

BUSH

sep 1978

TELEGRAPH



BUSH

vol. 20 no. 10

TELEGRAPH

the magazine of

R&EL

wood lane



Cover

"Bush Baby"

Editorial Board

David Green
Denis Groombridge
Mike Hagger
Richard Hammond
Geoff Holder
Ted Morrison
Peter Revell



Editorial

Watching Gene sweep up the early falling leaves is a potent reminder that there is now an 'R' in the month and we must, with as much British phlegm as we can muster, accept that the best (!) of the summer has been washed down the drain. Before the remainder of the Machine Shop wall scatters its autumnal reddy-brown foliage scrunchingly to the ground, and the birds intensify their noisy abuse to the setting sun as it deserts them earlier and earlier each evening, we shall have put away our tennis racquets (did we play?) and cricket bats, and adjusted our sights for badminton (did we stop playing?) and other winter pursuits. High on many people's list will come further education.

Studying the pages of "Floodlight" is an education in itself and we are tempted to wonder whether the emphasis that "useful" subjects like engineering, chemistry and electronics receive isn't too low relative to winemaking, Cornish and yoga. No doubt we are more interesting people for our extra-mural studies but let us hope that the end-product isn't a population knowing nothing about everything. British industry needs basic skills and knowledge of industrially relevant subjects if it is to maintain, let alone increase, its position in the world markets. The penalties for falling by the wayside could be severe. Would you like to drive a Lolls-Loyce?

Personnel News

STARTERS

Welcome To:-

C.J. Kavanagh who joins us as a trainee technician in the Admin Department.

R. McDonald who joins us as a Driver/Handyman in the Works Engineering Department.

Miss D.L. Pinto who joins us as a junior in the Physics Department.

J. Anton who joins us as a junior in the Physics Department.

I. Fordham who joins us as a junior in the Polymers Department.

W.A. Harlow who joins us as an Assistant Technical Officer in the Transmission and Energy Department.

A.W.S. Ainger who joins us as a Senior Project Engineer in the Product Engineering Department.

Miss M. Friel who joins us as Secretary to Dr D.S. Margolis.

S.G. Napper who joins us as a Student Apprentice,

D. Sen who joins us as a Student Apprentice,

A.N. Borer who joins us as a junior in the Polymers Department.

LEAVERS

Farewell to:-

Bill McGill of the Works Engineering Dept. who leaves after six years to take up alternative employment.

Angela Thornton of the Communications Dept. who leaves after one year to take up alternative employment.

Stephen Drury of the Mathematics Dept. who leaves after eighteen months to take up alternative employment.

Carol Platt of the Chemistry Dept. who leaves after eight years to take up alternative employment,

Ian Ringrose of the Polymers Dept. who leaves after two years to take up alternative employment.

John Wall of the Administration Dept. who leaves after only two months to take up alternative employment.

RETIREMENT

Good luck and a happy retirement to Reg McRae who retired on 31st August after sixteen years service.

LONG SERVICE AWARD

Congratulations to Mike Hobart (Commercial & Patents Dept.) who on 5th Sept. clocked-up forty years service with the Company.

Diary of Events

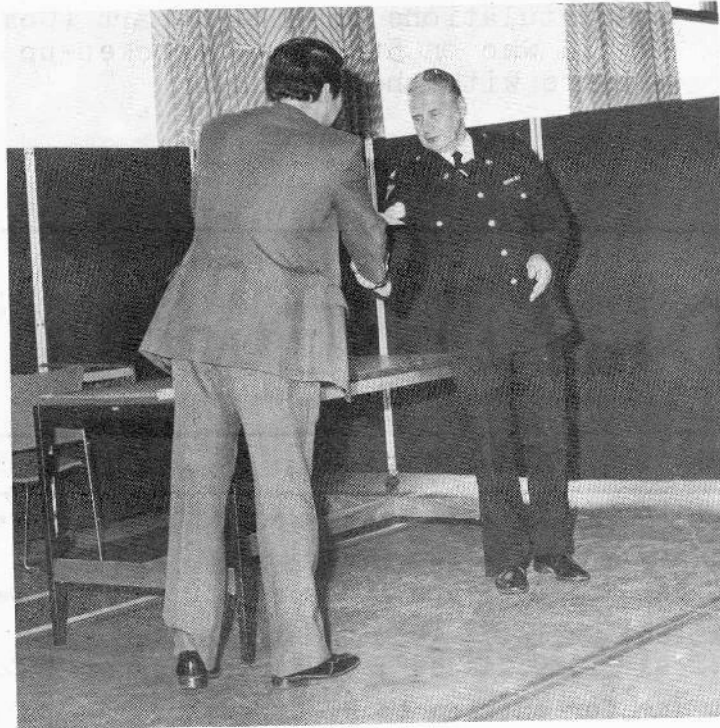
Date	Event	For Information
Fri 22 Sept	Disco; 8 pm - 1 am; Tickets 60p	Yvonne Ferrier
Fri 29 Sept	Last day for entries to "Aspects of G-BREL" photographic competition	Denis Groombridge
Wed 4 Oct	Technical Society; 1.30 pm Main Hall; "Optical Fibre Cables"; Dr Karl Plessner	John Heggie
Fri 6 Oct	Last day for entries to BT Crossword	David Green
Fri 6 Oct	Last day for contributions to BT	Editorial Board
Mon 9 Oct	Executive Council Meeting	Pete Walton
Mon 16 Oct	Sea Angling Trip	Pete Walton
Wed 18 Oct	Film Show and Soirée; 6.30 pm Main Hall "The Front Page"	Annette Mattock
Fri 20 Oct	Publication day BT	Editorial Board
Fri 10 Nov	Wine Tasting (provisional)	David Goff
Wed 15 Nov	Film Show; 6.30 pm Main Hall "Images", "Louisiana Story"	Annette Mattock
<u>Regular Events</u>		
Tuesdays	Badminton	Vic Banks
Thursdays	Badminton Air Pistol Shooting	Vic Banks Denis Groombridge
Weekends	Hot-Air Ballooning	Roger Millward or Denis Groombridge

!!!!!!

Woolworths are selling Christmas cards. Are you thinking about your contribution to the bumper Christmas issue of the Bush Telegraph? Start now, it's later than you think.

Retirement

Presentation to Reg McRae (24th August)



Following his war service with the Royal Engineers (1940-46) Reg returned to his prewar job with British Rail where he worked in the sleeping car equipment department up to 1962.

He then left to become a traffic warden, but following various remarks from motorists, coupled with a reluctance to give out tickets, left the same year. Reg then joined BICC at Wood Lane on the 3rd September 1962.

Fran Lam commented that he envied Reg in that he always showed a pleasant personality and a desire to help others. He quoted as an example of this an occasion when Reg had assisted others in removing a trapped Dr Gobbetti from the lift after most other members of staff had left for home.

Fran Lam then presented Reg with a cheque for £80 in appreciation for 16 years service which included almost exactly two years passed the normal retirement age.

Reg in his reply thanked everybody who had contributed to his collection which he intends to put towards some Hi Fi equipment. Reg intends returning for a free meal and bottle of beer at Christmas.

A photograph of the presentation is shown above.

The History of Electric Wires and Cables

PART 8: THE ATLANTIC TELEGRAPH CABLES (CONTINUED)
By R.M. Black

The 1858 Attempt

The cable laying operations carried out during the summer of 1857 having proved unsuccessful, a slightly different plan was proposed for the following year. The same two ships would be employed but this time it was proposed that they should rendezvous in mid-Atlantic. Here the two lengths of cable would be spliced together. The ships would then proceed in opposite directions paying out the cable as they went until one arrived at Valentia and the other at Trinity Bay, Newfoundland.

