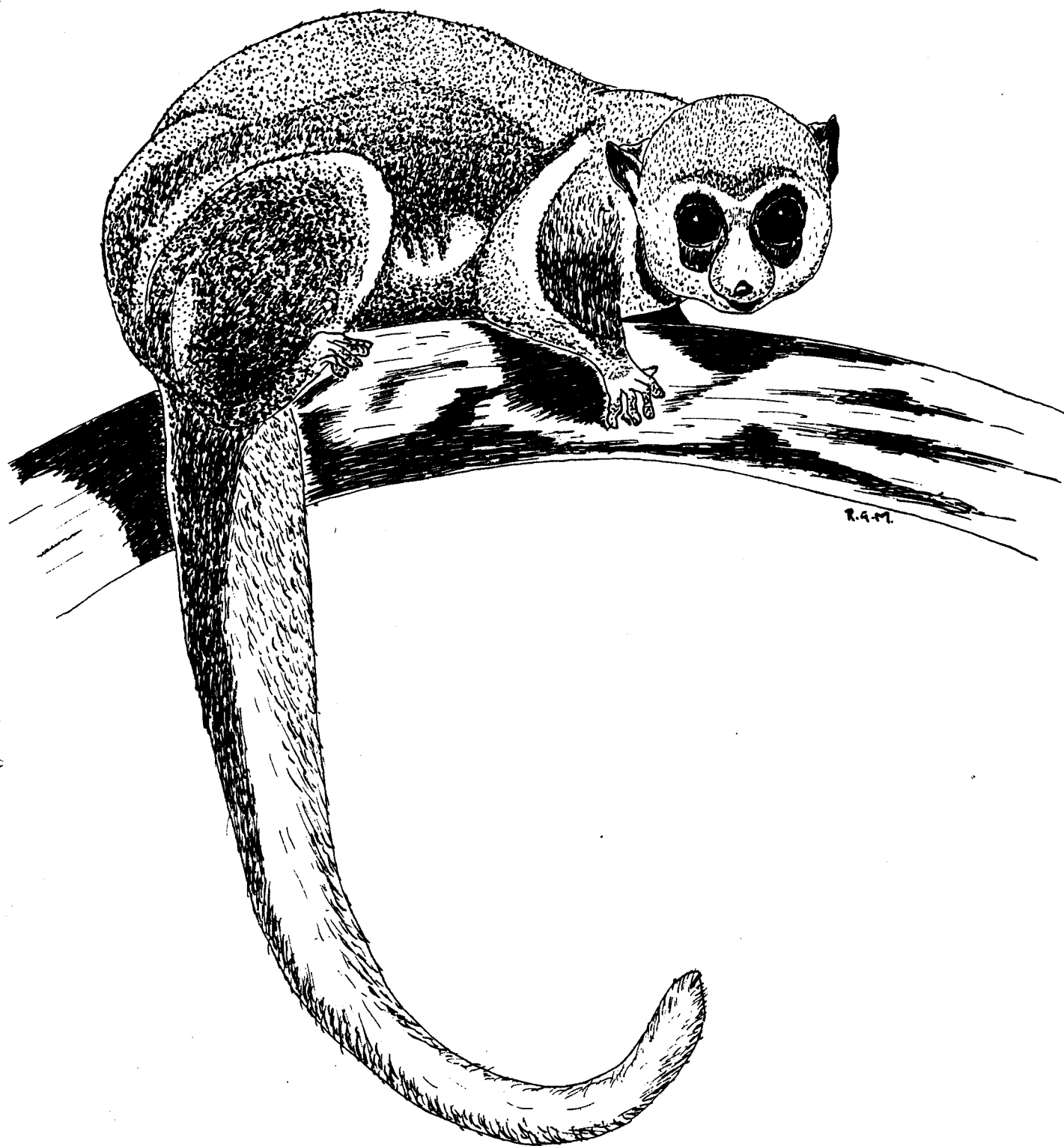


BUSH

feb 1979

TELEGRAPH



BUSH

vol. **21** no. **3**

TELEGRAPH

the magazine of

R&EL

wood lane



Cover

"BUSH BABY"

Editorial Board

David Green
Denis Groombridge
Mike Hagger
Richard Hammond
Geoff Holder
Ann Kirby
Ted Morrison



Editorial

In a few days time we shall be welcoming Dr. George Moore to Wood Lane when he takes up his position as Executive Director of R&EL. On page 2 of this month's issue we feature a letter from Mr. Banks giving the relevant details of Dr. Moore's career and achievements to date.

The appointment marks a significant departure from previous Wood Lane practice. From the days of Callender's Outside Testing Department, through the early years at Wood Lane, the post-war amalgamation to form BICC, the expansion phase in the fifties and sixties, down to the present day, the "top man" at Wood Lane has always been appointed from within the Company. The roll-call is small; Mr. Urmston, Dr. Brazier, Dr. Williams, Mr. Reynolds and Mr. Banks. Now, for the first time, we welcome an outsider to this level of responsibility.

It is pertinent to look for a reason behind this appointment. We see it as being consistent with the development of BICC as a whole. The prospects for a significant improvement in the UK cable industry over the next decade are currently rated as small, and the Company is therefore setting its sights on growth in other sectors. Wood Lane has already contributed to this shift through the entry of the Product Engineering Department into the field of specialised plant manufacture and via the general swing to long-range research. The creation of the New Markets Technology Panel is another example. We anticipate that the emphasis will continue to change and that Dr. Moore will use his wide experience to point R&EL and BICC not only into the 1980s but into the 1990s and beyond.

It will be a large task and one to which we will all have a contribution to make. For our part, as your magazine, we hope to continue with Dr. Moore the good working relationship we have had with Mr. Banks which has allowed us to report on many important events. In the meantime we wish Mr. Banks well at Bloomsbury Street, and extend a warm welcome to Dr. Moore.

Letters to the Editor



**Dr. George
Moore**

Dear Editor,

May I take advantage of your pages to introduce to all members of the Wood Lane staff the new Executive Director of R&EL, who will take up his post on 1st March 1979. He is Dr. George Moore, a Liverpoolian. After Grammar School education at the Liverpool Institute High School, he joined, as a student apprentice, the old AT&E Company in Liverpool. This is now part of the Plessey Company. He was sponsored by Plessey for degree course work at Brighton Polytechnic, which led to a 1st Class Honours Degree in Applied Physics, after which he returned to Liverpool. He worked for Plessey as a research physicist on solid state electronic devices.

George Moore returned to academic life and did a Post Graduate PhD Degree in Physics at Manchester University on fluorescence of organic molecules. With a PhD in his knapsack, he crossed the Atlantic and spent a year at the University of California at Berkeley working on an extramural contract for the US Atomic Energy Commission on the spectroscopy of inorganic materials at very low temperatures. In mid-1967 he sought a spell of industrial experience in a US atmosphere and received offers from IBM and Bell Telephone Laboratories. He joined the latter organisation and over the next 18 months worked on the properties of crystals which might be applied to telephone systems.

