



Push telegraph

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# BUSH TELEGRAPH

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## Wood Lane's Club

*Editor* Peter Revell *Editorial Board*  
Dave Castle  
Denis Groombridge  
Richard Hammond

**cover :** photograph by Dave Castle

vol. 19 no 7

## EDITORIAL

While the editor is away having a "Greece-up" we have taken the editorial from National Publications.

Observer Colour Supplement

Women live seven years longer than men on average. Many explanations have been suggested for this including the cumulative beneficial effect on women of sitting down every time they go to the lavatory.

From the Guardian

The House of Lords committee on Lord Arran's Budgers Bill yesterday approved an amendment making it illegal to keep a budger for a pet or for sale. The amendment was supported by lord Arran, four of whose pet budgers ran away on Thursday.

From the News of the World

Court chairman Mr. P.T. Cunningham hold her: "This is for your own good. If you are not pregnant, you soon well be."

# History of Wood Lane

## CHAPTER FIVE - THE MOVE TO WOOD LANE

The Buildings - Ferranti Transformers -

The Chimney - Alarms and Excursions -

Research Problems - "Arrested Failures" -

Maganta Dye Test - Application of

Pressure

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When Callender's finally moved into Wood Lane, they were confronted with buildings which, so far as the North side of the site is concerned, have not greatly altered to this day. If one can imagine the bunkers which until recently existed over the present Machine Shop (HV3) as also existing over the Stores (HV1), then one has a fair picture of the main premises in 1931. In other words, the buildings virtually consisted of what we still know as HV1, HV2, HV3 and HV4 - these were their original designations on the plans of the old Power Station. Of course, modifications were soon made to suit the type of work to be carried out, but generally the "shell" of the old main buildings has remained. In addition, there was the chimney stack, and to the North and west of this were several low buildings, later known as the Machine shop and the "Runway". South and east of these, in the area now occupied by McFadzean, Rutherford, Kelvin, Faraday and the Workshops, was nothing but railway sidings and open ground.

As stated, alterations were soon commenced and these continued right up to the official opening in 1934. Initially, HV3 was used as a garage, but soon a control room was built on a mezzanine floor and life testing equipment purchased and installed. This became the initial home of O.T.D. The end of HV3 was extended when substation No. 3 (now the Generator Room) was built. In the HV4 block the end section was originally constructed of corrugated iron and this was re-built by Callender's. Small laboratories were installed in this block to house Dielectrics, Chemistry, Physics and Photography.

In addition, a medium-sized laboratory was created for general purpose investigations up to 120 kV. Here the investigations into joint and sealing end design and tests on short lengths of high voltage cable, were carried out. This laboratory was generally concerned with the theory and mechanism of breakdown of cable dielectrics. The two main easterly buildings (HV1 and HV2) were allocated to high voltage life tests on cables and auxiliary apparatus and flashover tests on porcelains. In a corridor to the north of these two sections were installed the switchgear and motor

alternators supplying the transformers necessary for this work.

Two Ferranti transformers were purchased and these arrived at the beginning of 1933, being hauled all the way from the north of England by a fine specimen of a traction engine owned by Norman E. Box Limited of Manchester. Photographs taken from the Company's files indicate that the transformers which, of necessity, arrived late at night, presented a difficult problem in negotiating the turn into the drive and it was necessary to remove the central gate-post. (This was replaced, but new gates, without a central post, have been fitted in more recent times). The traction engine was eventually "parked" in HV2. Whilst the engineers were installing the transformers they lived in a caravan on the site.

Before installation could be effected and, indeed, before the transformers had arrived, a great deal of time and energy had to be spent in the preparation of the pits. Early on it was discovered that the concrete floor of HV1 and HV2 was so hard that the ordinary pom-pom drills were useless. Organic aggregate had been used in the concrete and eventually the pits could only be prepared by using rock drills! Even when the pits had been made a difficulty still arose in the form of flooding. One of the pits continually filled with water despite repeated attempts at waterproofing the walls and floor. Eventually it was discovered that a water main had been damaged when the pit was originally dug!