Accordingly, the 'Agamemnon' and 'Niagara' sailed from Plymouth on Thursday 10th June, 1858 and made for the rendezvous at Lat. 52 deg 2 min N, Long. 33 deg 18 min W. They were accompanied by HMS Valorous and HMS Gorgon. The voyage, which started quietly enough was soon to turn into a nightmare. To quote from Russell's account:

"Experienced mariners gazed with apprehension at their depth in the water as they left the shore. It was however, such glorious weather as to cause some anxiety lest there should be no wind, and that the stock of coals might be exhausted before their mission was accomplished. Before midnight, however, a gradually increasing gale gathered to a storm, while the barometer marked 29 in. For seven consecutive days the tempest, so eloquently described by Mr Woods in The Times, continued. The Agamemnon under close-reefed topsails striving to reach the rendezvous rolling 45° and labouring fearfully".

"On the 19th and 20th the gale reached its height. The position of the ship, carrying 2,840 tons of dead-weight, badly stowed, had become most critical. From her violent lurching as she sunk into the troughs of the sea, and struggled violently to right herself the coal bunkers gave way, and caused alarm and confusion. Were the masts to yield, the ship would rock still more violently, the cable would shift, and carry everyone with it to destruction. Captain Preedy had but two courses open in order to save the ship without sacrificing the cable-either was fraught with peril- to wear the ship, or to run before the gale and risk the chances of being pooped* by the monster seas in pursuit".

The storm was one of the worst that had been

* to receive a wave over the stern of the ship

experienced in the Atlantic for many years and it was not until the 21st that the weather had moderated to an extent that the Agamemnon could make her way to the rendezvous which she reached on the 25th. The companion ship and the escort survived the sixteen days with rather less disturbance.

On the 26th they proceeded to splice the cable, but on paying out, the cable became entangled in the machinery aboard the Niagara and broke. A second splice was immediately made, and it will be remembered that due to the difference in lay of the armouring wires between the two lengths a special yoke was required to prevent twisting and unravelling of the armouring, so that splicing was quite complicated. After paying out some 37½ miles of cable, electrical continuity was lost and it was thought that the cable had again broken somewhere near the bottom of the ocean. The Niagara commenced to haul in the cable when it snapped close to the ship.

On the 28th the third splice was completed and laying again commenced. At 4 p.m. on the 29th continuity was again lost this time after 111 miles had been laid. Apparently this was due to a slackening of speed by the Agamemnon who had paid out the 146 miles of cable stored in the upper deck coil and was preparing to transfer paying out to that on the lower deck. There was no undue tension on the cable at the time, it just parted "silently and suddenly".

The Agamemnon sailed back to Queenstown in Ireland after having vainly attempted to contact the Niagara at the rendezvous position. She arrived on the 12th July and was, after a meeting of The Company, ordered again to put to sea and make a further attempt to lay the cable.

At midnight on the 28th July, 1858 the Agamemnon and the Niagara once again met in mid-ocean and on the following day spliced the cable and commenced laying. On the 30th they laid 265 miles, on the 31st 540, on the 1st August 884 on the 2nd 1256 on the 4th 1854 and on the 5th 2022 miles. The Agamemnon had reached Dowlas Bay, Valentia and on the same day the Niagara reached Trinity Bay, Newfoundland. The first signal was exchanged when the shore and ocean ends were joined at about 2.45 a.m. on the 6th August.

It was however, several days before messages could be sent and initially only voltaic currents could be detected. One of the most important innovations that had taken place in the detection of telegraph signals at this time was the introduction of the newly invented mirror galvanometer which had been developed by Professor Thomson. It was called a 'marine galvanometer' and consisted of a small but very light steel magnet to which a tiny reflecting mirror was attached. The magnet was suspended from its centre by a silk filament and surrounded by a coil of fine gauge insulated copper wire. Signals through the coil caused a deflection of a spot of light upon a graduated scale. The invention caused James Clerk Maxwell to write in parody of Tennyson's "Princess":-

"The lamplight falls on blackened walls,
And streams through narrow perforations;
The long beam trails o'er pasteboard scales,
With slow decaying oscillations.
Flow, current, flow! Set the quick light spot flying!
Flow, current, answer, lightspot! flashing,
quivering, dying....."

On the 14th a message of 14 words was transmitted and on the 18th an official message from the Directors of the Company in England to those in America read:-

"EUROPE AND AMERICA ARE UNITED BY TELEGRAPHIC COMMUNICATION. 'GLORY TO GOD IN THE HIGHEST, ON EARTH PEACE, GOODWILL TOWARDS MEN'"

This message took 35 minutes to transmit and was followed by a message from the Queen to the President of America (67 minutes):-

"TO THE PRESIDENT OF THE UNITED STATES, WASHINGTON: THE QUEEN DESIRES TO CONGRATULATE THE PRESIDENT UPON THE SUCCESSFUL COMPLETION OF THIS GREAT INTERNATIONAL WORK, IN WHICH THE QUEEN HAS TAKEN THE DEEPEST INTEREST.

THE QUEEN IS CONVINCED THAT THE PRESIDENT WILL JOIN WITH HER IN FERVENTLY HOPING THAT THE ELECTRIC CABLE WHICH NOW CONNECTS GREAT BRITAIN WITH THE UNITED STATES WILL PROVE AN ADDITIONAL LINK BETWEEN THE NATIONS WHOSE FRIENDSHIP IS FOUNDED UPON THEIR COMMON INTEREST AND RECIPROCAL ESTEEM.

THE QUEEN HAS MUCH PLEASURE IN COMMUNICATING WITH THE PRESIDENT, AND RENEWING TO HIM HER WISHES FOR THE PROSPERITY OF THE UNITED STATES".

The President replied:-

"TO HER MAJESTY QUEEN VICTORIA, QUEEN OF GREAT BRITAIN: THE PRESIDENT CORDIALLY RECIPROCATES THE CONGRATULATIONS OF HER MAJESTY THE QUEEN ON THE SUCCESS OF THE GREAT INTERNATIONAL ENTERPRISE ACCOMPLISHED BY THE SCIENCE, SKILL AND INDOMITABLE ENERGY OF THE TWO COUNTRIES. IT IS A TRIUMPH MORE GLORIOUS, BECAUSE FAR MORE USEFUL TO MANKIND, THAN WAS EVER WON BY CONQUEROR ON THE FIELD OF BATTLE.

MAY THE ATLANTIC TELEGRAPH, UNDER THE BLESSING OF HEAVEN, PROVE TO BE A BOND OF PERPETUAL PEACE AND FRIENDSHIP BETWEEN THE KINDRED NATIONS, AND AN INSTRUMENT DESTINED BY DIVINE PROVIDENCE TO DIFFUSE RELIGION, CIVILIZATION, LIBERTY AND LAW THROUGHOUT THE WORLD. IN THIS VIEW WILL NOT ALL NATIONS OF CHRISTENDOM SPONTANEOUSLY UNITE IN THE DECLARATION THAT IT SHALL BE FOR EVER NEUTRAL, AND THAT ITS COMMUNICATIONS SHALL BE HELD SACRED IN PASSING TO THEIR PLACES OF DESTINATION, EVEN IN THE MIDST OF HOSTILITIES?" SIGNED JAMES BUCHANAN

On the 21st August the cable enabled the safe outcome of a collision between two ships, the Europa and the Arabia to be broadcast in as many hours as would normally have taken days. and a few days later the New York Journals recorded "how an entire continent had gone mad for very joy, how feasting was the order of the day, and how American intellect had achieved the greatest scientific triumph of the age".

