

WEDNESDAY, 9 FEBRUARY

TRAVEL 66 WHICH WAY IMPERIAL? TV COMES TO GUILDS UNIVERSITY CHALLENGE MEN

# Mech. Eng. to go

## MIKE CAST AT LAST!

metric

By R.J. Mitchell

THE APPLIED HEAT SECTION of the Mechanic-HEAT al Engineering Dept. is to introduce a metric system of units into their courses next session.
(The Applied Heat Section covers Thermodynamics, Fluid Mechanics, Combustion and Heat Transfer).

At a recent meeting the Staff were unanimous in their decision to incorporate the new units into their lectures, but as yet he plan is to use them alongside the present system, rather than substitute them for it, and try to make students 'bi-lingual'. Professor Spalding, Head of the Applied Heat Section, hopes to have things such as Heat Tables available in the new system of units by the start of the next session.

The decision to use metric units is in line with general Government policy on this issue. In May last year Mr. Douglas Jay, President of the Board of Trade, issued a policy statement in which he said that Britain is to switch to a metric system of units. He said that the change

Britain is to switch to a metric system of units. He said that the change over would probably take about 20 years, but he hoped that industry will have caanged within ten years.

The Government took this step after representatives from various industries had presented the case in favour of the change to it. One major advantage of a metric system is that it will make export dealings simpler. A Government committee consisting of representatives from the relevant Government departments and In-

A Government committee consisting of representatives from the relevant Government departments and Industry, was set up to keep the progress in the change-over under constant review and the British Standards Institution was charged with the working out of metric British standards.

A spokesman for the Ministry of Technology said they are exhorting the whole of British Industry to adopt the new metric system, and added, "The change will be effected as rapidly as can conventionally be done. We are aware however, of the large number of small practical difficulties. Unofficially, it is expected that the Imperial system of units will be made illegal within the foreseable future, but it is doublind whether the old system will die out for a considerable time. The particular metric system that is to be introduced into the Applied Heat courses, and in fact into the country in general, is the 'International System'. (SI). This is a coherent system with six basic units; metre, kilogramme, second, ampere, de-

Cont. on back page, col. 4.



photo: Mike Smith

### GIANT FELIX **HUGE SUCCESS**

#### FOUR RECORDS TO SHOUT ABOUT

1. SALES: an all-time record of 2,000 copies of the last issue of FELIX were circulated by the Friday evening following publicat-

riday evening following publication.

2. SIZE: never before had FELIX produced a 34-page issue; previous best 26 pages on 24 February 1965 (also a Careers issue).

3. ADVERTISING: 793 inches, putting FELIX for once on a par with Cambridge's VARSITY.

4. ... and now SIZE AGAIN: a 22-page non-Supplement edition; previous bests 18 pages 4 & 18 November 1964 and 27 January 1965.

### Chain F.R.C.P

Professor E.B. Chain, Professor of Biochemistry at I.C., was admitted as an honorary fellow of the Royal College of Physicians at a quarterly meeting of the College on 27

Mike is on his way to the Union Lounge. On Friday 29th, he was cast in the foundry in RSM by a team led by 'Mac'—the foundry's supervisor. Mike—IC's new mascot, a micrometer,—was cast in brass in a pattern made by Stan Cook, a carpenter in the Civil Engineering Building.

BOARD OF DIRECTORS PREVAILS

## Felix backs down

FELIX has no longer any anonymous columnists following Felix Board moves after the last isuse. Despite the blistering editorial printed in the last issue the editorial board succumbed to pressures from the Felix Board of Directors, a subcommittee of Council.

### Casson Honoured

Sir Lewis Casson, Fellow of I.C. at the College from 1892-94, and his wife Dame Sybil Thorndike are to recieve honorary Doctorates of Literature from Oxford University. They are the first husband and wife to be honoured together by Oxford.

At the Felix Board meeting before the last issue went to press, a motion was passed which would have limited the number of anonymous columnists to one.