In the autumn of 1968 Dr. Moore and his wife decided to return to the United Kingdom. At the time Pilkington Brothers Ltd. wished to extend their R&D efforts and he joined the Central Research Department in Lancashire as Head of the Physics Section. Over the next five years his time was spent equally between new ideas for new products where he had to market some fairly novel ideas, and on technical support to the various factories in Pilkington's divisions. He helped to introduce Management by Objectives concepts into R&D work and learnt a lot about trouble-shooting on major works inside the Group.

After five years George Moore felt the need to widen his experience and suggested that he go into marketing. The idea was accepted and he became Market Development Manager for the Fibre-glass Division working on new uses for a whole variety of fresh products coming out of the Division's activities. As a consequence of his marketing efforts, he had to go back to the plants and improve their productivity. He also developed a glass fibre tissue for roofing felts which, although technically worse than the competition, held its place in the market by better service which Pilkington's could offer.

In mid-1974, Dr. Moore joined Vickers Instruments at York, which is an autonomous division of the Vickers Group, initially being recruited both to develop and market new products of the Division. After six months he was asked to concentrate more of his own efforts on production problems and, in the end, took over personnel, production control and production engineering work for the Engineering Director.

Most recently, Dr. Moore has been Assistant Managing Director of Vickers Instruments and directly responsible for R&D, engineering, production, personnel and also some marketing.

Dr. Moore has been enjoying the broad responsibilities of his recent work, but he would like now to come back to a purer research and development situation. As you can see from his experience, he has a great deal to offer both Wood Lane and BICC Limited. He will help to introduce us to new areas of interests with a broad business approach. I know that you will all do your utmost to support him in his endeavours. May I just make this simple introduction, knowing that you will give him an excellent welcome.

Yours sincerely,

J. Banks

Personnel News

Starters

Welcome to:-

D.E. Garrard who joins us as Storekeeper Designate in the Works Engineering Dept.

J.R.W. Ballard who joins us as an Assistant Technical Officer in the Physics Dept.

R.J. Weller who joins us as a Photographer in the Administration Dept.

Dr. M.H. Engineer who joins us as a Senior Mathematician in the Mathematics Dept.

Q.G. Home who joins us as a General Operative in the Works Engineering Dept.

Retirements

Best wishes for a long and happy retirement to T. (Joe) Couch of the Works Engineering Dept. who retires at the end of the month after almost 30 years of service.

Mrs. Elsie King who retires from full-time employment in Wood Lane Library after 8 years service, but remains at Wood Lane on a part-time basis in the Mathematics Dept.

Transfers

Andy Platt of the Corrosion Dept. has transferred to the Chemistry Dept.

Thank you

Dear friends and colleagues,

I was deeply moved by your generosity in contributing to my retirement gift.

As I was not able to thank you all personally, I would like in this way to show my appreciation.

The silver plated tea-set will always remind me of you and the happy days when I could work with you and enjoy your friendship.

Yours very sincerely,

Danuta Turasiewicz

Diary of Events

Date	Event	For Information
Wed.21st Feb.	Badminton vs St Albans Mixed (Home)	Vic Banks
Tues.6th March	Film Section AGM. 1 pm Small Conference Room	Annette Mattock
Tues.6th March	Last Day for contributions to B.T.	Editorial Board
Wed.7th March	Badminton vs St Pauls Mens (Away)	Vic Banks
Wed.14th March	Sea Angling Trip	Andy Platt
Wed.14th March	Film Show: 6.30 pm Main Hall	Annette Mattock
	"England Made Me", "Futtock's End"	
Fri.16th March	Disco, 8 pm	Yvonne Ferrier
Tues.20th March	Publication Day B.T.	Editorial Board
Thurs.22nd March	Executive Council Meeting	Pete Walton
Wed.4th April	Badminton vs St Pauls Mixed (Away)	Vic Banks
Regular Events		
Tuesdays	Badminton	Vic Banks
Thursdays	Badminton	Vic Banks
	Air Pistol Shooting	Denis Groombridge
	Slimming - 1 pm	Yvonne Ferrier or Lindsey Buchan
Weekends	Hot-Air Ballooning	Roger Millward or Denis Groombridge

Health and Safety

First a Correction:

An error crept into my report in last month's B.T. (page 5), due to a misunderstanding on my part.

In fact, only Hose Reel crews have undergone training. Training of Fire Wardens is under consideration.

Don't!

Until the layout of the new entrance is completed, you may be tempted to take a short cut round the wrong side of the triangular island. There have been one or two near-misses, so

Don't!

Temporary 'KEEP LEFT' signs have been erected.

G.F. Holder
(Secretary, H & S Committee)

Executive Council

The Executive Council met on 18th January and the main points arising were as follows:

- (a) The new Badminton court should be laid by the middle of February. The work is planned for a weekend in order to cause minimum disruption.
 - (b) Some ambiguities have been discovered in the Club Rules, and Dr. Fox has agreed to iron out any such deficiencies.
 - (c) Moves were initiated to increase the insurance cover given to members in respect of Club activities.
 - (d) Margaret Kingston and Norman Davis were elected life members of the Club.
 - (e) An offer of £200 for the piano has been received, and accepted, from a member.
 - (f) The secretary appealed for all outstanding forms for subscription alteration to be returned as soon as possible.
 - (g) The next meeting was fixed for March 22nd.
-

Disco

FRIDAY 16TH MARCH - MAIN HALL - 8 pm

BAR OPEN

Have you volunteered to help Yvonne with the organisation? She's waiting for your call on 281.

Puzzle - Math

Mr. A. Teaser is still convinced that 2 is greater than 3, and even equal to 4 (see January E.T.).

"Will nobody rid him of this turbulent delusion?"

The History of Electric Wires and Cables

By R.M. Black

PART 13. CALLENDER'S VULCANIZED BITUMEN

On 19th April, 1882, the same year that the Holborn Viaduct installation was carried out, Callender's Bitumen Telegraph and Waterproof Company Limited was formed to manufacture and install electric cables insulated with a new compound, at first known as 'Bitite', and now better, though more inaccurately known as 'vulcanized bitumen'. This compound had been developed by William Marshall Callender, one of the sons of William Ormiston Callender the founder of the company and an importer for some years of Trinidad bitumen for road surfacing. In those days with the introduction of electric lighting and the tremendous interest that was engendered by it, he felt sure that the bitumen could be modified in such a way as to make it into a suitable insulation for application to conductors.