But the joy was to be short lived for on the 7th September the following letter was published in The Times:-

"September 6th, 1858

"Sir, - I am instructed by the Directors to inform you that, owing to some cause not at present ascertained, but believed to arise from a fault existing in the Cable at a point hitherto undiscovered, there have been no intelligible signals from Newfoundland since one o'clock on Friday the 3rd inst. The Directors are now in Valentia, and, aided by various scientific and practical electricians, are investigating the cause of the stoppage, with a view to remedying the existing difficulty. Under these circumstances no time can be named at present for opening the wire to the public. Geo. Seward"

The practical electricians mentioned in the letter included Professor Thomson, Mr Varley and Sir Charles Bright but despite all that they could do the cable was dead.

The Committee appointed to report as to the causes of failure of the cable concluded that first, that it had been manufactured too hastily; secondly that a great and unequal strain was brought on it by the machinery; and thirdly, that the repeated coilings and uncoilings it underwent served to injure it. To these can be added that the cable had been through one of the worst Atlantic storms of the century, it had been stored dry on a dock through the winter and had been subjected to 3,000 volt pulses from an induction coil which the Company's electrician, Wildeman Whitehouse, inadvisedly used in attempts to activate ordinary receiving instruments when the normal signals began to fail. He was well named!

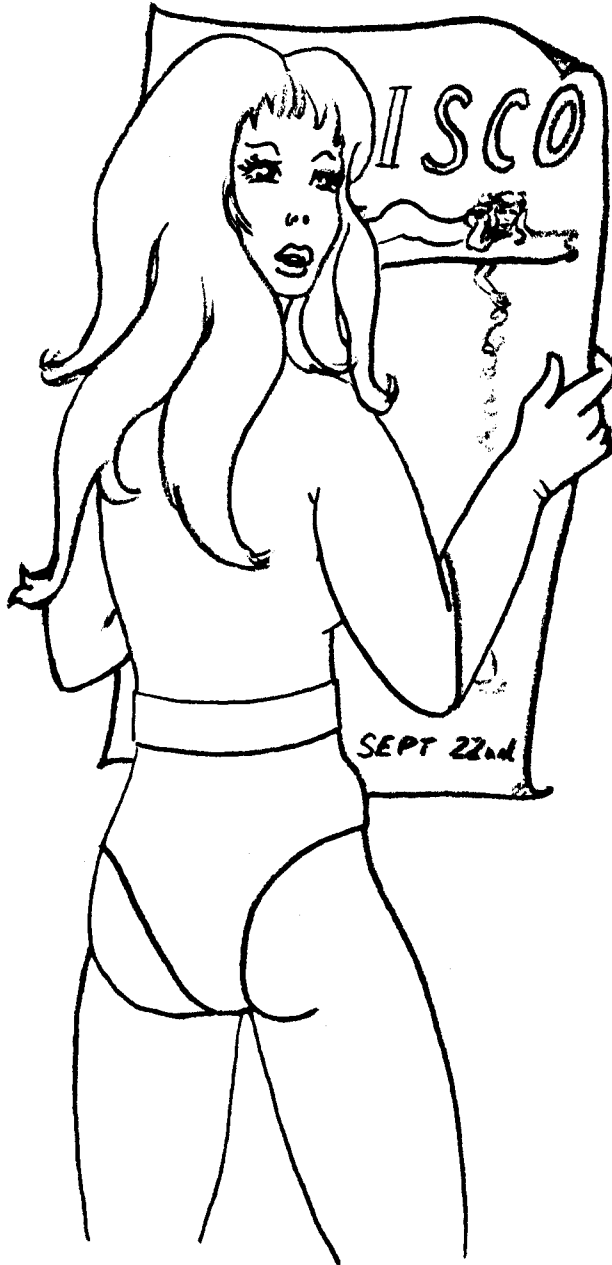
This for the time being put a stop to any attempt to lay another Atlantic cable. It was however, argued that far from being a failure the experience of 1858 clearly demonstrated not only that it was possible to lay a cable across the Atlantic but also that messages could indeed be transmitted through it. All that was needed was a little more attention to detail in the manufacture and a little more care in operation. It was not until 1865 that the next attempt was to be made.

(to be continued)

NOTICE BOARDS

In an effort to improve the state of the official notice boards (those at the gatehouse and in the 4th floor cafeteria) all notices, other than those which are legally required to be displayed at all times, will be removed after a given period of time, usually 2-3 weeks. The date for removal will be written on the bottom of each notice. The responsibility to read notices remains with you.

Biccarella



I DON'T CARE IF THE SATYR
WAS COPIED FROM A GREEK
VASE, HE'S NOT STAYING
LIKE THAT!

Save Our Scrap

In response to our suggestion on Page 21 of last month's BT, Mike Fox sent us the following notification of equipment which is available from him. We didn't actually undertake to act as a clearing house, but if that's what you want we will be pleased to do so.

BPL electrolytic capacitor bridge (50 Hz), ranges up to 220 μ F, loss tangent up to 34%, 50 mA leakage current, polarizing voltages up to 600.

A History of The Film Section

by Ted Morrison and Tom Ruben

Part 1 : The First 14 Years

In the Bush Telegraph of ten years ago, between September 1968 and May 1969, a series of articles related the history of the first 14 years of the Film Section. In this 25th season we thought the time was right to bring the story up to date. This first, introductory, article summarises the previous series.

The Film Section of the BICC Athletic and Social Club (Wood Lane), to give its full title, was founded in 1954 by Dr Don Tester and Mr Alan Rogers of the then Rubber and Plastics Department, with a constitution approved by the Federation of Film Societies. The first film show took place on Friday 23rd April 1954; the main film was Rene Clair's LE MILLION, supported by a Felix the Cat cartoon FELIX WINS AND LOSES and ULTRASONICS. In those days the McFadzean Laboratory had not been built, and the show took place in the canteen, which is now the General Fitting Workshop. Norman Davis was the projectionist.

The second show, when the main attraction was David Lean's BRIEF ENCOUNTER, was also held in the canteen, but the next show, Orson Welles's CITIZEN KANE, moved to the then Conference Room, which is now the Design Office. This remained the venue until the opening of McFadzean in 1961, when the Lecture Room on the 4th floor (now disappeared to form part of the Commercial and Patents Department enclave) became our regular home, with occasional forays to the 5th floor Main Hall when large crowds had to be accommodated.

From its inception the Film Section has striven to present a very diverse range of programmes, and in the first 14 years it encompassed complete programmes devoted to various periods of film history ranging from silent films up to the introduction of 16 mm Cinemascope prints. Films generally unavailable to the public such as THE WILD ONE and LI'L ABNER were also included with great success, and we even ran probably one of the longest film society shows on record at 5½ hours when, between the films, we included live on TV the final of the European Football Cup between Manchester United and Benfica - a classic case of live with thine enemy.

Generally, the early part of this period was devoted to films available from the British Film Institute, a gold mine of the classics, and we showed such films as INTOLERANCE, THE GRAPES OF WRATH and a great many more. An alternative and equally rewarding source was provided by the Federation of Film Societies, who every year arrange Viewing Sessions at the French Institute. Lasting a whole weekend, a complete range

of films from all over the world is presented to committee members for their judgment and possible consideration in programme planning. Our society has always attended these strenuous sessions in strength, and many of our programmes included viewing session items which proved a great success at Wood Lane.