Much has been written about the various departments at Wood Lane, but little mention has been made of the chimney stack. This was converted for use as a vertical cable testing laboratory. Originally the chimney was 210 ft. high. In November 1931, however, the top 20 ft. was removed owing to cracks. At the same time the fire-brick lining was removed, a concrete roof put on the chimney, an entrance cut to the base at ground level and a steel stairway installed up to the first 120 ft. consisting of six ladders with landings at every 20 ft. level. A working platform was erected at the top of the stairway. By these arrangements it became quite easy for clear vertical runs of 100 ft. of high voltage cable, such as may be required in power stations, for example, to be installed and tested. This "laboratory" was connected by duct line to the life testing laboratory so that tests could be carried out either with transformers located in the base of the chimney, or with transformers located in HV3. Work on the chimney was carried out by Altitude Limited.

To complete the work a new lightning conductor was installed. Later, in 1934, the chimney was rebanded.

Before the installation of the Ferranti transformers, a hodge-podge of high voltage equipment which had been collected at Ormond Yard was used. Temporary cages were erected around this equipment with whatever safety measures could be rigged up.

As stated before, in those early days the site still bore the signs of the old Power Station. Railway tracks covered much of the ground and there was a large grass area one which cricket was played in the lunch hour. The railway lines also had two bogies running on them of the type that are moved by two people facing each other and pumping levers in a see-saw fashion. Part of the line was traversed by big double doors in one of the blocks, these usually being open. One day the inevitable happened. Somebody closed the doors without giving due notice. From that day on, the railway ceased to function at Wood Lane. Another escapade of those days was largely the result of the current spate of ganster films starring James Cagney, George Raft and other tough guys. In these films, the gangster was inevitable led to the electric chair and when this happened all the other inmates of the prison learned of it by tapped messages on the pipes that ran through all the cells, which caused a terrific din. Wood Lane had such a system of pipes running through the various departments and again the inevitable happened, causing some of the "hierarchy" to throw fits because they could never trace the origin of the noise.

To anyone but an electrical engineer the role played by apparatus such as was installed at Wood Lane may seem a little puzzling. It is necessary therefore to consider what happens to a cable when it fails and how such failures can be accounted for by laboratory tests. In those early days informative laboratory tests were limited, but soon new testing techniques were developed - many at Wood Lane.

As already stated, it had been found that breakdowns on solid cables were attributed to successive heating cycles which caused the formation of voids in the impregnating compound, i.e. weak areas which could break down by ionisation due to high stress.

The next logical step, therefore, was to study the exact process by which a cable failure developed when the cable was tested under severe conditions in the laboratory.

Some breakdowns were very simple in appearance, consisting of a clean radial hole between conductor and earth. In others, scorched and brittle papers were found, particularly in the inner portions of the dielectric. Others were accompanied by tree-like or fern-like patterns of carbon, which usually occurred near the centre of the dielectric wall and were associated with dry patches where scarcely any free impregnating oil remained. On the other hand, there were in existence lengths of cable which had given satisfactory operation for years and were perfectly dry throughout, the impregnating oil having been replaced by a yellow wax-like substance (familarly referred to in those days as "cheese") which was neither fusible nor soluble in the usual organic solvents.

Small wonder then that the early investigators were baffled by the complexity of the breakdowns, and turned with relief to the Schering bridge as a method of keeping a watch on the dielectric losses during the life of the cable.

Unfortunately, a sufficiently sensitive recording wattmeter or recording bridge did not exist, and when the measurements could only be taken at intervals it was very easy to miss the small overall rise of power factor which was caused by a severe local loss. A cable on a life test, or under conditions closely simulating service operation, might behave excellently for months and then fail suddenly without any previous warning obtained from the daily or weekly loss measurements.

