

HISTELEC NEWS

NEWSLETTER OF THE SOUTH WESTERN ELECTRICITY HISTORICAL SOCIETY

Web Site : www.swehs.co.uk

No. 10

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IRONBRIDGE 1999

There has been a good response to Ironbridge Weekend 15th -16th October 1999 with 31 people signed up. Many complained that it was too early to book up so long in advance, so it has been decided to go out to the membership again in February 1999, with the hotel holding more rooms.

Also it is possible to put on some in-house entertainment, having had five volunteers so far, however it hinges on finding a pianist amongst our members, wives and friends. Any volunteers?

PLYMOUTH'S CENTENARY

Member Ted Luscombe has been busy writing up the history of Plymouth's Electricity History, which is to be published in the "Transactions of the Devon Association" to celebrate the centenary of Plymouth's first public supply in September 1899. A reduced copy will be printed as a supplement to this newsletter in Autumn next year. Ted is also planning to mount a display of photographs at the head of the main stairs at the Plymouth Central Library in September next year, some of which will come from the Archives. Ted has recently been on Radio Devon discussing the same topic.

ARCHIVAL ACTIVITY

With the Millenium coming even closer many villages throughout the South West are preparing booklets on their history. We have had many requests recently for the date of their first electricity supply. These have included Blagdon, Instow, Rickford, Praa Sands, Marazion, Shapwick and Chagford.

SWEB PHOTOGRAPHS

Jim Whitehead, SWEB photographer, has kindly donated several boxes of photographic material to the Society. This includes slides, negatives and prints of events and personnel. Among items covered are the electrification of the "off" islands of Scilly, the 1990 Storm and some interesting slides of old domestic appliances.

John Gale is presently sorting through the material to decide what the Society should keep.

INSURANCE

Everyone will be pleased to learn that all members are now covered for insurance whilst involved in Historical Society activities, whether inside SWEB premises or elsewhere on a SWEHS event. This has been made possible by SWEB's insurance document being modified to include groups such as ours, but specifically by naming the Society. This will save us having to arrange a separate cover, which is a considerable financial benefit.

ELECTRICITY IN CORNISH MINES

Those who missed the talk at Exeter by Eric Edmonds on the 26th September missed a treat. The weather was appalling and the numbers attending were down. Added to that, the pub at Sandygate, where we normally go, decided not to serve food on that Saturday. Barrie did a magnificent job in finding at short notice another pub "The Exeter Arms" nearby at Middlemoor. The food there was excellent and good value for money. We will look forward to going there again.

The tale that Eric had to tell us was absorbing covering not only the electricity to and in the mines, particularly Dolcoath, but also he traced the history of Cornwall Electric Power Company at the same time. The photographs he showed of the plant in both Cam Brea and Hayle Generating Stations were exceptional. He has promised copies of these for the South West Archives. It was very enjoyable day all round.

Peter Lamb

REDRUTH GAS MUSEUM There is talk of a Gas Museum in the old Fire Station at Falmouth Road, Redruth just yards from the house where William Murdoch invented gas lighting. We wish the idea well.

GREEN ELECTRICITY

Can you believe that they are actually marketing this commodity. I suppose it's a bit like green petrol, you never see it green, it is just labelled accordingly. The group selling it is the Renewable Electricity Company and their main output is from Landfill Gas, i.e. methane. The gas is burnt in engines, which in turn drive generators. Their output includes electricity from Wind Farms.

MAGIC LANTERN

On 14th November members were transported back a hundred years at Aztec West before the era of moving pictures. We were entertained by David and Eunice Elsbury to a Victorian Magic Lantern Show. David initially told us about the early lanterns, explaining that they were an important source of entertainment and information in Victorian times. The oil lamps were followed by a gas operated "lime light" (gas jet playing on a piece of lime stone). The early lamps were unpredictable and tales were told of audiences placing bets on when the next explosion would occur. The cunning Victorians were able to fade in and out two gas operated lanterns using a special valve arrangement.

Two magic lanterns were used, circa 1895 and converted to electric light operation, giving us a memorable presentation using original glass slides, many of which were hand painted or tinted. The versatility of the slides, the brightness of the colours and the use of the two lanterns gave the appearance of movement. The presentation was accompanied by music and we were all invited to join in some of the old musical numbers.