The society has often co-operated with other bodies of the Social Club such as the Music Section, Railway Section and Horticultural Section to add a new dimension to their activities. For example, in 1958 the Social Club organised a combined social event involving the Horticultural, Hobbies and Handicrafts interests, the Photographic Section and a few cookery experts. Together they put on a large exhibition and competition one Saturday afternoon to be followed by an evening dance. The film society filled the gap between exhibitions and dance by screening WAR OF THE WORLDS and probably obtained the best captive audience that we are ever likely to get.

To many of our audiences it may seem that the presentation of a film show is simply confined to obtaining the film, threading it through the projector and switching on. Far from it! There is of course a vast amount of preparation needed before the day, including persuading an audience to come along. Throughout our life we have had our share of misfortunes ranging from failure of the projector during the programme - or even before the programme started - to the non-arrival of a film (THE OLD MAN AND THE SEA) after the programmes had been printed and sold. On other occasions, especially at Christmas, committee members could be seen at Loftus Road GPO sorting office frantically searching among the Christmas cards for that distinctive brown box that stood between us and disaster.

Still, the sense of adventure always prevailed. When screening the full-length silent classic INTOLERANCE, a complete programme of mood music had to be gleaned from anyone who had 78 rpm gramophone records in their possession, and matched to the film. This little exercise occupied two full evenings prior to the show and the use of two turntables and a mixer (provided by 'Doc' Watson) for 'the night'. Apart from physical and mental fatigue, the committee thoroughly enjoyed the challenge - and luckily so did the audience. A similar effort was made some years later to provide music to accompany THE CABINET OF DOCTOR CALIGARI, but on this occasion the music was transferred to tape before the show.

In addition to the normal shows during the season, an additional treat for the film committee was to provide film shows for the regular Children's Christmas Parties. We were normally sandwiched between tea and the appearance of Father Christmas.

As the first fourteen years progressed we became even more ambitious, showing programmes that included shorts each month depicting a particular director's work, or with some other common theme running through them. Such was the case with the National Film Board of Canada and in particular Norman McLaren, whose speciality is off-beat animated shorts such as RHYTHMETIC, NEIGHBOURS, BEGONE DULL CARE and PEN POINT PERCUSSION. In another season we devoted a complete programme

to shorts from different countries, including Russia, Canada, Poland, USA, France and Great Britain. Features were not forgotten either; in the 1966-7 season the entire range of programmes was selected to fit into a common theme and entitled 'A Season of Suspense'. These films comprised Hitchcock's NORTH BY NORTHWEST, Clouzot's THE WAGES OF FEAR, Frankenheimer's THE MANCHURIAN CANDIDATE and Cayatte's EYE FOR AN EYE. Another venture in this season was a complete programme devoted to documentaries, including the moving but true war-time nautical drama SAN DEMETRIO, LONDON.

The last season in those first fourteen years, 1967-8, witnessed our first attempt to screen 16 mm Cinemascope. For this, we hired an extra-large screen and an anamorphic lens to 'unsqueeze' the picture. The film that marked this occasion was VIVA MARIA starring both Brigitte Bardot and Jeanne Moreau, and over 80 people turned out for the occasion. It was a case of hoping that VIVA MARIA would echo as "vive le BICC Film Society", and that is what the coming instalments of this history will show in fact happened.

(to be continued)

FIRE!

In June 1977, all members of staff should have received a copy of the "Fire Regulations".

In October 1977 a full scale Fire Practice was held.

It is now eleven months since that Fire Practice.

The Fire Practice held in October 1977 was needed for two reasons. Firstly, as part of the schedule to hold practice drills as frequently as practicable, and secondly, to test the efficacy of the newly circulated "Fire Regulations". It was generally agreed at that time, that no set of rules could be guaranteed one hundred per cent effective without a full test. Having held the test, what did we learn and what are we going to do about it? The answer to the first question is that the Health and Safety Committee made a number of observations, which were published in the Christmas 1977 edition of the Bush Telegraph. The second question remains unanswered.

It would appear reasonable to hold a Fire Practice in the near future, if for no other reason than many new members of staff have joined BREL since October 1977. Holding such a practice would also enable the members of the Health and Safety Committee to observe any shortcomings in the execution of the practice in the light of their earlier recommendations.

Memory Lane

Our Memory Lane photograph from last month was seen by Geoffrey Layzell-Ward, formerly of Polymers Dept., now at Helsby. One of his colleagues is Peter Brinsley, son of Alf Brinsley (No. 36 in the photo). Alf went to Helsby after 22 years at Wood Lane and has now retired. He was able to come up with some more reminiscences of the '38 trip.

Of the previously unidentified characters number 3 was Sid Hagan (a welder), 28 Arthur - (a plumber) and 37 Taff Burnett (a machine-shop handyman who "made a very good cuppa tea").

Apparently the wickerwork containers, which were full of beer at 6 pence (old) per pint and cost more than their contents, mysteriously disappeared half-way to Margate. About a week later a bill arrived for a chrome-steel bar for opening the containers!! Alf says that he was one of those who got "lost", but far from coming home in Mr Urmston's car he, and a few others, hitched a lift with some nurses (complete with Matron who regarded the whole thing as highly irregular). There is no doubt about it, they don't make outings like that these days!

Competitions

- 1) Puntoons : This competition has now closed and we have to report a nil response. So either there will be no diploma or Ron Tarbox will send us one with a large raspberry on it! We have plenty of cartoonists around and we hear some horrible puns, so why no puntoons? Absence of lateral thinking perhaps?
- 2) Crossword : Dave Green has received a number of completed crosswords from last month's BT. There is still time to enter (closing date 6th October). If you want a further copy of the clues and grid please contact any member of the Editorial Board or take a Xerox copy from the magazine.
- 3) Photographic : Just a few days left until the end of September, which is the closing date for our "Aspects of G-BREL" competition. Photos to Denis Groombridge please.

Technical Society

The 1978-9 season will open with a meeting on Wednesday 4th October when Dr Plessner will give a talk on "Optical Fibre Cables". All members of staff are invited to attend. The venue is the Main Hall, and the starting time 1.30 p.m.

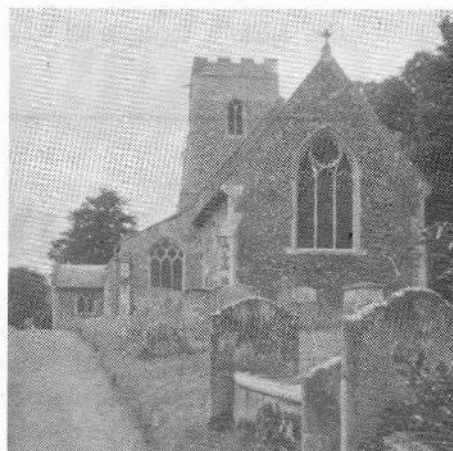
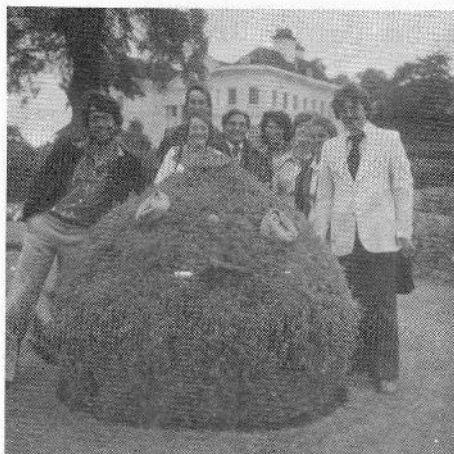
A Day Trip to Brent Eleigh Hall



On Sunday 23rd July, Sir David Barran a non-executive Director of BICC Ltd., opened the gardens of his Suffolk home - Brent Eleigh Hall, near Lavenham, in aid of the National Gardens Scheme, (The Queens Nursing Institute) and a party of ten from BREL took the opportunity of a days outing.