This became such a common experience that some engineers were led to believe that cable breakdown was a mysterious affair, taking place suddenly without apparent reason. Obviously little progress could be made from examination of faults occurring in service, partly because the exact conditions and past history were unknown and also, because the fault-arc invariably burnt out most of the evidence before the protective equipment could operate.

Investigations of the mechanism of breakdown necessarily started in the laboratory, but in order to be certain that the conclusions were applicable the laboratory had to be capable of "full scale" research and, furthermore, the results had to be correlated with all possible evidence collected from cables in service.

Many kinds of test were suggested and used with the object of assessing the quality or determining the safety factor of impregnated cables. There appeared to be three types to which most of these tests belonged, viz:

- (1) The voltage/time-to-breakdown test.
- (2) The stability test.
- (3) The accelerated ageing test.

For many years it had been known that a cable subjected to excess voltage might develop local hot spots and that if the voltage was maintained the cable frequently failed at or near the hottest of these points. By attaching a large number of thermometers or thermocouples to the cable and keeping a continuous watch on these, it was possible to obtain advance information on the condition of the dielectric all along the cable without cutting the lead sheath and disturbing the normal pressure conditions. It became particularly easy to obtain such information by use of an automatic thermocouple recorder developed at Wood Lane by Dr. Brazier.

This device became of the greatest assistance in the laboratory examination of the mechanism of cable failure, and it is no exaggeration to say that without some such system much useful information on cable behaviour would never have been obtained.

In the past laboratory tests on cables had generally been continued to breakdown, largely because no warning of failure was available. It was felt, however, that it would be more instructive to stop the test before the final arc occurred as the latter generally destroyed much of the evidence of interest. The "arrested failure" could then be examined, as described later. Frequently some hours elapsed between the first observation of the rise of temperature on the recorder chart and the actual breakdown, and with the help of the temperature recorder it was found possible to stop tests in all the various stages, and thus to show how the deterioration progressed to breakdown.

The cable the failure of which had been arrested in this way was then subjected to a post-mortem. The papers were removed from the section near the "hot spot" until anything unusual was noticed. When any doubts existed as to the mechanism of the failure, or the point of origin of the trouble, the Magenta dye test was applied. This test, which had been developed at Wood Lane by the then chief Chemist made use of the fact that the wax formed from the cable oil as a result of ionisation was insoluble in the usual organic solvents (petrol, benzene, etc.) and, further, that this wax remained on the papers where it was formed, adhering closely to the paper fibres. Thus the tapes taken from the cable could be extracted in petrol to remove the oil and if they were then dyed, the wax, which would not take up the dye, would show up very plainly. Magenta dye had the further advantage of giving good contrast in photographs. By means of this test traces of wax quite invisible on the original papers could be clearly seen, the wax taking on different shapes and forms according to its position and method of formation.

The mode of formation of voids in the cable dielectric and the mechanism of their subsequent breakdown were thus elucidated, but the problem of the prevention of such failures still remained as a serious challenge to the cable manufacturer.

An increase in pressure does not result in any radical alteration in the mechanism of breakdown. The pressure results in the suppression or extinction of the ionisation until the electric stress has reached a higher level, but at this level the same phenomena occur.

The whole field had been thoroughly surveyed in a comprehensive manner in patents taken out by Fisher and Atkinson in America in 1922, in which every possible method of utilising pressure in conjunction with a cable was covered. These patents, however, appeared to have been in advance of their time, and it was not until about 1930 that the matter was actively investigated by cable makers.

The first question to be determined was the amount of pressure necessary to prevent the ionisation of cable voids and the highest pressure that could be used in order to obtain the maximum advantage. To answer this question a pressure vessel was constructed in the laboratories incorporating two electrodes between which were sandwiched layers of plain or impregnated paper. To such a system a variable gas pressure could be applied at various voltages between the electrodes. It was possible to watch through a viewing window the extinction of the ionisation as the pressure in the container was raised.