Commercial breaks were shown a hundred years ago and these proved entertaining, including chocolate (Frys) and soap adverts. All of us were amazed at the versatility and the large range of effects which were possible. A very entertaining and interesting afternoon was had by all ending with "The Queen". Chris Buck thanked the presenters for their polished performance.

John Gale & David Hutton

CIGARETTE CARD CORNER No.1

John Haynes has a series of interesting old cigarette cards. Here is the first of the 1927 series no.26 "Wills Engineering Wonders", with the following reverse script :-

"Electric Motor Driving a Reversing Mill, Great Britain - This 150,000hp electric motor manufactured by Metropolitan Vickers Elec. Co.Ltd. is employed in driving a rolling mill used for breaking down into small billets red hot cast steel ingots weighing upwards of 3 tons each. The motor is coupled to the roils direct, although the moving parts weigh over 80 tons in addition to the weight of the mill rolls etc., it is capable of being reversed to full speed in either direction in three seconds by the touch of the control handle. Any speed in either direction from a slow creep up to 100rpm can be obtained at will. The machine weigh s about 205 tons".

SEE PICTURE IN ADJACENT COLUMN >

MEMBERS NEWS

We offer condolences to Mrs May, who sadly lost her husband, member Noel, in the Summer. We hope that she may still come and join us occasionally in the future.

Roger Horstmann. member, has moved from Bath to St.Buryan, Cornwall.

New member joining us is Chris Eker. Welcome Chris. Hope you will find much friendship.

ENGLISH HERITAGE

We have been approached for our views on a survey, which has been undertaken by the Trent & Peak Archaeological Unit at Nottingham on behalf of English Heritage into the Electricity Supply Industry. The survey includes known generation sites where there are considerable remains. In the South West, the sites included are :-

Public Supplies

Lynmouth leats assoc. with the hydro-station 1890

Chagford station 1891

Bristol Temple Back station 1893

Bristol Counterslip station(Tramways) 1899

Exeter station 1902

Wedmore station 1907

Ivybridge hydro-station & aqueduct 1909

Mary Tavy hydro-station 1932

Morwellham hydro-station 1934

Private Supplies

Fyne Court 1830's

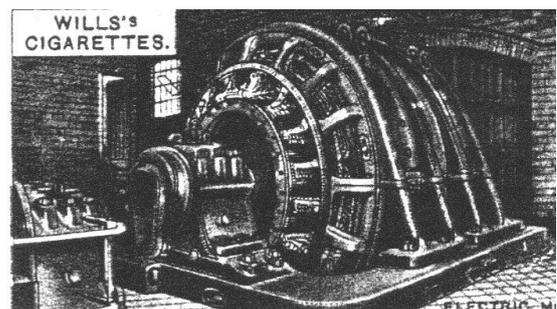
Hawkcombe Mill & Wheel Hse, Porlock 1909 Castle

Drogo 1920's

We have recently made representation to the Archaeological Unit to press them to include :-
Portishead Old Mill Rd Station building 1905 Bath
Dorchester St buildings 1930 Weston-s-M Locking Rd,
switchrooms 1901 Bridgwater Mount St buildings
1904 Totnes Antrim Terrace building 1904 Lyme
Regis Mill Lane buildings 1923 Newquay Mount Wise
buildings 1906

Are there any others out there which we should press them to include? A list of 16 other sites has been despatched to SWEB to see if we can find out from people working on the ground. You could help if you know of any other remains.

Contact the Secretary *Peter Lamb* on 01275 463160



THE FIRST UNDERGROUND ELECTRIC CABLES

(Possibly one of the first methods of distributing electricity in built-up areas)

This system of distributing electricity from the point of generation to other points via troughing cables was one of the first methods ever used. It was first employed possibly in the 1880's and early 1890's. At that time it was considered to be marvellous.