When the issue came out it had the usual two columns by Ignotus and Colcutt in defiance of the edict. President Fletcher, who wrote in Felix last year as the columnist Colcutt, called a meeting of the Board and it was believed that the meeting would call for the resigntion of the editor and his staff.

In the small hours of the morning that the Board was due to meet, a compromise was worked out under which the two offending columns would disappear and the Board would ignore the way in which the editor had disobeyed their commands. This was agreed to at the formal meeting.

## Foreign Affairs

selected by Paul Smith

#### Drunk in charge of a cheese

two Lampeter theological students were arrested last week on suspicion of being drunk in charge of a cheese. A policeman stopped them whilst they were rolling a large cheese along the main road near the college precincts. They were discharged with a warning. Two Lampeter theological

#### **CAMputers**

Caius College, Cambridge, bas taken a 5% interest in a computer marketing company. This make them the second Cambridge college to openly go into business.

#### Catering debate

The catering division of Bristol University Union is expected to make a loss of £10,000 in its first year of operation, and is to ask the College for a subsidy. Another loss of about £6,400 is forecast for the next session.

#### Bar corruption

A member of the Connaught Hall (University of London) bar commit-tee has been asked to resign following irregularities in the accounts.

The deficit last term alone amounted to £140, ten percent of the takings. Committee members are alleged to have served free drinks to their friends and £20 was once taken from the till and an I.O.U. 'left in its place.

#### Financial difficulties

Courier, the newspaper of New-castle University claims that it is the only student "newspaper" in the country, no others putting anything like the emphasis on news that they do is this because they can't afford to print features?

#### Newcastle desecration

The Chapel of Newcastle University, St. Thomas' Church, was desecrated by vandals last week. An exhibition of pictures illustrating aspects of Unity was slashed, a crucifix stolen and a candlestick damaged. The oftenders have not been found and the chapel is now being closed at 4.30 p.m. instead of 8 p.m., until further notice.

### Russian guests

RUSSIAN STUDENTS, reported in the last FELIX to be attending a party at I.C. on February 9th, will be taken on a conducted tour of the departments in the morning of that day, and in the afternoon will take a trip round London, to the more unusual spots. They will then be introduced to the ladies of ICWA, followed by a party in the evening. It is hoped that the students will be shown around the Houses of Parliament on the afternoon of the day before. Lefore.

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purchasing, industrial relations and marketing.

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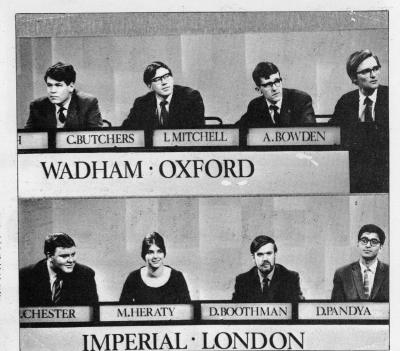
Promotion at Ford is traditionally from within and graduates have accelerated quickly here. Management Development operates to make sure they can.

There's much to interest the graduates at Ford. See your Appointments Secretary, or write for details to J S Smale, Room 1/178, Ford Motor Company, Warley, Brentwood, Essex, who will be visiting

IMPERIAL COLLEGE, LONDON

23rd February





## A close thing

## Wadham defeats IC

by Tony Firshman

DEFEAT for I.C. by175 to 150 points against Wadham College, Oxford, in a close-fought round of University Challenge, and a cup of terrible coffee were th3 rewards of the thirty I.C. students who travelled through the fog to Manchester to support their team at the recording of the quiz at the Granada Headquart-

The I.C. team was composed of Darshan Pandya (Chem. Eng. PG), Mrs Margaret Heraty (Maths 3), Derek Boothman, capt. (Physics 3), and John Chester (Chem. 2), who were chosen last term by a selection procedure which received little publicity. The reserve, Ke th Cavanagh, also accompnied the team, but was not called upon.