It was learned that above pressure of 200 lb/in<sup>2</sup> there was little improvement obtained on further rise of pressure. This figure became generally accepted and proposals for gas pressure cables were largely based upon a maximum pressure of 200-250 lb/in<sup>2</sup>.

The next problem was a method of applying such a gas pressure to a cable. Fisher and Atkinson proposed using a high pressure gas, such as dry compressed air for instance, applied to the dielectric of a cable in such a manner as to raise its breakdown strength to a point at which ionisation of the vacuous spaces was completely suppressed. Furthermore, they thought that since voids no longer constituted a menace there would be no need for the elaborate precautions hitherto adopted to eliminate them during manufacture. Pursuing the idea to its logical conclusion they reasoned that the impregnating medium itself was unnecessary, and that dry paper alone could be used as the dielectrics, the occluded air being maintained under compression would thereby have its breakdown strength raised and ionisation would not occur. The patent, however, gave no indication of the practical methods of implementing this technique and as Ferranti was heard to remark, "Ideas are generally cheap and easy, but to carry them out is a very difficult matter."

In Great Britain where no corresponding patents had been taken out lively attention to the problem was given by four of the largest cable makers, including Callender's.

There was general agreement, in the initial stages at least, that the proposal to dispense with impregnating compound altogether was too sanguine, but this raised a major issue on which opinion was sharply divided.

One school of thought maintained that the use of gas in contact with the impregnating oil was unsafe, and that the gas pressure should be exerted on the dielectric via an impermeable membrane or diaphragm, e.g. a thin lead sheath. Others held the view that, provided an inert and therefore non-rating gas such as nitrogen was used, no adverse effect need be expected from contact between the gas and cable compound, also that the introduction of a diaphragm would unnecessarily increase the weight and cost of the cable.



Thus, though the fundamental principle of the application of high pressure gas provided the basis for all cables of this type, this early divergence of opinion resulted in the development of two major classes of gas pressure cable, which may conveniently be referred to as the indirect pressure (or diaphragm) type, and the direct pressure (or non-diaphragm) type.

All of the ideas that were put forward, probably the design which came the closest to the original Fisher-Atkinson conception was the dry gas pressure cable, designed at Wood Lane by Dr. A. N. Arman, and which is best described in his comprehensive paper which was published in 1937. The paper was entitled "The Gas Impregnated Cable" and described six years of experimentation which commenced early in 1930.

Whilst considerable time and energy were spent on the design of the dry gas pressure cable, Callender's were also interested during early thirties in other designs of cable which would be capable of withstanding still higher voltages. The work culminated in the successful design of the compound impregnated gas pressure cable and will be described later.

## ***Thank you***

I would like to thank all those friends at CRED; who contributed towards the splendid Watch and Strap, which was presented by Mr. Reynolds on the occasion of my recent retirement.

My wife joins me in thanking you also for the very useful cheque that was received at the same time.

Yours sincerely,

John Thompson

# Answer

## Table Top Navigation Trial

The response to the table top navigation trial was very poor, only 3 entries were received of which two were correct.

The answers were:-

1. 042865
2. 510
3. Meldon and Middleton
4. 119857
5. 063932
6. 064896
7. 2
9. 032833
10. Hartburn

The Editorial Board has decided to split a small prize between the two winning entries:- Mr. R. Hall and Mrs. A. Smith.