When Callender's had started to import bitumen, they acquired a site comprising $4\frac{1}{2}$ acres of land together with a landing stage on the River Thames which had previously been used by the Diamond Fuel Company, a company making patent fuel. The landing stage was ideal for unloading the shipments of bitumen from the Trinidad lake and the existing buildings were turned into a refinery. It was here, in a hut on the marshes that William Callender, the chemist of the family, carried out his experiments. He soon found that bitumen itself was a fairly intractable substance, but that if Elastikon, a pitch residue from the manufacture of cotton seed oil, obtained from Holland, was heated with sulphur and 20 percent of bitumen milled in as an extender, a satisfactory product resulted. This could be extruded over tinned copper wires and on cooling, formed a dimensionally stable insulation.

A patent was taken out in 1881 (Letters Patent No. 4409 of 1881) in the following words:-

"My said invention consists in the use of bitumen combined with other hydrocarbons or their equivalents in proportions varying from about twenty to sixty percent of the hydrocarbon relatively to the bitumen employed. The combination is effected at various degrees of temperature, according to the nature of the materials employed. A compound material is thereby produced which is available for covering and insulating wire or other conductors used for telegraphic, electric, or other similar purposes. The compound material so produced can either be vulcanized in the usual way, or used without being vulcanized".

It was usual for early cables insulated with vulcanized bitumen to be provided with a jute braid serving, but various forms of armouring were later adopted to guard against abrasion and mechanical damage when the cables were used in collieries or under other onerous conditions. Since vulcanized bitumen cables could be manufactured in

substantial lengths, and the new dielectric was appreciably cheaper than vulcanized india-rubber, and more stable than Gutta percha, it rapidly became popular for low voltage distribution.

The first installation of note was at Hatfield House for the Marquis of Salisbury where he had installed an electric lighting plant. Several thousand yards of VB cable had been supplied for this contract by the end of 1882. In the following year, VB cables were used for the electric lighting of the Law Courts, the First Avenue Hotel in Holborn; and for Covent Garden Opera House. The Opera House had just been fitted out with Jablochkoff candles the electric power for which was to be supplied by cables laid across Waterloo Bridge from the Brush Company's generating station in Belvedere Road, Lambeth. The route lay from Lambeth, across the bridge, up to the Strand and then up Wellington Street to the Opera House.

This particular contract became known afterwards as the 'Battle of Waterloo'. In order to avoid the delay which would be occasioned by a direct approach to the appropriate local authorities on both sides of the river, it was decided to carry out the operations of excavation and cable laying over the August Bank Holiday Week-end when the Courts would not be available for the taking out of any injunctions to interfere with the work. Accordingly, all tools and materials were taken to the site in advance and soon after noon on the Saturday operations commenced. Work went on from dawn to dusk over the week-end, and George Barnard the site engineer, recollected how an office and tent was erected on the outside parapet of Waterloo Bridge for resting during the hours of darkness "so as to be on the job by sunrise". This particular contract suffered more than was usual at that time, from the depredations of the local populace, jackets and tools disappearing unless watched carefully. Despite this, the contract was completed on time and there is no record of any subsequent legal problems.

The late Jim Temple-Hazell, in the book 'The Development of Power Cables', mentions another interesting installation carried out around that time. This was the underwater supply line to the S.S. Castalia in the Long Reach at Dartford. The Castalia was a ship of experimental construction which had been built for the Dover-Calais Service in the early 1880s, but had proved unsuitable and had been taken out of service, moored off-shore at Dartford and used as a fever hospital. To enable electric lighting to be installed aboard ship, submarine cables were required, specially waterproofed and very heavily armoured. Four such cables, insulated with vulcanized bitumen, were manufactured and supplied by Callenders, who also undertook the laying operation. The supply mains were duly laid as far as the river bank; but here, the laying gang, terrified at the prospect of boarding a floating small pox hospital, shewed understandable preference for the amenities of the Long Reach Tavern. George Barnard, the young engineer in charge, finding all argument useless, rowed out with the tow-ropes to the Castalia. Here he cajoled the hospital staff into helping haul the cables on board, after which he, single handed, completed all the necessary jointing and terminating arrangements.

The success of vulcanized bitumen was such that a number of installations were carried out on the continent. There were large scale installations at Antwerp and at Le Mans, and later in many parts of the old British Empire. The photograph albums in the archives give the impression that there was no city or town of any importance throughout the world, the main streets of which were not devastated by the excavations of intrepid cable layers. The trenches and mounds of earth and lines of cable drums are the same but the national dress of the locals varies widely, particularly their head-gear.

The Antwerp installation took place during the winter of 1884/5 and involved the laying of a low tension net-work in the City near the Gare Centrale, the power station being in the Rue Loos. The type of mains installed was for the Gulcher 55-volts dc system and consisted of 19 single-core cables laid on the Solid bitumen system in cast iron troughs. Barnard recalls that the winter of that year was very severe and

"we could not open the trenches, so for a few days, to keep ourselves occupied whilst the frost lasted, we were allowed to go and skate on the moat outside the City Walls. When the weather broke, towards Christmas, the work had to go on night and day, and I well remember working all through Christmas Eve and hearing the great bell of the Cathedral toll for midnight Mass".

With the spread of vulcanized bitumen cables to the New World, Thomas Callender and his brother William established a small factory in America for the production of VB cables. But the venture was not a success and manufacture was abandoned in 1885. Competitors claimed that VB cables suffered from the disadvantage that if overheated the insulation would soften and deform, but in practice more trouble was in fact experienced from eccentricity introduced during the extrusion process than in actual service. The press used for applying the compound to the conductor was not at first provided with a male die and this did give rise to some decentralization. A fault did occur in service which was attributable to softening of the insulation, this was in a cable installed for the Gatti Brothers to provide the Adelphi Theatre with a supply from the private electricity plant at the Adelaide Gallery. Six years after installation of the cable a fault occurred, this on examination was found to be due to the cable having been laid immediately over an underground baker's oven!

In the event, VB cables achieved an excellent reputation and even after forty years' service such cables were described as "as good as when laid, and apparently likely to last for ever". This was largely due to the method of laying these cables introduced by Thomas Callender: the Callender Solid System.

The Solid System consisted simply in laying the cables in open troughs and subsequently filling the troughs with bitumen. This technique originated in the Waterloo Bridge installation in which it was necessary to provide substantial protection for the eleven cables laid with no great depth of earth available. The solution was to use simple troughing, the cables being supported at intervals by wooden separators and the whole covered with bitumen.