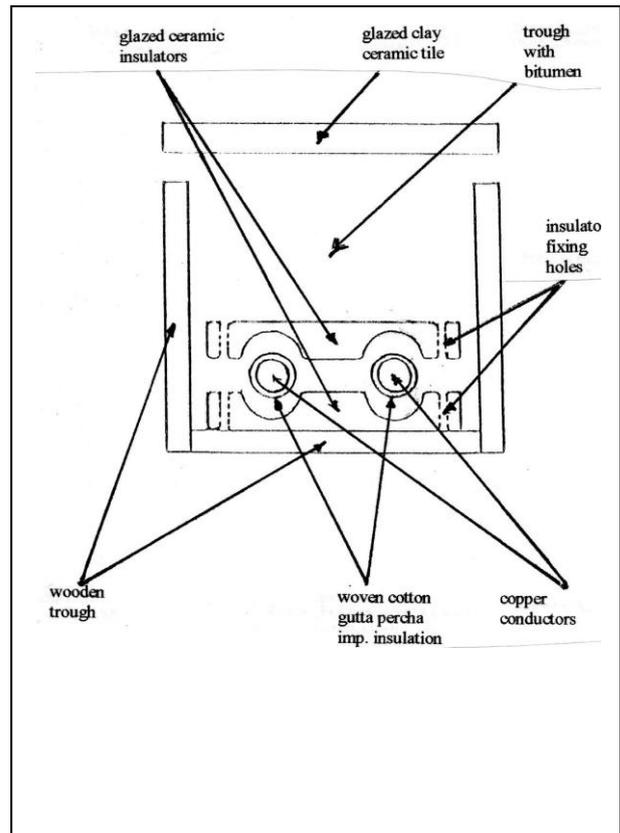
The generation was at DC at usually 110volts. (anything higher was deemed to be dangerous) By the virtue of DC generation at this level of voltage the distance of distribution was very limited.

To insulate the conductors, which were copper, a method was used, which was copied from the machines used in the manufacture of ladies' dresses. At this period some ladies' dresses were designed so that they were narrow waisted and expanded out similar to a tea cosy. To hold the material out from the waist-down, a wire frame was used. To prevent the material from rubbing on the wire frame and wearing out too quickly, the manufacturer had a machine, which could weave cotton around the wire.

The Electrical Engineer & Designer of the day looked at this machine and realised it could be used to insulate their conductors. It was tried and found that it would work. To give further strength and insulation values to the cotton insulation, when the cotton was woven around the conductors, they were immersed in heated Gutta Percha liquid, a tree gum from India, and allowed to cool. The Gutta percha was rubbery in substance so a degree of flexibility was afforded to the conductors. These treated conductors were then placed in a constructed wooden trough and held in place with glazed ceramic insulators as shown in the drawing. To give extra protection from the damp soil, the trough was filled with heated bitumen and allowed to cool. After cooling, a glazed clay tile was placed on top of the bitumen filled trough to give mechanical protection and identification.

This method of distribution was very time consuming, because a trench had to be dug, then the wooden frame had to be constructed in the trench and the conductors fixed in place. After this process was completed the trough had to be filled with bitumen and the tiles placed on top, before back-filling the trench. Although this was an arduous method of distributing electricity, at the time it was considered to be the best way of laying conductors safely in built-up areas.

There were similar systems of distribution in Weston-super-Mare and at the locations of the other early supplies, some of which were not removed until the 1950's. **Harry Cardy**



A Cross-section of a Wooden Trough

SPELL CHECKER

I have a spell chequer
it came with my pea sea,
It plainly marquees four my revue
Miss steaks eye cannot sea

When I strike a quay or right
a word, I weight four it two say,
weather eye am wrong oar write,
It shows me strait a weigh

As soon as a mist ache is maid
It noes bee fore two late
and eye can put the error rite
Its rarely, rarely grate.

I've run this poem threw it
I'm shore your pleased to no
Its letter perfect in it's weigh
My chequer toiled me sew!
(Sauce unknown)

KEEPING OUT OF MISCHIEF

As some of you may know I (Barrie) have a thing about mains hum and have built up a modest collection of some 300+ vintage wireless sets. What is now classed as vintage, includes everything from the earliest crystal sets, through the global warming valve era and back to the early solid state British and even Japanese transistors. I even admit to having the first portable employing an integrated circuit; a Mullard TAD 100 IC of 1970, incorporating 11 transistors and 11 resistors in an area of 1/500* sq. inch.