# Answer to Mathematical Crossword

<sup>1</sup> 3	0	<sup>2</sup> 2	<sup>3</sup> 5		<sup>4</sup> 2	9	<sup>5</sup> 5
1		<sup>6</sup> 1	9	<sup>7</sup> 1	4		2
<sup>8</sup> 3	<sup>9</sup> 1	0		<sup>10</sup> 1	8	<sup>11</sup> 5	2
<sup>12</sup> 1	9		<sup>13</sup> 1	5		4	
	4		<sup>14</sup> 1	4		<sup>15</sup> 1	<sup>16</sup> 3
<sup>17</sup> 1	5	<sup>18</sup> 3	9		<sup>19</sup> 1	0	2
9		<sup>20</sup> 6	1	<sup>21</sup> 1	4		1
<sup>22</sup> 1	2	0		<sup>23</sup> 1	4	7	2

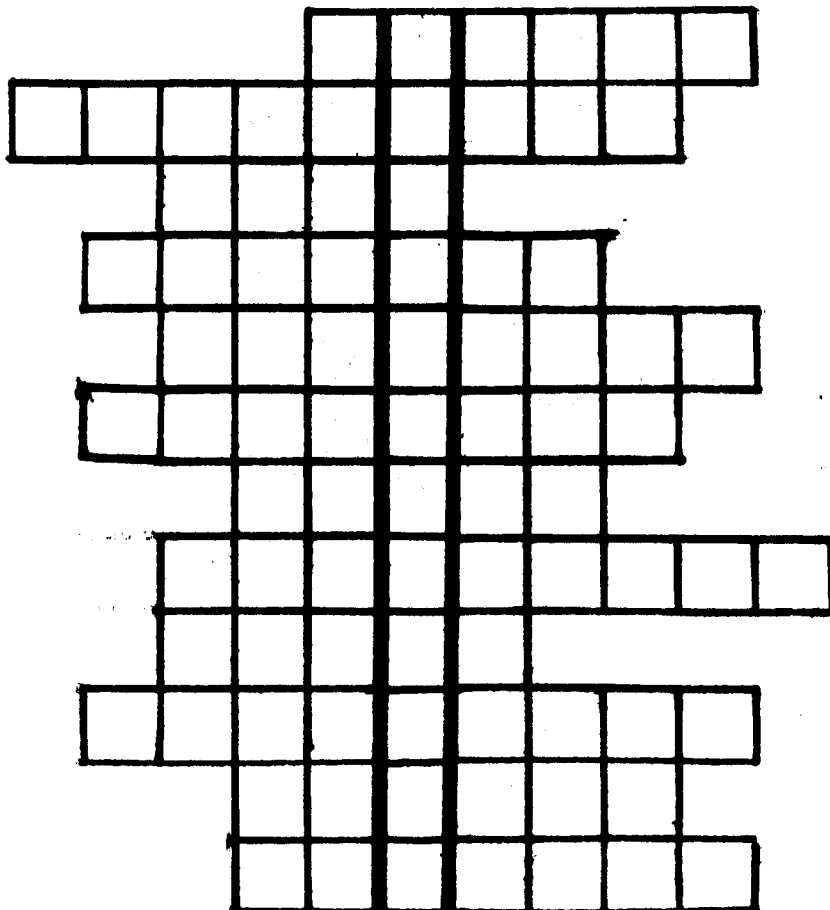
Several answers were received to last months mathematical crossword. Ron Hall was however the only one to have seen a 295 bus going to East Acton. The answer to 4 down was then 248, the switchboard internal telephone number.

This month's quiz is slightly different and the first we have run using famous people. All you have to do is fill in the names of the famous people answers to the clues in to the grid and using the letters contained in the double thickness lines to solve an anagram to give the name of another famous person.

Send your answers to an Editorial Board member before 22nd October. For a correct entry both the anagram and the grid must be correct.

- Clues
1. Inventor of the phonograph.
  2. Daughter of Ptolemy XI and the 6th Queen of Egypt by that name.
  3. Founder of international communism.
  4. First air-man to fly from Calais to Dover.
  5. Greek philosopher, who died by drinking hemlock.
  6. British engineer who built the Menai suspension bridge.
  7. Russian revolutionary leader.
  8. Author of Death in the Afternoon etc.
  9. Author of Alysses, Portrait of the Artist etc.
  10. Painter famous for The anatomy lesson and The mill.
  11. One time headmaster of Rugby Public School.
  12. First woman to fly from England to Australia.