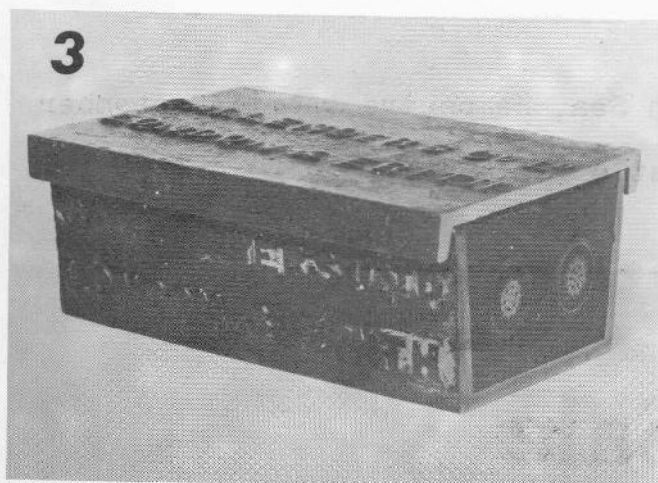
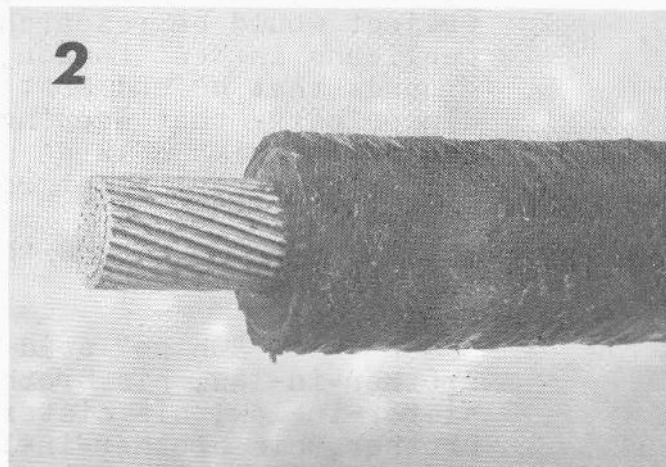
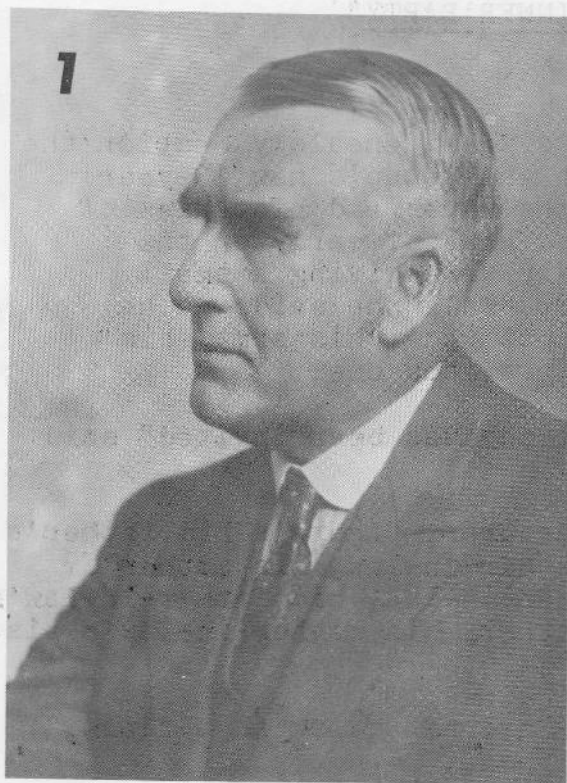
This form of laying proved so simple in practice and was so successful that it became a permanent feature of the Callender practice. Not only this, but also the system of 'solid' laying precluded the necessity of elaborate joints involving joint boxes. Since the conductors were encased in bitumen throughout their entire length, it was only necessary to butt-joint and solder them, tape up the junction with VB strip and cover it in the normal course with molten bitumen. The jointing process as developed by George Barnard, involved the use of a primitive 'weak-back' ferrule, made by hand from sheet copper being bent round a mandrel leaving a 1/8 in slot at the top. As Temple-Hazell comments: in those early days development was entirely empirical; and much depended upon the character of the engineer-in-charge, whose essential equipment had to include infinite resourcefulness and a large fish kettle for the soldering operation. In the Le Mans contract it was found impossible to obtain a plumber's metal pot so George Barnard bought a cast iron stew-pan and all the joints in the contract were made using this pan heated by a fire of charbon-de-bois.

The initial design of the Callender Solid System comprised lengths of rectangular section cast-iron troughing in which the cables were laid on closely spaced creosoted hardwood bridges, molten bitumen being poured in around the cables to fill the trough. After the bitumen had set, a flanged iron cover was placed in position to complete the installation. Over the years a number of variants was introduced; wooden troughs with tile covers or even with covers made from concrete roughly shaped to give an apical finish similar to that of the modern safety tile cover.

ILLUSTRATIONS

1. George Barnard in 1932 when he was Birmingham and Midland District Engineer and Manager for Callender's Cable and Construction Company. He joined W.O. Callender and Sons on 28th February, 1882.
2. Early Vulcanized Bitumen Insulated Cable: stranded tinned copper conductor, insulated with vulcanized bitumen, taped and braided.
3. Callender Solid System: VB Cables in bitumen filled iron trough with an iron cover.
4. Laying VB Cables across Waterloo Bridge, August 1883; cables laid in cast-iron ducts or troughs are being covered with molten bitumen.

Competition



Competition

"THE GENEALOGIST'S DINNER PARTY"

At a recent meeting of the Genealogy Section the Secretary, having announced that the group's new 10-year project would be research into the lives and histories of publicans in West London, excused himself early on the grounds that he and Mrs. Secretary were giving a small dinner party that evening. "Very small" he said, as he rushed out with a large plastic pot under his arm - his family tree having outgrown the previous one.

"Sounds as though nobody has been invited" said the Chairman.

"Oh no" said the Treasurer, "there's his father's brother-in-law, his brother's father-in-law, his mother's sister-in-law, his sister's mother-in-law, his father-in-law's brother, his brother-in-law's father, his mother-in-law's sister and his sister-in-law's mother."

"I see" grinned the Chairman quick as a flash, "there won't be much washing up then".

How many people sat down at Mr. Secretary's table that night? and why are you so sure?

Answers to Mike Hagger by Tuesday 6th March.
A prize for the best correct solution to this improbable story.

For Hire

6 berth Caravan, Milford on Sea, Hampshire, April-September

Details S.M. Castle (283).

For Sale

1972 Radiation Highspeed G Gas Fire in Teak Surround

In mint condition, hardly used, £40.

Contact Derry Moore
Alperton

Section Reports

BRIDGE SECTION

The section's team has had a lean time during January, with three of the six fixtures being cancelled, due to a combination of rail strikes, and sickness. Two of the remaining games resulted in heavy defeats, but some pride was restored in the last match by a good-win against B.P.

Results of January Matches, all played in London Business House League.