The Swan Hotel, Lavenham, was chosen as the meeting place, and prior to the visit arrangements were made for lunch. By 11.0 a.m. on Sunday morning all were present and accounted for and after renewing old acquaintances over a cup of coffee, the party moved off to explore Lavenham High Street.

Many years ago Lavenham was a prosperous wool marketing town. As business thrived wealthy clothiers moved into the area and built large dwellings. The village today is still very picturesque with many lop-sided Tudor style shops and houses with the familiar exposed beams. Some of



the properties have now fallen into disrepair but fortunately many are being restored in traditional style. The High Street was quite busy and to cater for the visitors many of the small shops were open selling bric-a-brac, antiques, local Suffolk pottery, and reasonably priced water colour and oil-paintings by local artists.

Having spent more than our allotted time browsing through the shops we had to move on. A trip to Lavenham would not be complete without a visit to its church, one of the finest examples of the Late Perpendicular churches in East Anglia. Early records show that there has been a place of worship on the site since about 1300 AD. The present church was built during the period 1485-1525 to celebrate the accession in 1485 of Henry VII, the first of the Tudors. The re-building work was assigned to John De Vere the thirteenth Earl of Oxford and understandably there are many examples of the De Vere coat of Arms both outside and inside the church. The history of Lavenham church would fill many books but the one thing that strikes the visitor is the church tower which dominates the whole countryside. The tower stands 140 ft. high and the more energetic members of the party climbed the 200 step spiral staircase to the top. The effort was rewarded with a magnificent view of the village and the surrounding countryside.

Lunchtime was fast approaching and with thirsts developing from the mornings activities we left the church and made our way back to the Swan Hotel. A few pints (and a few gins) later we were ushered into the dining room, a part of the old Lavenham Guild Hall adjoining the original hotel, which has been tastefully restored by the owners.

Lunch was served, an excellent three course meal at £6 a head including wine, coffee, and service charge. At 3.0 p.m. we left the hotel and feeling very refreshed drove the mile or so to the large wrought iron gates which formed the entrance to Brent Eleigh Hall. The weather by now had worsened and heavy rain began to fall but undaunted and suitably attired we ventured out of the cars to tour the grounds and gardens,

The house was large and impressive with a spacious gravel forecourt adjacent to a wooded area. At the rear of the house there were extensive lawns dotted with rose beds and a solitary massive beech tree said to be 200 years old. To the side of the house a large walled kitchen garden flourished with every conceivable kind of vegetable and numerous varieties of soft fruit. Several green houses adjoining an orchard housed grapes, peaches, peppers, aubergines, and several varieties of tomatoes.

At the rear of the house on the paved patio we met and spoke to Sir David and Lady Barran. Sir David was born in 1912. In 1944 he married Jane Macaskie and they had four sons and three daughters. He was educated at Winchester, Trinity College Cambridge, and was awarded a BA in 1934. Sir David was knighted in 1971 and became a Director of BICC in 1972.

In view of the weather conditions, Sir David agreed for one of his sons to take the party on a conducted tour of the house. The house was built in the early eighteenth century and apart from minor structural alterations to the entrance hall, remained to this day largely as it was built. The entrance hall was large and hung with many fine old paintings, to one side a splendid ornate wooden staircase led to the first floor landing. The study housed a collection of fine old leather backed books neatly arranged in shelves around the walls, with the ubiquitous paper backs lying about on chairs and occasional tables giving the place a living atmosphere. A large and appropriately furnished dining room overlooked the lawns and pastures beyond at the rear of the house. The bedrooms housed many fine pieces of period furniture and of course to complete the picture some fine examples of 'four posters'.

We were thankful for the chance of seeing inside the house which was by way of a bonus, and since the rain had stopped we decided to complete our days outing with a visit to nearby Brent Eleigh church (illustrated). The church dates from around 1300 and is famed for several elaborate frescoes at the rear of the altar, but unfortunately there was no one in attendance to give details of their history. Finally, we visited the unmarked grave of Peter Howard leader of the world wide Moral Re-Armament movement, who died on February 25th 1965.

It was now fast approaching evening and time to make tracks for home. On the way we stopped at the White Swan Hotel, Braintree for a nightcap and to chat over the events of the day. The time passed quickly and soon we went our separate ways, but all were agreed it had been a most enjoyable day, a tribute to good food, good drink, but most of all, good company.

G.E. Price

New Telephone Exchange

After a week of frantic activity it was finally decided that the projected transfer of the current GPO lines to the new system would not take place over the weekend of 16th/17th September. It is now intended to await the completion of the remaining work on the present internal system, where some exchange and auxiliary wiring is necessary plus replacement of old instruments, before effecting a changeover. This may well happen before the October BT appears. All staff will be receiving the necessary instructions for operating the new system, and a new telephone directory is being prepared.

Opinion is divided as to whether the new facilities will work smoothly from the word go. Whatever happens staff are asked to be patient, and remember that Sandra (good luck) will be doing her best to help us all master this new technological wonder.

Circulation of Library Journals

Obviously the reading of journals is something that fills in those odd moments when the more pressing work subsides, but one wonders if the circulation of some of the more popular journals need take years.

New Scientist, for example, appears to move so slowly that it could be "booked" for parking. Admittedly the circulation list is long but this cannot explain why the July '75 copy remained in one department and was seen by eight people in THREE YEARS.

As far as we are aware Bob Black is not giving a prize to be the person having the greatest pile of magazines on their desk so in the interest of others:

PLEASE CIRCULATE JOURNALS QUICKLY.



Section Reports

SNOOKER & BILLIARDS SECTION

SPOT WHITE '78

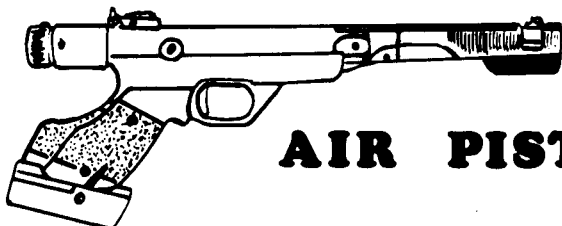
Now that the holiday season is more or less over, may I appeal to the billiards players to get the remaining group matches played off, so that the semi-finals can be started and the tournament completed, hopefully, before 1979?

TABLE LEVY

The condition of the snooker table is deteriorating visibly, and repairs must soon be made. Regrettably, the 4p per frame levy is not bringing in nearly as much cash as was hoped for, after a promising start, whilst the holiday season has not made any significant difference to the number of games being played. The only explanation is the forgetfulness - or bloody-mindedness? - of some players, who will only pay up if constantly reminded.

PAY UP - AND PLAY THE GAME!

GFH



AIR PISTOL SHOOTING



Member of

As a result of holidays, the light evenings etc., attendance at shooting has been down over the past month. Nevertheless, our own handicap competition is nearing its final stages and hopefully will lead to revived interest. The results of the N.A.R.P.A. postal competition have been received, Joe Lou, Bob Maidlow and Denis Groombridge having done particularly well. Congratulations are in order to Joe Lou who came top of his group in the competition and has been invited to compete in the NARPA championships to be held at RAF Cosford on September 17th.

The Film Column

THE FRONT PAGE: Wednesday 18th October

The opening show of the Film Section's 25th season, THE FRONT PAGE, is a hilarious comedy with a newspaper setting. Directed by Billy Wilder and starring Jack Lemmon as the ace reporter and Walter Matthau as his editor, this is the third and, arguably, the best film version of the play by Ben Hecht and Charles MacArthur.