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12

The Festiniog Railway in the mountains of North Wales runs from Portmadoc up to Ddualli (pronounced as it is spelt The - aht). The gauge is 1 ft 11½ in and trains are hauled by steam engines - of course! The line used to continue to the slate quarries at Blaemau Festiniog but it was drowned under the reservoir of a pumped storage electricity scheme. A new route is being constructed by volunteers avoiding the reservoir.

Geoffrey Ward has been going there for years but although I have long been interested and have had an occasional ride, I thought it was about time I went to lend a hand. Expressing a preference for something fairly active I was asked to help with the laying of permanent track at the beginning of the new route. Ddualli is only accessible by rail and the workers go up on the first train - not very early as it doesn't get there till 10.30, but the first morning I travelled up on a petrol engined trolley originally built to supply the trenches in the '14' - 18 war.

The new line spirals round the station in order to gain height - this was handy as wherever we were working, we didn't have far to go to patronise the buffet car whenever a train came in.

The track is being laid with second-hand rail (ex Tilbury Power Station sidings) on new sleepers and my first job was chipping rust off the clips for holding the rail down before being promoted to driving the screws into the sleepers. This is flat bottom rail and is different from the rest of the railway which is laid with chaired track. After three days of this we reached the furthest point that the formation was ready. As a diversion I was asked to dig a ditch for a drain pipe across under the track. When digging it I thought that's going to make a fine booby trap for anyone walking along the line. You guessed it - I fell into it myself and walked with a limp for the rest of the week. A trainload of ballast was then brought up and we spent a day shovelling it over the track we had laid. This was really thirsty work! In the evening we rode the empty wagons back to the yard. As the railway is on a continuous gradient, it is only necessary to release the brakes and away you go. This was how they brought the slate down in the old days. Travelling like this, you really see how the railway twists and turns to follow every contour of the hillside and how narrow the cuttings are. But the noise of the iron wagons was deafening!

Towards the end of the week we went back down the spiral and started to lift old track which had been laid temporarily and replacing it with new track, and finally there was another train load of ballast to spread and another ride down on the empties in the evening sunshine.

Before coming home, I visited the Ffestiniog end and saw where they are preparing for the new line - all manual labour with pick and shovel. "Come on - get digging" they said.

# Letters to the Editor

Dear Ed,

re: Melting Point of Platinum

Just a few words of metallurgical advice for chemists:

- (i) Do not take Metals and Alloys Dictionary too seriously, after all, metallurgists never fail never to use it. (Furthermore, I expect your copy is years out of date).
- (ii) Buy an up to date edition of Metals Reference Book. The 2nd edition of 1955, 3rd of 1962 and 4th of 1967 all quote the melting point of platinum as 1769°C.

Perhaps the following references, which all quote 1769°C, will dispel the controversy:-

Metals Handbook  
Kempe's Engineers Year Book  
Metallic Materials by Ross  
Johnson Matthey Chemicals Ltd., precious metals catalogue no. 1765

Yours,

Smug Metallurgist  
(Roger Jones)

Not wishing to start an interdepartmental war between Chemists and Metallurgists I declare this topic closed and leave it in the melting pot!

Frustrated Ed.

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From the T.V. programmes in the Express.

Horizon: The Wizard Who Spat On The Floor with more than 1,000 patients to his name.

Obviously "Spitting spreads diseases"

Mac spotted this.

# Badminton

## NEW SEASON

A new season is nearly with us again and we officially start on Tuesday 2nd October. This of course does not stop anybody playing at the present time since we have use of the court all the year round. Anyway we advise you to start practising as our first tournament is not so far off. Unfortunately the cost of play to members has gone up this year to 12 p a Club Night due to yet another rise in the price of shuttlecocks of up to 5 p each.

## COACHING

Two years ago a successful coaching course was run for the Member's of the club who were of average club standard. It would seem that several members are again interested in a coaching scheme.