	I.M.P.S.	VICTORY POINTS
IBM 'B'	13 - 76	0 - 10
SBS	14 - 111	0 - 10
BP 'B'	62 - 21	8 - 2

League Table for 2nd Division Hammersmith & District League
as at 31st January 79

	<u>P</u>	<u>W</u>	<u>D</u>	<u>L</u>	<u>F</u>	<u>A</u>	<u>V.Pts</u>
B.I.C.C.	7	3	-	4	420	307	41
Heathfield	7	3	2	2	437	355	41
NTG Fulham 'B'	7	4	1	2	411	362	40
Barons Keep	6	4	-	2	381	320	35
NTG Fulham 'C'	8	4	1	3	392	451	35
Fulham Rangers	7	2	1	4	346	398	30
Wimpey 'B'	6	1	1	4	271	465	18

The following interesting hand was taken from a board played in a recent match, and is presented as a bidding problem, followed by his successful line of play, by DR. GOBBETTI.

SPADES : Q 3
HEARTS : A K 10 5 2
DIAMONDS : Q J 9 3
CLUBS : Q 3

You are East, vulnerable, in a duplicate bridge team of four event, against non vulnerable opponents. North, dealer, opens one Club. You hold the above hand and bid two Hearts to indicate to your partner that you have more than a normal overbid. South passes and your partner bids three Clubs. North passes. What do you bid next? (see page 18)

THE AMERICIAN HANDICAP BADMINGTON

TOURNAMENT

It was the night, of the big match the highlight beening Keegan's run down the wing crossing the ball to Bob Latchford who headed it straight passed Sorry wrong match, let's start again.

Cris Butlin didn't think luck was on his side when he fownd he had forgotten his plimsolles. He ended up trying on 3 or 4 pairs during the evening which could partly explain why he and his partner Denice Copper came last. For the pair coming 3rd part of their downfall came when it was found that Sandra didn't have her diamond rings on and hence upset the balance of her backhand looping top spin smash, which is quite amazing if you have ever seen a half a ton of metal flying through the air on a hand.

Second place went to the underdogs of the night Dave Goff and Pete Walters. Tatics against these two mainly consisted of trying to hit Pete on the head with the shuttle, sometimes it worked and sometimes it didn't but with a hefty handicap (+8) they managed to collect enough points to come second. The winner of the American Handicap Badmington Tournament and receiving a first prize of a night out with Kevin Keegan's mother and Arnold Schwarzenegger are John Childs and Mayur Patel playing superb badmington with skill and determination Watson scored the 3rd goal with a beautiful header sorry. Winning all their games without too much trouble and making everyone else very tired these two will go down in history, ranking with all the other great badmington players who have won this tournament. I was bribed to put that last piece down.

Thanks especially to Vick Banks who came up and infected everyone with his cold.

By the star of stage screen and Link.

R. Mottalle

FINAL POSITIONS

1st Mayur Patel	and	John Childs	90
2nd Dave Goff	and	Pete Walters	81
3rd Richard McHale	and	Sandra McCormick	70
4th Dennis Cooper	and	Chris Butlin	48

HOT AIR BALLOONING

Our visit to the ICICLE meet in January (reported in last month's B.T.) gained GABRIELLE some more television "air" time - several seconds in a medium distance shot with other balloons with the logo clearly visible and several more in a close up shot - this time on "THE MULTI-COLOURED SWAP SHOP" on Saturday 27th January on BBC-1.

Previously GABRIELLE was on screen for a similar length of time on Midlands BBC at the National Hot-Air Balloon Championships. Our pilot then was Chris Kirby who took 3rd place and so qualified for the World Championships in Sweden. These took place early in January, and Chris achieved 11th place out of about 40 balloons. Well done Chris!

There will be a half-hour programme on the World Championships on the 6th April, also you may have seen Chris being interviewed at the "Worlds" on ITV "World of Sport" on Saturday 13th January.

Our next flight after the ICICLE meet was on Saturday 4th February. The Met. report the previous night was promising - wind speed increasing gradually in the morning to only 10 knots at mid-day. The following day's Met. was a little different with 15 knots forecast at 10.30 a.m. However, always hopeful, Roger Millward, David Goff (with Caroline and Jonathan) and myself set off early to meet our pilot Ray Bailey.

We arrived together at our launch site in time to see two hot-air balloons taking off - a good sign! With our new inflation fan we were quickly ready to go. This time, because of the wind speed, Ray and I were to fly without extra passengers.

I was allowed to perform the take off, and burned carefully to clear the trees surrounding the launch site by a safe margin. This turned out to be about two feet because of the wind strength. In flight, of course, there were no problems with the wind speed (these belonged to Dave and Roger retrieving who did very well to keep in touch during the whole flight and be on hand at the landing) - except when it came to landing!

It's amazing how fields fill with cattle when you're looking for a landing site! Anyway, eventually Ray found a likely pair of fields (this was no day for a landing by a beginner), bounced in both of them to reduce speed, and finally made a safe landing in the second.

This ended a flight of 18 miles in 1 hour and 5 minutes, which was in fact our first flight in the Hemel Hempstead area. If you live conveniently close, please note that we will be flying quite often in this area (Ray's home ground) and that participants/spectators are always very welcome. Contact Roger Millward, Denis Groombridge or myself for weekend-flight details.

While Gabrielle has been relatively inactive this year, the balloon van has found employment during the working week as combined workhouse and caravan for the Communications Department, who have found it a useful aid to jointing glass fibre cable on remote sites. This, of course, has not affected weekend flying which will continue to take place whenever the weather permits.

Why not come along next time? - Otherwise you'll never know what you're missing!

Joe Lou

The Film Column

Viewing Session: An Invitation

Viewing sessions are normally opportunities for film distributors to show their wares to film societies, and are normally open only to committee members. The London Regional Group of the Federation of Film Societies has now, however, extended an invitation to all film society members to come to their sessions. The next one is on Sunday 18th March from 2.30 to 8.30 in Bloomsbury. Further detail from Tom Ruben (212).

Annual General Meeting

The AGM of the Film Section will be held at 1 p.m. on Tuesday 6th March in the small Conference Room (2nd Floor, McFadzean). Nominations for the Committee will be very welcome: get your Nomination Forms from Annette Mattock (256) or Richard Grigsby (336).

ENGLAND MADE ME : March 14th

The Wood Lane season finishes on Wednesday 14th March with Peter Duffell's film of a Graham Greene novel. ENGLAND MADE ME, starring Michael York and Peter Finch. The supporting film is FUTTOCK'S END.

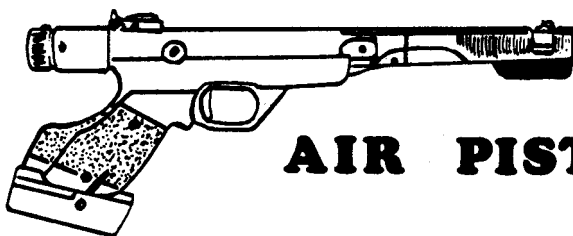
National Film Theatre

March is the month for Clint Eastwood fans, with over 20 films starring or directed by Clint Eastwood. "Magic Roundabout" fans can see DOUGAL AND THE BLUE CAT in a season of puppet animation films. There is also a season of Jack Buchanan films, and in "Re-View" a host of goodies from the past, too numerous to mention here - but the full programme may be seen in the Library.