The two opposing tams met cach of for during the effection, when they had an extensive rehearsal for the evenings recording. It is interesting to note that during this prerun, our team beat Wadham in competition conditions by the continuing margin of 330 points to 175. vincing margin of 330 points to 175.

competition conditions by the convincing margin of 330 points to 175. This supports a statement by Bamber Gascoigne in an interview with FELIX that there is at least 50% of luck in the game.

Al #.30 with this encouraging rehearsal behind them, a confident I.C. team were set to win the round. After the floor manager had led the introductory applause the challenge began. The tense atmosphere throughout the match was a very noticable feature of the half-hour. As Bamber Gascoigne pointed out, this was due to the pitting of two high-powered teams against one another. At the half-way point, Wadham looked clear winners but in 'part 2' I.C. fought back with some excellent interruptions to the starters by Pandya and Chester. In the closing minutes the teams looked like drawing level, but were beaten by the gong.

The audience then adjourned for free coffee, to return half-an-

hour later for the following weeks round. An amusing feature of the evening was the antics of the Director in the control room who appeared to be literally conducting Director in the control room who appeared to be literally conducting the proceedings. It emerged that he always did this during the musical questions. There were four cameras used during the recording, one of which filmed the credits at the end of the contest. These credits were changed manually, the expensive automatic changer having been discarded as was the automatic score change, as they did not produce the quality of the manual methods.

We were rather unlucky to lose this match, considering our excellent performance in the rehearsal. The reasons for this are numerous but the prevailing one is bad luck, Darshan landva is of the opinion that we would have beaten them given time which is of course, impossible to say tor certain.

tor certain.

Ed: The match is to be televised on Wednesday, 16 February.

Photo: Granada T.V.

Advertisement



## Dinner & Dance success

## Mooney excels

By B. Pichler

"ONE MUST BE seen to do the right thing", so the old adage for success runs, although when these social 'necessities' involve attending the Engineer's Dinner and Dance this is no longer a social chore but an enjoyable evening's (and morning's) entertainment.

A superb meal with lashings of wine—if you emptied your glass frequently enough—followed by amusing speeches was certainly a fine pre-requisite for the ensuing dance. Inevitably on such occasions Mr. Mooney seems able to excel himself—the menu was suitably incom-

Mooney seems able to excel him-pelf—the menu was suitably incom-prehensible and such novelty dishes as Devilled Whitebait (No, not cat's food but tiny 'sprats' complete with head and tail—delicious) were served.

The diner was followed by speeches from Da: Howell, W.F.F. Martin-Horst, Adrian Fletcher and Pete Foster. Mr. Martin-Hurst spoke about the difficulties of designing and manfacturing cars, and the £1,000,000 gambles one has to take with any new model.

with any new model.

Mr. Foster subsequently satirised this speech by talking about "Bob" a little man who solved all his motor-

a little man who solved all his motoring problems—including that irritating green light that seemed to glow incessantly on his dash board—Oill Mr. Foster must surely be one of the most competent after-cumer speakers, with his witty incisive remarks. Unluckily? Jed Stone and the Raiders were absent, but it was possible to cover up lack of formal dancing ability by suitable positioning in the centre of the mêlee. Richard Murdoch was the cabaret artist and this was the most unfortunate part of the morning. His 'iokes' were invariably finished by a distinguished Guildsman at the front, who must have heard his last radio who must have heard his last radio

who must have heard his last radio programme.

His half hour act, which by the way cost £65, was a dismal failure. This did not reflect on the occasion as a whole, which was an immense success. The people concerned with the organisation had obviously put in a great deal of time and effort. The Concert Hall was very well decorated with shields and flowers and all night drinking and gambling were provided (I lost 6/6)

provided (I lost 6/6).

Next year find yourself a woman at a hop, buy a dinner suit, get your application in before Christmas and go to the best function in the I.C. calender.