It is proposed to run two courses, one for beginners and a second for average club players, engaging if possible Ken Crossley, National Coach (Professional) Badminton Association of England. The course would cost approximately £2.00 per head covering four coaching sessions and shuttlecocks. If you are interested please fill in attached slip and return to M. J. Squelch as soon as possible.

Name ..... Dept ..... Tel. No.....

I am interested in a coaching course for beginners/average club standard.\*

\* Delete where applicable.

## SINGLES TOURNAMENT

The arrangements for a singles tournament are now in hand and on entry form is attached. As on previous occasions a plate tournament will be run for those knocked out in the first round.

## BADMINTON SINGLES TOURNEMENT 1973/74

### ENTRY FORM

Early rounds to be played 6th, 7th & 8th November 1973.

Final rounds to be played 13th November 1973.

Entry Fee 20 p.

Name ..... Dept ..... Tel. No. ....

Entry forms when complete should be sent to M. J. Squelch no later than Monday 29th October 1973.

## Drinks all round

A nice pub, in West London, which I recently discovered is the LITTON HOTEL in Greenford. The hotel is to be found in Oldfield Lane, the southern branch running from Western Avenue to Ruislip Road in Central Greenford. An old building, half timbered with beamed ceilings makes an attractive place to visit there are three bars, all small, but it is usually easy to get served. A pleasant garden with rustic seats completes the scene. The hotel is a Free House and stocks Double Diamond and Tartan Keg beers, car parking is easy, either in the road or the car park the entrance of which is found at the end of the garden. One interesting fact is the manager is what one would imagine Charles II looked like!

On the South side of the river looking out on Kew Green one finds the ROSE and CROWN. A Courage pub which boasts a terrace at the front which oversees Kew Green and a private rose garden at the rear which all makes summer drinking enjoyable. The two bars are very ordinary and not to be recommended, however this is made up for by the excellence of the food available from the bar. Salads, rolls, sandwiches and all the trimmings are available at quite reasonable prices for today.

Finally out of town along the A40, Oxford road, I am sure that the BULL in Gerrards Cross is a familiar sight. In fact the village of Gerrard Cross takes its name from a 17th century inn keeper called Gerrard who founded the Bull when the surrounding area was common land. One of the Bars is named after a notorious robber, Jack Shrimpton, who used this inn as a refuge.

The Bull has been added to over the centuries and has a very long frontage, some of the building materials in the inn came from a nearby mansion house called Bulstrode, from which the name Bull was taken.

The origins of Bulstrode came from the era of the Norman conquest when a local saxon lord defeated Norman soldiers by using a herd of bulls against them, then called himself Bulstrode in commemoration, quite a history. The present pub is a very nice place, worth a visit and renowned for its comfort and elegance.

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From Daily Telegraph

A new telephone directory has been published in Moscow. It contains "700,000 personal listings plus the numbers of some 150,000 communal apartments served by one telephone". - must be a well used phone!

Presentation to Mr. G.H. Bradbery: Works Engineer

Mr. Bradbery received his retirement presentation from Dr. McNeill on the 31st August 1973. He joined the company in February 1923 working for the accounts section and transferred to the Research and Outside Testing Department on its formation. He became works engineer after leaving the army (as a major) at the end of the 1939-45 war.

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Headline in Evening Standard

15.8.73

" CRICKET BAT DEATH : GIRL GETS BAIL "

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# bridge section

The Bridge Section will be holding a "Pairs" competition in the Main Hall, on Wednesday the 3rd October, starting at 6.30 pm.

There will be an entry fee of 60p per pair to cover the cost of prizes and refreshments.

All entries to R. FRASER by Wednesday 26th Sept.

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Entry Form

The following pair wish to enter the Bridge Pairs Competition.

Names        1.  
                 2.

Signed.....



ARE YOU A SOCIABLE TYPE?

Answer the following questions.