GENEALOGY SECTION

The section has been accepted (subject to formal ratification) as an Associate Member of the Federation of Family History Societies. The immediate benefit from this will be that the section will obtain all the latest news and information quickly, will have access to much additional information and advice, and will be able to liaise with other groups throughout the British Isles.

The TV series "Family History" begins on BBC-2 on Wednesday 14th March at 7.50 p.m. The latest information on the book to accompany the series is, according to a spokesperson from the BEEB, "it is unlikely to be published". Any newcomers who want some background information and reading before the series should contact Mike Hagger (340).



AIR PISTOL SHOOTING

Shooting averages at 8.2.79



Position	Name	Score	Position	Name	Score
1.	L.P. Lou	43.9	6.	P. Walters	25.8
2.	D. Groombridge	41.5	7.	T. Dore	23.0
3.	R. Maidlow	39.7	8.	R. Roberts	21.3
4.	P. Donovan	30.3	9.	R. Fraser	17.5
5.	J. Walters	27.5	10.	K. Sichel	11.5

The start of 1979 has not been particularly auspicious for the shooting section, average attendance at our Thursday evening sessions has been lower than usual, in part due to the weather and rail strikes. We would therefore like to renew our appeal for new members - no experience or equipment is necessary, just turn up on Thursday evening.

The Christmas lay-off has had little effect on shooting averages, Joe Lou, Denis Groombridge and Bob Maidlow are still leading the field - providing a challenge for the rest of us. Roger Roberts makes a welcome return to the averages having recovered from injuries received playing football.

ALCOHOL IV

The second meeting of the Wine and Beer Making Group was held on January 16th. Unfortunately the weather was rotten and British Rail decided to hold a strike on that day so attendance was not as great as it could have been. Nevertheless, there was a good discussion of the activities the Group could undertake and the advantages that could arise from belonging to a group; a beer-tasting session was then held. A variety of kit-made lager, bitter and brown-ale was tasted along with a strong-tasting brew of Chris Butlin's, made from raw ingredients.

A further meeting is being arranged at which it is hoped a selection of bought and home-made wines will be sampled.

The Winemaker magazine has been ordered and will be circulated to members of the group when it arrives. In the meantime we are indebted to Gene Nalon who has acquired and made available to the group a large number of back issues of "Amateur Winemaker"; please contact Peter Walters (266) if you wish to consult or borrow any of these issues.

BILLIARDS & SNOOKER

The "Spot White '78" Billiards Tournament was finally settled on 19th January 79, with a narrow win in the 5th game in favour of Geoff Holder, after Pete Mercer had wiped out a 2-0 deficit (reported last month), and pulled back to level terms.

Pete will no doubt be out for revenge in the 1979 Snooker Tournament, the draw for which is given below. (Previous winners were seeded No. 1 in each group). By the time this edition is published, it is hoped that the first Group matches will be under way. All the necessary details (rules, etc.) have been posted on the Notice Board in the Cafeteria.

"POT WHITE 79" - Draw

<u>Group 1</u>		<u>Group 2</u>	
K.R.M. Elder	337	M.J. Squelch	283
C.R.E. Carroll	295	D.R. Groombridge	212
L. Panasuik	341	P. Mercer	349
L.R. Marriage	251	H.W.G. Boulton	237
K. Heer	377	G.E. Price	353
J.A.H. Counsell	266	T.E. Dore	377

<u>Group 3</u>		<u>Group 4</u>	
M.R. Kendle	341	G.F. Holder	347
W.L. Mascarenhas	356	T.A.C. Alleyne	341
R.T. Walker	332	A.P. Jordan	327
R.W. Corne	340	S.M. Castle	283
R.A.G. Fraser	323	R.J. Arekion	345
J.K. Spencer	349	P.M. Walters	340

BRIDGE QUIZ (from page 13)

You bid three No trumps.

This bid is not as risky as it seems at first sight. To start with, partner's bid promises good Clubs control, and being at the three level, some support in Diamonds or Spades. In addition your queen of Clubs, sitting over North, is a valuable card. You have excellent control in Hearts and reasonable control in Diamonds. You have no control in Spades, but if either opponent had a five cards Spades suit it is likely that he would have bid it.

This is the full hand:

NORTH

SPADES : AK5
HEARTS : 9864
DIAMONDS : A
CLUBS : K7642

WEST

SPADES: J10972
HEARTS: VOID
DIAMONDS: K105
CLUBS: AJ1098

EAST

SPADES: Q3
HEARTS: AK10
DIAMONDS: QJ93
CLUBS: Q3

SOUTH

SPADES : 864
HEARTS : QJ73
DIAMONDS : 87642
CLUBS : 5

South led the five of Clubs, dummy played the ace, North played the two and East dropped the queen. The jack of Clubs followed, North played the King and switched to a low Heart. East won with the King, conceded the ace of Diamonds, re-entered dummy with a diamond and made, in all, four Club tricks, three Diamond and two Heart tricks. Although the distribution in the North hand is favourable to declarer, hands like this are not uncommon and show that with a total of only twenty three points between East and West, and in spite of West's void, it is possible to make three No Trumps where a game contract in a suit would fail. The knowledge of where the strength of the opposition lies, which can be derived from the bidding, is often the important factor.

Obviously the contract can be defeated if South leads a spade at trick one and North switches to a Heart at trick two. But if you bid only contracts which are cold against any defence, you would not go very far.

This hand occurred in a LBHA match against Lyons, in which I was playing East and Roger Millward was West. At the other table Roy Fraser and Peter Walton defeated a part score contract by the opposition. We gained 12 I.M.P's on this hand and won the match by 9 to 1 victory points, against opponents to whom we had lost on most previous occasions.

J.A. Gobbetti

Dysphagian Diary

(the occasional column without the free offer throat sweets)

There used to be a "Joe Lyons" by Hammersmith Underground station. It is now "Brian's Flower Shop" and boasts the following notice:

"WEDDINGS AND FUNERALS A SPECIALITY"
Underneath it says,

"PLEASE SERVE YOURSELF"
Is everything pre-packed these days?

*

Making a living from death certainly has its lighter side. There used to be a notice in the window of a North London funeral director which announced,

"CHAPELS OF REST - ALWAYS AT OUR CLIENT'S DISPOSAL"
Where else?!

As for the South London firm of Wake and Paine, it speaks for itself.