After the film the audience are invited to our annual Soirée. Those of you who have attended one of these functions in the past will know that it is an occasion not to be missed. The wine flows, there is music and a lavish spread of cheeses, patés and other delicacies is laid out for your enjoyment. All this and the film show for the very modest price of 60p (40p for children), and if you have bought a season ticket it's an even better bargain. So come along and bring the kids for what promises to be a thoroughly entertaining evening.

For newcomers to R&EL, we would like to mention that this Film Show and Soirée is the first in a season of six film shows, full details of which are given in the brochure which will be published and distributed in the very near future. All Social Club members are welcome, as are their guests. Admission is by programme, which should be purchased in advance from your local representative - or you can save money by buying a Season Ticket. The film shows start at 6.30 p.m. in the Main Hall, and the dates and features are:-

Oct. 18th	THE FRONT PAGE
Nov. 15th	IMAGES, LOUISIANA STORY
Dec. 13th	HOLLYWOOD COWBOY
Jan. 17th	I'M JUMPING OVER PUDDLES AGAIN
	BEAT THE DEVIL
Feb. 14th	LAW AND DISORDER
Mar. 14th	ENGLAND MADE ME

National Film Theatre

A bumper month at the NFT in October, the major event being a complete retrospective of all the films of Michael Powell, from 1930s "quota quickies" through such masterpieces as A MATTER OF LIFE AND DEATH, THE RED SHOES and PEEPING TOM, to his 1972 children's film THE BOY WHO TURNED YELLOW. Then there's a season of German entertainment cinema from the 20s and early 30s; a season of Robert Aldrich films; RKO 'films noir' including CITIZEN KANE, Hitchcock's NOTORIOUS and Von Sternberg's MACAO; and a week of view Czechoslovak films.

Film Recommendation

THE FRONT PAGE, Wednesday 18th October here at Wood Lane (see above).

An Apology to anyone who, on receiving his August BT, set off to the New Severn Cinema in Wembley to see INTERNATIONAL VELVET and found STAR WARS being shown instead. The information given in last month's Film Column was correct, any confusion arising because the BT was published a little before the advertised date.

CRICKET SECTION

England won the test series and Kent are the county champions but, at the time of writing, the Wood Lane 6-a-side competition is undecided. After a certain amount of good-humoured lethargy the semi-finals were decided during August, Metallurgy defeating Control Engineering I and Polymers despatching Allsorts.

Both matches featured one substantial partnership which proved to be match winning for the sides batting first. For Metallurgy Rhys Llewellyn (19) and Peter Raw (14) made a large dent in the CEI bowling, and for Polymers Terry Alleyne (20 n.o.) and Geoff Devitt, on loan from Metal Manufacturers, (10 n.o.) brought their side back from the verge of disaster after Adrian Cole had taken two wickets for one run in the first over. Neither CEI nor Allsorts had enough batting to reach their targets and wickets fell at regular intervals. Allsorts briefly had a chance whilst Steve Drury was batting, but he succumbed to a brilliant, diving, one-handed catch by Terry Alleyne. Terry unfortunately landed on a "softer" piece of ground which left him cursing the canine population and extolling the virtues of biological detergents!

Results:

Metallurgy (44-2) beat Control Engineering I (24-4)
Polymers (35-2) beat Allsorts (17 all out)

GENEALOGY SECTION

We have received details of an enterprise called the "National Genealogical Directory" which is due to be published late this year or early next. It will attempt to provide an index of all families being researched and by whom. For £2 individuals may submit up to 20 names for publication and included in this sum will be a copy of the finished directory. All section members have received full details. Anyone else wishing to participate should contact Mike Hagger (208) immediately. Entries must reach the publishers by the end of September.

Gabrielle

Third Lake District Balloon Meet

Holker Hall

On the 18th August Gabrielle left for her first 'fun flying' balloon meet accompanied by ten crew members, namely Yvonne Ferrier, Sandra McCormick, Denis, Barbara, Paula and Clare Groombridge, Joe Lou, Roger Millward, Graham Taylor and Nick Thearle. Arriving in the afternoon we set up a compact camp of tents and a caravan in the grounds of Holker Hall; all except Nick that is who must have known something we didn't about the green tent the other side of the field that he pitched beside. Judging by his haggard look in the mornings he must have been right as well.

The weather was unsuitable for flying that evening so we decided to have a quick inspection of the catering facilities, which proved to be faster than we thought, as the caterers hadn't turned up. Still we managed to find the beer.

At the 6.00 a.m. briefing the following day, it was again decided that the weather was unsuitable but after watching one of the more adventurous! pilots taking off most other balloons decided to try it. Nick had a very pleasant flight with Ray Bailey our pilot for the weekend. They landed in a friendly farmer's field; he even helped to retrieve the balloon with his tractor.

The evening flight was a contest in which the balloon landing nearest to its previously chosen landing point wins. With great skill our pilot managed to steer the balloon to land 65 yards away from his declared goal having flown 9 miles. This great achievement was marred by the fact that Sandra cut her head on landing even though wearing a crash hat, she is our first casualty. Still nobody could accuse us of cheating as we had the blood to mark the spot! We did in fact win 1st prize.

That evening there was a dinner and dance at Grange over Sands, even the thought of an early start didn't deter the BICC boozers, last to leave as usual, after an enjoyable evening.

Sunday started off wet, but when the rain eventually stopped and the sun came out, we had an excellent mornings flying, with tethered flights for the children as well. The afternoon was open day at Holker Hall with displays by parachutists, motorised hang-gliders and of course hot-air balloons.

There was an inflation race for balloons in which we had instructions not to hurry just to go through the motions; we in fact came third! It's amazing what you can do without trying.