- |   |        |
|---|--------|
| Do you have any spare Tuesday or Thursday Evenings?         | YES/NO |
| Do you have an understanding wife/girl or boyfriend?        | YES/NO |
| Do you like the quiet informality of a small bar?           | YES/NO |
| Do you get on with people?                                  | YES/NO |
| Do you join in any social events at Wood Lane?              | YES/NO |
| Do you participate in any sporting activities at Wood Lane? | YES/NO |
| Do you wish to learn any game, badminton, darts, cards etc. | YES/NO |
| Do you like an occasional drink?                            | YES/NO |
| Do you belong to the Social Club?                           | YES/NO |
| Do you think a Social Club should have a bar?               | YES/NO |

If you answer 6 or more with a YES then the Social Club Bar Committee would like to hear from you. As they are now one member short.

If you would like more information Please Ring P. Walton 323.

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Local Ad.

We require also a Grand father Clock for a collector with a Brass Face. Also one with a inlaid body.

Holidays, pneumatic igloo gent, pumps up in a few minutes.

The bride wore a full length white silk dress trimmed with lice.

From Weekend

Budapest physics student Otto Czarvic, 21, was presented with a prize for his term work and was invited to perform an experiment before Hungarian scientists. His demonstration blew up a £12,000 laboratory and lost him his price.

# the FILM column

## THE FILM SECTION'S TWENTIETH SEASON

We are pleased to announce details of the 1973 - 4 programme of films being presented by the Film Section.

### Egypt comes to Wood Lane

The opening programme is at 6.30 p.m. on Wednesday September 26th in the Main Hall. We will be showing an outstanding Egyptian film by Shadi Abdelsalam, THE NIGHT OF COUNTING THE YEARS, based on a true incident in 1881 which led to the discovery of the tombs of thirty of the mightiest Pharooks and their rescue from the tomb-robbers. The colour photography is superb.

As in previous years, the film will be immediately followed by a Soiree, when we hope that you will not only enjoy the food and drink but also chat with us about films in general and the Film Section in particular. Admission for this event is by programme, price 25p. Programmes for the remaining six film shows are 20p each, but you can save yourself money by buying a Season Ticket for only £1.00. The full season's programme is given below. Further details, programmes and Seasons Tickets will shortly be available from members of the Committee and Local Representatives, listed below.

### 26th September 1973

#### THE NIGHT OF COUNTING THE YEARS

followed by

A SOIREE

### 31st October 1973

#### INVESTIGATION OF A CITIZEN ABOVE SUSPICION

Adventures in Perception

History of the Cinema

### 12th December 1973

#### VALERIE AND HER WEEK OF WONDERS

Campaign

Paint

A Plain Man's Guide to Advertising

### 16th January 1974

#### DANCE OF THE VAMPIRES

Kenojuak, Eskimo Artist

From Small Beginnings

The Hoffnung Palm Orchestra



27th February 1974

GETTING STRAIGHT

Tribute to Fangio  
La Linea

3rd April 1974

SHOCK CORRIDOR

London My Lord  
The Line  
Kama Sutra Rides Again

1st May 1974

THE ROYAL HUNT OF THE SUN

Violin  
Sailing

Film Committee and Local Representatives

R. Grigsby	A.F.L. Mattock	J.T. Ruben
C.O. Tilbury	J.W.E. Watson	S.M. Castle
M.R. Dennis	S.W. Hemming	I.P. Higgins
A.E. Morrison	R.D. Pride	

W. C. FIELDS NIGHT

**B.I.C.C. FILM SOCIETY 20th SEASON**

*presents.....*

# The Night of Counting The Years

Arabic dialogue/English subtitles

in colour (A)

from EGYPT

Acclaimed internationally

Shadi Abdelsalam's  
evocative drama of  
the tribe that robbed  
the Pharaoh's tombs



*Followed by a Soirée*

**WEDNESDAY 26th SEPT 6.30p.m.**

**Admission by Programme 25p**