*

Strikes and weather have been well to the fore in recent weeks. Perhaps the best quote came as a result of a combination of the two when a 24-hour stoppage by train drivers coincided with one of the worst days of the snowy spell. Said a spokesman for British Hi-Speed Southern Region,

"It's just as well there was a rail strike, or it would have been chaotic".

*

To be fair, the aforementioned "Southern" did produce a handsome leaflet entitled "Why ice and snow disrupt your trains". It was printed by Alpine Press.

*

Just to prove that it isn't only the UK which suffers from the elements the following statement was put out recently by the Arab News in Jeddah, where there has been severe flooding.

"We regret we are unable to give you the weather. We rely on weather reports from the airport, which is closed because of the weather. Whether we are able to give you the weather tomorrow depends on the weather".

Come back Ayatollah Barbara Edwards, all is forgiven.

Fire Regulations

Due to changes in personnel it has been necessary to revise the list of staff with special duties and responsibilities during fires and fire practices.

Please ensure that you append the new list, which you may already have, to your copy of the fire regulations, and whilst you are doing so, why not take the opportunity to re-read the booklet. If you are unsure of any aspect of the regulations please ask for clarification.

A History of The Film Section

by Ted Morrison and Tom Ruben

PART VI

From a peak of nine or ten film shows per season (i.e. the period September to May) between 1968 and 1972 there had been a reduction to seven shows. Owing to falling attendances and ever-rising costs (does this sound familiar?), coupled with a reluctance to ask the Athletic and Social Club for a subsidy even larger than the one they generously provide, it was decided in 1977 to curtail activities even further to six shows. In part this decision also stemmed from the refurbishing of the Main Hall for, despite their other advantages, the new curtains have one serious drawback from our point of view: they are not as light-tight as the old curtains. Consequently it is not really practical to show films as early in the evening as 6.30 in the late spring or early autumn, and film shows have to be restricted roughly to the period of Greenwich Mean Time. In the last two seasons, therefore, we have planned one film show every month from October to March.

1977-8 opened with the Richard Lester epic THE FOUR MUSKETEERS, loosely based on the Alexandre Dumas tales; and of course our traditional soiree, attended by 64 people. This was followed by the exciting story of an attempt to assassinate President de Gaulle, THE DAY OF THE JACKAL, accompanied by a repeat showing of the Wood Lane film SERPENTINE SERENDIPITY, made by Dennis Cooper and Denis Groombridge. In response to pressure from the anti-smoking lobby, we followed the example of a well-known chain of cinemas and banned smoking in the right-hand half of the hall; smoking is still permitted on the left-hand side, and this measure seems to be generally popular.

The Christmas film was THE MAD ADVENTURES OF RABBI JACOB. And in addition to Eileen King's annual Children's Party, where we as usual projected the films, another important event that Christmas was the reappearance after a four-year absence of your favourite monthly magazine, the "Bush Telegraph". We had high hopes that the resulting improved publicity for film shows might lead to much larger audiences from Wood Lane and Alperton, but this doesn't seem to have happened yet. However, we have recently established friendly relations with our neighbours from across Wood Lane, the BBC Film Club, and some of their members have attended several of our shows. Incidentally, they have issued an invitation to their shows, held in the City, to all Social Club members.

The feature films shown in the second half of the 1977-8 season were Bo Widerberg's ELVIRA MADIGAN, THE ANDROMEDA STRAIN and Claude Faraldo's anarchic THEMROC. But the most momentous event of the season, and arguably of our whole history, occurred on 1st April 1978.

Every year the British Federation of Film Societies holds a competition among its 700-odd members to find the Film Society of the Year. Societies are judged on a combination of qualities such as Programming, Publicity, Community Involvement, Presentation, etc. There are separate categories for Schools, Student, Closed, Town and Rural societies, and the winner of one of these sections is adjudged to be the Film Society of the Year.

Well, no, we didn't actually win any of the above awards. But we were runners-up to the Post Office Research Film Society in our category, for closed societies. No mean achievement, we feel, for a small society like BICC. 1st April was when the awards were announced, at the Federation's annual National Viewing Sessions at the National Film Theatre, and presented by the Minister for the Arts, Lord Donaldson.

In these last few instalments of this History we aim to include a complete Checklist of all the feature films that BICC Film Society has shown in the last quarter century. We have decided to list films under country (making a sometimes arbitrary choice of principal country in the case of co-productions) and director. The first instalment, below, lists all the films from the USA, which comprise over a third of the total.

(to be continued)