## Halls Council enquiry

IN THE coming three months you will be making your first application to an IC Hall of Residence, then you have a one in three chance of entering. If you are applying for a second year then you may be one of the lucky(?) two in five who are accepted,

These are two of the facts that have come to light from the present Council-sponsored enquiry into Hall entry. The final report will not be debated, however, until the second Council meeting of the term,

in March,
Already, one change has been made in the method of application to Hall. This is the absence of the redesigned form of a preference list for Halls; instead one is asked if there is any one Hall that one would particularly wish to join.

## plan European exchanges

Guilds Union are in the process of arranging a tripartite exchange scheme with the Universities of

Prague and Aachen.

Guilds have already been in touch with Prague and Aachen, and both seem very keen on the idea, although plans will not be finalised until Prague and Achen have nad a changer to communicate

until Prague and Achen have nad a chance to communicate.

The provisional plan is for six or seven students to spend 10 days (between June 25th and July 25th) in each place.

The cost of this scheme for Guilds will be from three to five hundred pounds, but the students will not have to contribute anything towards this. C&G Union President, Dai Howell hopes that he will be able to raise the majority of the money from outside, and not involve C&G Union in any undue expense.

pense.

RCS Union are also arranging exchange visits for this summer. They have almost finished plans for an exchange scheme with Granada in Spain, and a similar scheme with Cotenburg in Sweden seems certain to come off.

R.J.M

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Clem. with gibbet in Carnival Procession 1964

## Clementine forty

'Posh do' Celebrations

By A.R. Morrish

CLEMENTINE II R.S.M'S ancient CLEMENTINE II R.S.M'S ancient lorry, is 40 years old this year. Celebrations are being planned for early next term, and will probably include a rally and a party. Mrs. Barbara Castle, the Minister of Transport has been invited to come and sneak at the latter, which will start off as a "posh do" with sherry, arnd liven up once the celebrities have left have left.

have left.

Clem will also be entered in this years Commercial Vehicles Run.

A Morris descended from the Bullnoses, Clementine was born at Cowley in 1926 and weighed 30 cwt. at birth. She started life as a covered van, and was weaned on mailbags by the G.P.O. In 1937 she went for an operation; her bodywork was remodelled and she

appeared later in the year as an open truck.

open truck,
Clem retired from commercial service after the war, still a young ster of 25, and disappeared from the scene until a horde of Minesmen descended upon her home in January 1960. They dragged her off, and began the face lifting process and modifications necessary before acceptance as one of them.

1964 saw her christened in a traditional manner—her radiator was topped up with beer and a rejuveneted Clementine took to the road once more.

With forty years down, it looks as if there will be forty more to come.

Congratulations Clementine!



## Comment by the

## Pathway to Presidency

DORMALLY, about this time of year it is becoming obvious who are the main contenders for the "top post" in Imperial College Union. But there seems to be at present no outsignating personalities running for the Doming

present no outstanding personalities running for the Presidency.

Apathy has spread thus high in the Union. Needham, following in Fletcher's footsteps as RCS representative on Council, was early last term expected to continue upon that course. Such ideas he has since sought to dispel. Since he hopes to conduct postgraduate research at Silwood, he would require a sabbatical year if he were to accept the post.

This change in the constitution is not expected.

This change in the constitution is not expected to occur. However, it does seem possible—in spite of last fortnight's inquorate IC Union Meeting—that next year's President may be elected by a full Union Meeting rather than by just Joint Council.

by just Joint Council.

Ire there any other possible contenders. A few favour the chances of the two Keiths—Guy and Cavanagh. Other outsiders might include Dai Howell, President of Guilds, who at present expects to be working next October, but who seems to be taking an ever more important role in Executive.

But it is more usual for the President-elect to rise from the lower ranks of Council. It is

generally agreed that the canvassing for support that has to take place when there is more than one candidate demands as much time as the work involved in being any officer of the Union. Fletcher is attributed with eighteen month's canvassing prior to his

However, next year's President need not, even under the present rules, arise from this year's Council. It is merely somewhat to his advantage to be familiar with the way in which Council works. Perhaps more important though is the candidate's ability to present, if not now, then certainly by October, an imposing and responsible public image; for this is what the Union, and the general public, sees as the epitome of the student population of Imperial College.