In June each year our village hosts a two day Vintage Rally & Country Fair attracting enthusiasts and the curious from all over the West Country. With over 50 tractors and steam engines, 60+ stationary engines and some 100 motorbikes, cars, commercial and military vehicles.

To keep the event ahead of competitors, this year we included a Vintage Wireless Section. I thought that it would be relatively easy to stage, but as the weekend came closer, our ambitions seemed to increase. We decided to cover the period 1920 to 1970. After discussion with fellow collectors, we agreed on 56 sets. I had the job of producing labels. Comparing costs with a graph of RPI from 1900 was interesting. A McMichael set of 1930 worked out at £439 at today's money with the speaker extra!

Wouldn't it be nice to create the atmosphere of the day and play nostalgic recordings through our radios? One of our group designed a low power transmitter and we set up our radio station for the weekend - what licence? We declared war on Germany ten times and Vera Lyn moved to the top of the charts in Mid-Devon.

For a few days sets from all over the South West converged on the village and we worked into the night cleaning signs, horn speakers, polishing the bakelite and checking that wood-worm were dormant! A display turntable was made and a bookcase converted into a secure display cabinet for our more valuable items.

Calling it a "logistical challenge" did not make the sets any lighter or the trips from car to marquee any fewer. Despite the dreadful weather on the Saturday, many people enjoyed our trip down Memory Lane. Thanks to SWEHS members who came and took our mud home on their boots!!
Barrie Phillips

Editor : *The mind boggles considering what mischief Barrie might get up to if he wasn't messing about with radios!*

PROGRAMME -put dates in your diary

**Thurs. 7th Jan Bristol Get-together - Lunch 12.15pm
Cambridge Arms, Coldharbour Road**

Sat. 23rd Jan. ANNUAL WINTER LUNCHEON at Fortfield Hotel, Sidmouth 12.45pm. Visit beforehand the Norman Lockyer Observatory and the James Lockyer Planetarium.

**Thurs. 4th Feb Bristol Get-together - Lunch 12.15pm
Cambridge Arms, Coldharbour Road** **Thurs. 4th Mar Bristol Get-together - Lunch 12.15pm
Cambridge Arms, Coldharbour Road**

Sat. 20th Mar ANNUAL GENERAL MEETING

Also a talk by Michael Knight "Mechanical Clocks Through the Ages" with a full working model.

**Thurs. 1st April Bristol Get-together - Lunch 12.15pm
Cambridge Arms, Coldharbour Road**

Thur 22nd April SALT FORD & BATH VISITS

Visit Saltford Brass Mills as guests of BIAS, lunch at nearby pub, then visit to Horstmann's Factory.

(Note above meeting on Thursday)

**Thurs. 6th May Bristol Get-together - Lunch 12.15pm
Cambridge Arms, Coldharbour Road**

Sun. 23rd May DAY IN DEVON

Steam boat ride on Roadford Reservoir, lunch there and then visit to Lifton - Dingle's Village

**Thurs. 3rd June Bristol Get-together - Lunch 12.15pm
Cambridge Arms, Coldharbour Road**

**Thurs. 1st July Bristol Get-together - Lunch 12.15pm
Cambridge Arms, Coldharbour Road**

Sat. 3rd July VISIT HESTERCOMBE GDNS

Lunch at Merry Monk and then proceed to visit the lovely gardens of Hestercombe House, nr. Taunton

**Thurs. 5th Aug. Bristol Get-together - Lunch 12.15pm
Cambridge Arms, Coldharbour Road**

**Thurs. 2nd Sept. Bristol Get-together - Lunch 12.15pm
Cambridge Arms, Coldharbour Road**

Sat. 25th Sept. BATTLE OF TRAFALGAR

At Exeter, John Dike to give an unusual presentation involving live entertainment of pictures and music with members participating.

Fri./Sat./Sun. 15th 16th 17th Oct. IRONBRIDGE

Weekend at the Madeley Court Hotel and visiting the five major museums in the Gorge.

NEXT EDITION

Please send information, articles, photographs or letters to Peter Lamb at 35 Station Road Backwell, Bristol BS48 3NH or telephone on 01275 463160.