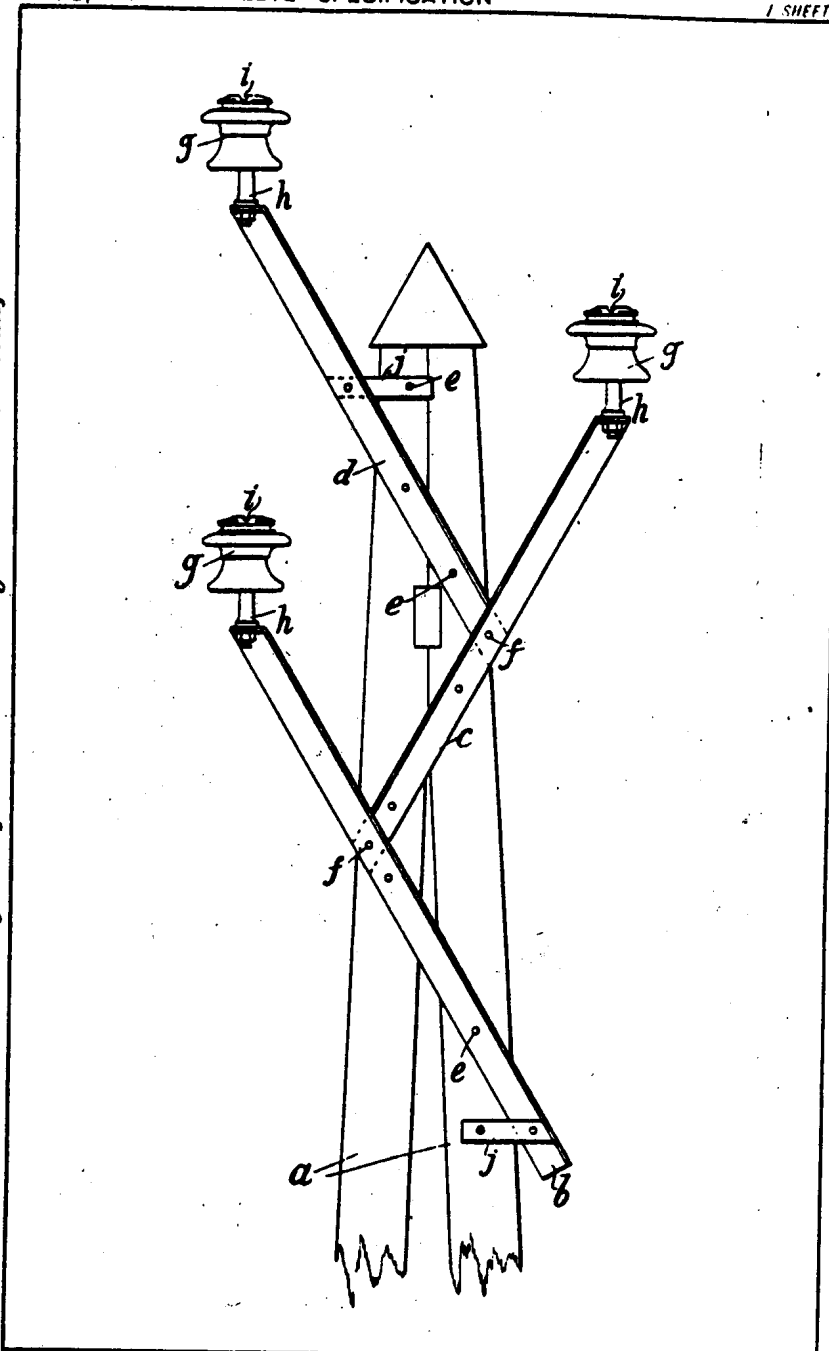
There was a mass fly-out of balloons in the evening to mark the end of the weekend. Everybody agreed it had been a most enjoyable weekend, even Sandra who was pleased to learn that we were not going to charge her for the dent in the basket. The weather had been fine most of the time and allowed enough flights to be made so that everyone got a ride in the basket.

The Ballad Box

278,847 COMPLETE SPECIFICATION

1 SHEET

[This Drawing is a reproduction of the Original on a reduced scale.]



Charles & Read Ltd. Photo Litho.

Mike Poole has thrown some tentative light on the subject of "Pernax Patent Bird Guards". Patent number GB 278,847. "Improvements relating to the Supporting of Overhead Conductors", granted to Siemens Brothers and William Ernest Poole in 1927 says,

"Overhead high voltage conductors are usually supported on or by insulators which themselves are attached to horizontal cross arms of a mast or pole which may be of the lattice type and troubles are experienced through birds perching on the cross arms and touching the conductors or vice versa.

The so-called bird guards are often provided which usually consist of insulating material placed on the cross arm adjacent to the insulator to guard against a bird cross-connecting a conductor wire and an arm.

The troubles referred to might be overcome by making the insulator or its supporting stalk or its suspension long enough to remove the conductor a sufficient distance from the cross arm to obviate the possibility of contact but this for various reasons is not desirable.

According to the present invention the insulator supporting a conductor is situated at the end of a supporting arm which is inclined at such an angle to the axis of the insulator that a bird perching on the arm cannot easily make contact with the conductor and vice versa. The cross arm is also preferably shaped so as to render it difficult for a bird to perch thereon".

The diagram shows the arrangement of the supporting arms.

Whether the Pernax guards advertised by Croydon Cable Works in 1930 are of the same type, or are the "so-called bird guards" mentioned in the Siemens' patent is not clear. Any additional information or stories about birds would be welcomed.

This month's extract from The Electrical Engineer's Ballad Book original appeared in "Glover's Almanac" in 1905. It is by "Simplex", is entitled "Cable Notes", and is short and to the point.

Road repair:
Navy, pick;
Cable there -
Dying kick!

Junction box,
Jointer's mate;
Sudden shocks -
Heaven's Gate!

Engineer,
Spanner, flash;
Urn and bier -
Calcined ash!

Wild Life at Wood Lane

No! Fred - this is not a guide to night clubs and topless go-go, but a brief account of some of the winged residents and visitors who have found our site and its immediate surroundings attractive enough to stay for a while.

Pride of place must go to the black redstarts. They are among Britain's rarest breeding birds, and at one time only some twenty pairs were known in the country, mostly on the South Coast, although they are fairly common on the Continent. They typically nest in holes in cliffs and rocky slopes, but during the last war a colony built up on the bombed area around Cripplegate, where the derelict buildings offered artificial nesting sites, and the weeds provided seed and attracted a supply of insects for feeding the young. With the postwar development of the area, the colony became dispersed, and it seems likely that the RBK rubbish disposal site next door reminded them of their bomb site home. They have been breeding here for at least twelve years to my knowledge, originally nesting in holes in the walls of the old incinerator building. They were however disturbed from there a few years ago as a result of the car breakers.

The redstarts arrive on migration from North Africa towards the end of April, and the first sign of their presence is usually the very distinctive call of the cock, who is resplendent in black plumage with white wing patches and, of course, red tail (start is an old English word for tail). The song is usually delivered from a suitable high point, a flagpole on the McFadzean building being a favourite song perch. When he has been successful in attracting a mate - she is a duller brownish-grey colour with no wing patches, but still has the distinctive red tail - the singing ceases while they go about the serious business of nest building and raising a brood. Indeed things go so quiet that one might think that they have left. However in June he is usually yelling his head off once more, as the fledglings leave the nest, and they are often to be seen in a family party feeding on the waste ground on the RBK site, or alongside the lorry park or railway. By late July they are usually off to Africa again for the winter, although one year, one cock did stay and was seen several times during mid-winter.

Our next most distinguished birds are the kestrels, who have been flying over the site for many years, and who began breeding three years ago in a ventilation duct in the old C.D.O. building opposite the Chemistry Laboratory. Kestrels have been the most successful of the birds of prey in adapting to man's alteration of the environment, and they are now often seen in cities and are frequently to be seen hovering almost stationary over motorways, as they scan the verges for small animals and beetles which form a major part of their diet. Small birds are often taken, and I have seen a kestrel dining on top of the McFadzean building, with a flurry of goldfinch feathers floating down.

Goldfinches also breed successfully in the RBK waste lands, and family parties can often be seen in August, feeding on thistle heads - the seeds are a particular favourite. The bright yellow wing flashes, and red, white and black bands on

the heads of the adults make these our most colourful residents.

Other birds frequently seen are the pied wagtail, who often struts around the car park; blue and great tits, who forage in family groups through the trees lining the site; swifts and occasionally house martins who circle the skies in summer in their continuous sweep for insects; crows who can sometimes be seen disputing the air space with kestrels; and of course the numerous house sparrows, starlings, blackbirds and the occasional thrush, dunnock, wood pigeon, and various gulls particularly in winter.

Less often seen are the wren, whose song, so unexpectedly loud and piercing for such a small bird, has often been heard from the triangle between the gate and the underground railway, and who has been known to have winter quarters under the eaves of Kelvin; the heron, whose occasional early morning raids greatly depleted the fish in the fountain; and the robin, sometimes seen in winter around the greenhouse.

Unexpected birds of passage on spring or autumn migration may drop in for a breather and in the past have included wheatear and linnet.

Other winged residents include the colony of wild bees, which live in the roof space of Kelvin, while, before the car breakers ruined it, the "nature reserve" of the RBK site contained a wide variety of insects, including grasshoppers in abundance, many butterflies including peacock, tortoiseshell, comma, wall, meadow brown, common blue and Essex skipper, and an interesting selection of moths and caterpillars.

