE 2002 ISSUE:
15th May 2002