CHECKLIST OF FEATURE FILMS SHOWN BY BICC FILM SOCIETY FROM ITS FOUNDATION IN 1954 TO MARCH 1979

<u>Country</u>	<u>Director</u>	<u>Date shown</u>	<u>Film Title</u>	<u>Year</u>
USA	Robert Altman (see also Eire)	Dec 74	M*A*S*H	1970
	Laslo Benedek	Jun 58 & Sep 65	The wild one	1954
	David Butler	Dec 57	The road to Morocco	1942
	Frank Capra	Apr 59	Arsenic and old lace	1944
	Eddie Cline	May 73	The bank dick	1940
	Roger Corman	Apr 70	The trip	1967
	Michael Curtiz	May 60	We're no angels	1938
	Michael Curtiz and William Keighley	Jan 77	The adventures of Robin Hood	1938
	Jules Dassin (& see France)	Dec 69	Topkapi	1964
	Delmer Daves	Oct 61	3.10 to Yuma	1957
	Edward Dmytryk	Jan 75	The Caine mutiny	1954
	Stanley Donen (see also Kelly)	Dec 70	Charade	1963
	Robert Downey	Apr 69	Chafed elbows	1968
	Blake Edwards	Sep 68	The pink panther	1964
	Robert Flaherty	Feb 56 & Nov 78	Louisiana story	1948
	John Ford	Apr 55	The grapes of wrath	1940
		Mar 59	The long voyage home	1940
	Melvin Frank	Nov 62	Li'l Abner	1959
	John Frankenheimer	Mar 67	The Manchurian candidate	1962
		Oct 68	Seven days in May	1964
		Nov 68	The train	1964
	Samuel Fuller	Apr 74	Shock corridor	1963
	D. W. Griffith	May 56	Intolerance	1916
	John Guillermin	Feb 72	The Blue Max	1966
	Byron Haskin	Mar 58	The war of the worlds	1953
	Stuart Heisler	Dec 56	Blue skies	1946
	Alfred Hitchcock	Oct 66	North by northwest	1959
	Norman Jewison	Oct 76	Fiddler on the roof	1971
	Elia Kazan	Oct 57	Gentlemen's agreement	1947
		Mar 55	Viva Zapata	1952
		Nov 63	The General	1927
	Buster Keaton William Keighley see Curtiz			
	Gene Kelly	May 70	A guide for the married man	1967
	Gene Kelly & Stanley Donen	Dec 66	On the town	1949
	Stanley Kramer	Jun 70	On the beach	1959
	Mervyn LeRoy	Apr 64	The bad seed	1956
	Sidney Lumet	Sep 63	Twelve angry men	1957
		Oct 70	The pawnbroker	1965
		Feb 62	The sweet smell of success	1967
	Alexander Mackendrick (see also Gt Britain)			
	Joseph L Mankiewicz	Jan 55	All about Eve	1950
	George Marshall	Sep 55	Destry rides again	1939
	Andrew V McLaglen	Oct 69	The way west	1967
	Lewis Milestone	Feb 71	All quiet on the western front	1930
	Paul Newman	Mar 77	The effect of gamma rays on man-in-the-moon marigolds	1972
	Fred Newmayer	Apr 61	Safety last	1923
	Mike Nichols	Feb 76	The day of the dolphin	1974
	Alan J Pakula	Dec 75	Klute	1971
	Ivan Passer	Feb 79	Law and disorder	1974
	Frank Perry	Jan 76	The diary of a mad housewife	1970
	Roman Polanski (see also Gt Britain)	Jan 72	Rosemary's baby	1968
	Richard Quine	Dec 63	Bell book and candle	1958
		Feb 66	The world of Suzie Wong	1960
		Dec 68	How to murder your wife	1965
	Martin Ritt	Mar 63	A man is ten feet tall	1957
	Mark Robson	Oct 63	Phifft	1954
	Richard Rush	Nov 74	Getting straight	1970
	Bert Stern	Sep 67	Jazz on a summer's day	1959
	Joseph Strick	Apr 68	The balcony	1963
	John Sturges	Nov 65	Gunfight at the OK Corral	1957
		Mar 75	The magnificent seven	1961
	Jacques Tourneur	Jan 76	Cat people	1942
	Hal Walker	Dec 59	The road to Bali	1952
	Charles Walters	Dec 61	Lili	1953
		Dec 58	Easy to love	1954
	William Wellman	Nov 56	Strange incident (The Oxbow incident)	1943
	Orson Welles (see also Spain)	Jul 54	Citizen Kane	1940
	Billy Wilder	May 55	Sunset Boulevard	1950
		Apr 65	Some like it hot	1959
		Oct 78	The front page	1974
	Robert Wise	Feb 78	The Andromeda strain	1970
	Sam Wood	Oct 54 & Jan 77	A night at the opera	1935
	William Wyler	Sep 59	The best years of our lives	1946
	Howard Zieff	Dec 78	Hollywood cowboy	1975
	Fred Zinneman	Mar 77	A man for all seasons	1966

2 in 1 Competition

6 entries (of extremely varied quality) to this competition. First, here are the correct answers to part A, the numerical part.

1. 18,446, 744, 073, 709, 551, 615 grains
2. 12 cats.

There were only three people who gave correct answers to both questions, and one of the "question 1" answers was in binary, but being a scientific establishment we allowed it. First from the hat, and winner of prize A, was Richard Davies.

Part B proved more troublesome, two competitors making no attempt at all. Of the others, three did well on question 1. Richard Davies noted that the 64th square would contain approximately 9.2×10^{18} grains or about 10^{12} tonnes of wheat. Tom Ruben had serious doubts about man's ability to construct a large enough chess board, but Rob Corne came closest to the heart of the matter by noting that there are not that many grains of wheat in the world and also that an enormous board (he suggests 500 miles square) would be needed.

Question 2, by comparison, didn't get a look in. Mike Denton did note that the answer depended on all the cats being the same, and Tom Ruben possibly had a suspicion that all was not well by thinking that 13 cats were needed. Rob Corne gave us some delightful thoughts on methods of killing rats (using Supercats, Bionic Cats, Kittyhulks etc.), but added that in his neighbourhood the moggies were content to find a caterpillar and have a catnap - quite a catastrophe he thinks. So what answer were we really looking for?

By the ordinary rules of mathematics the answer is 12 cats. But, given that 6 cats kill 6 rats in 6 minutes consider the scene after 48 minutes of the problem - 96 rats are dead. How can the remaining 4 rats be killed in 2 minutes? To answer this we must consider the four ways in which 6 cats kill 6 rats in 6 minutes.

- A. All 6 cats are needed to kill a rat; and this they do in one minute, the other rats standing meekly by, waiting for their turn.
- B. 3 cats are needed to kill a rat, and they do it in 2 minutes.
- C. 2 cats are needed, and do it in 3 minutes.
- D. Each cat kills a rat all by itself, and takes 6 minutes to do it.

Thus, in 'A' and 'B' the 12 cats are capable of finishing the job quite tidily in the time allowed. In 'C' and 'D' no such solution is possible, unless one invokes the horrid concept of fractional rats! Hence more cats are needed. For 'C' at least 2 more are needed to kill the other 4 rats in any 12 minute span during the allotted 50, and in 'D' one extra cat suffices but takes 24 minutes to do its stuff. In both 'C' and 'D' the cats suffer from under-employment.

So for Prize B we judged the winner solely on the basis of Question 1, and the award goes to Rob Corne.

Just a footnote to all those people who complained that their calculator blew-up doing question 1 - this problem is set for 9 and 10 year old schoolchildren to do! Back to the abacus chaps.



Wanted

Travelling companion from Farnborough (Hants) area to form car pool or share petrol costs. Contact Rob Weller, Photographic Section (Ext. 399).

Concessionary Trading

We have received several enquiries regarding the next soap and Ola orders. At present we are waiting for the area representative to call so that we can obtain the latest bulk prices. When these are available we will be placing another order.

Fred Palmer

Poets Corner

THE INDISPENSABLE MAN

Some time when you're feeling important,
Some time when your ego's in bloom,
Some time when you take it for granted,
You're the best qualified man in the room:
Some time when you feel that your going,
Would leave an unfillable hole,
Just follow this simple instruction,
And see how it humbles your soul.
Take a bucket and fill it with water,
Put your hands in it up to your wrists,
Pull them out - and the hole that remains,
Is a measure of how you'll be missed.
You may splash all you please when you enter,
You may stir up the water galore,
But stop, and you'll find in a minute,
That it looks just the same as before.
The moral of this is quite simple,
Do just the best that you can,
Be proud of yourself, but remember -
There is no Indispensable Man:

Finally this month, a sticker on a Japanese car.

"BUY BLITISH"

Not B.L. likely!

BICC
FILM SOCIETY
SILVER JUBILEE SEASON

**ENGLAND
MADE
ME**

and
Futlocks End

WEDNESDAY MARCH 14th

6.30 pm

MAIN HALL 5th FLOOR

ADMISSION BY PROGRAMME 40p

Orders for sandwiches may be placed with members
of the Committee or with your local representative
not later than 12.00 p.m. on the day before the
show