I shall be pleased to hear of any unusual sightings of wild life in the area - we may even get ourselves classified as a Site of Special Scientific Interest!

Ron Hall (255)

Mike Fox, who has an uncanny eye for a juxtaposition, sent us this extract from the Institute of Physics programme of meetings for 1978/9.

1 November

WHAT CAN WE DO TO ENCOURAGE MORE
GIRLS TO STUDY PHYSICS?
Professor Daphne Jackson

Physics Building, PB 1A6
University of Sussex

6 December

THE DISCOVERY OF CHARMED QUARKS AND
THE SEARCH FOR NAKED BOTTOMS
Dr D Bailin

Physics Building, PB 1A6
University of Sussex

For Sale

CBM Commodore Scientific Calculator (Model SR 7919);
18 functions, new and unused, 1 year guarantee.

£8.50 - contact T. Cozens (tel. 311)

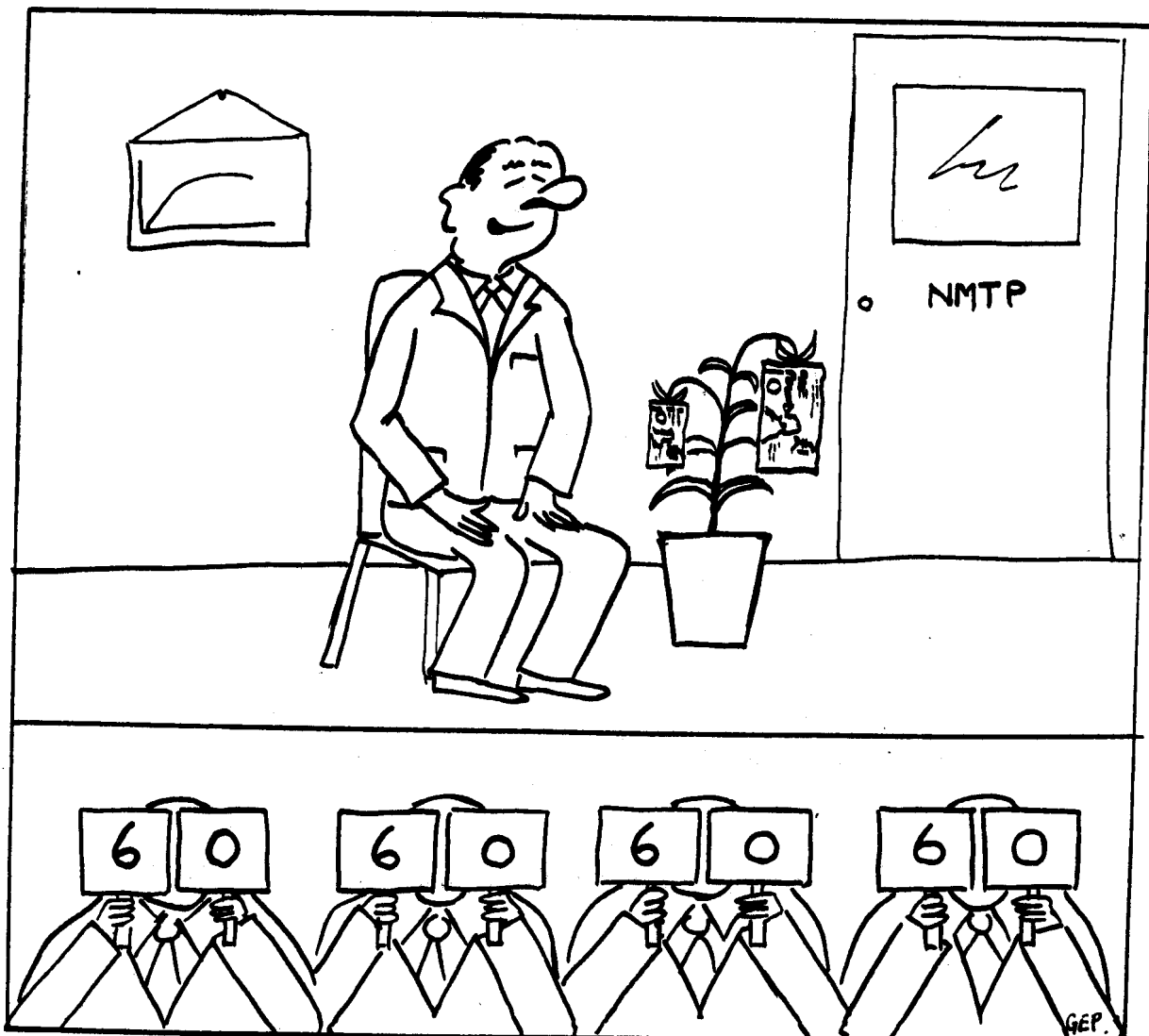
Honda SL 125 (Trials) in Excellent Condition
'N' Registration - Useful as a Commuter
£200 O.N.O.

Contact Pat Donovan (222)

Praktica L 35 mm Camera
B-1000th sec with Leather
Case 2.8 Tessar Lens.
Rubber Lens Hood, Electronic
Flash, Pistol Grip and
Hanimex Light Meter. £45.

Contact Maureen Jackson (243)

One baby 'Grand' (well nearly) Piano. To be
seen in all its glory any day in the main hall.
If you are interested please contact Pete Walton
on 323.



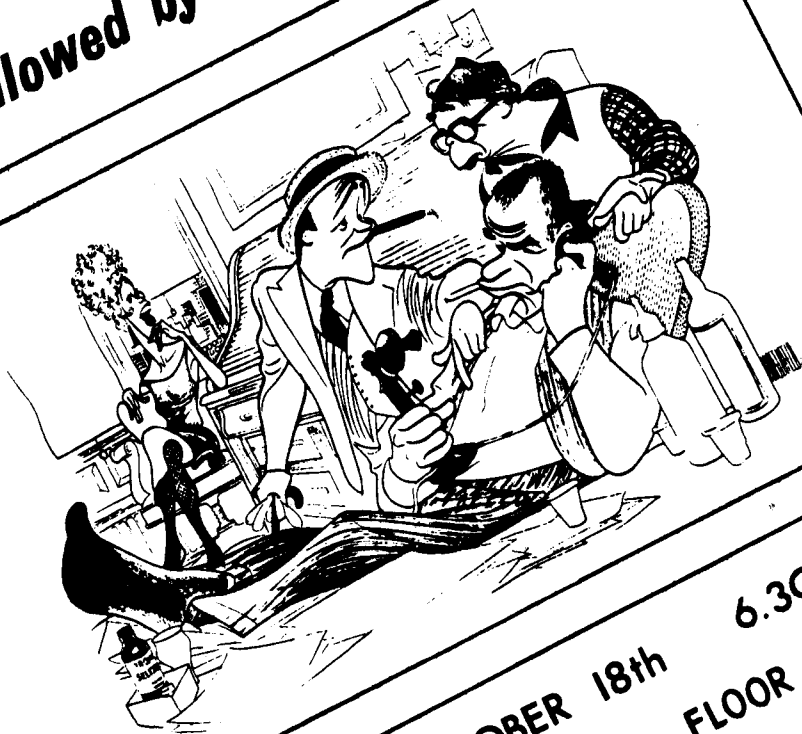
BICC FILM SOCIETY

SILVER JUBILEE SEASON

Jack Lemmon and Walter Matthau in

The Front Page

followed by a Soirée



WEDNESDAY OCTOBER 18th 6.30 pm
MAIN HALL 5th FLOOR

ADMISSION BY PROGRAMME 60p
(including Wine and Buffet)
CHILDREN 40p