#### Another Filibuster?

SIR,
The President of the Union showed little concern that the Union meeting of January Union meeting of pathiaty 27th, was inducrate, in fact, he proposed that it be turned into a meeting of the Debating Society. It would appear that he feels his sole responsibilities as far as Union meeting. ibility, as far as Union meetings are concerned, is to call

No new meeting has been arranged before March 3rd., this is no doubt an attempt to prevent the lobby of the House of Commons from taking place. A working party was set up by the last Union meeting and yet the Executive does not seem concerned to debate the findings. Can the Executive really claim '5 1 e interested in the views of the members of the Union?

I hold that were members of the Union to elect their

of the Union to elect their President then there would be more respect paid to Union

meetings. After the last Union meeting. Mr. Fletcher retired to conduct what appeared to be a private witch-hunt against "Colcutt"; no doubt he felt he had the support of the Union in doing this! DAVID LIVESEY

### Point of Information

SIR,
I would like to point out a slight and unimportant error in the report on "Quiz In-ternational" on page 12 of issue 225

The matches you refer to were recorded not broadcast on 12th and 18th Jan. respectively. This practice is common, to enable editing to be performed and to enable the recording to be made at any convenient time of day. The first programme, for example, recorded on 12th Jan., is due to be broadcast on BEC world service (short waves) on three occasions:

Monday Feb. 7th 1315 GMT Tuesday Feb. 8th 2130 GMT

> Prince Consort Road London, S.W.7 Telephones: KEN 2963 Internal 2881/2799

Also in this issue: Malcolm Rossiter, Garth



One down....eight to go

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## **Experimental Education**

FELIX has in the past carried several articles critical of the teaching methods used in the college and it is therefore, pleasing to print an article about research into educational method which is going on in one of the Departments

On our centre pages you will find a description of the experimental work which is in progress on the use of television within the college. But television has been in operation for many years now and a lot of experience has been gained both in this country and in America on its use as an educational medium.

#### by the features editor

made up its mind to go in for it properly and not to continue with the present equip-ment which is only available within one de-

partment and is more like a toy than a serious piece of apparatus?

Other universities in Britain are now going in for television in a big way. A complete television studio with a full time director was owened only last month at Leeds. As the leading technical institution in the country Imperial College should be at the forefront of progress. If it is not careful it will find itself lagging far behind.

## discussion

Friday Feb, 11th 1645 GMT Incidentally, subsequent to the scores noted in "Felix late K.C. played making the scores

I.C. 283 (4) U.C. 232 (4) K.C. 159 (3) L.S.E. 190 (4) Q.M.C. 109 (3)

Tonights match between K.C. 40, Q.M.C.-36. Hence the final scores of the preli round are

I.C. 283 U.C. 232 K.C. 199 L.S.E. 190 Q.M.C. 145 fulfilling your prediction that Q.M.C. do not go forward semi-finals Brian M. Barker

(Physics I) Ed.: Our apologies for this in-accuracy and grateful thanks for the extra information.

Imperial College Union

Simpson. Rahif Qattan. Paul Smith, Michael Smith, Chris Cooper, Graham Horder, Claire Souter Dick Reeves, Jerry Stockbridge, Richard Gentle, Nigel Shindler, Jane Pearson, and Shorley



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## CHRISTOPHER

I'M GLAD they've got rid of Ignotus. He wrote such snide and insulting stuff, and most of the ideas were mine anyway. Also, it was annoying having people walking up to me and telling me I was Ignotus.
Only my old mate Pete Finch
wasn't fooled; he insisted I just wasn't bright enough to write with such style and grace. I'm now waiting for him to tell me I'm not bright enough to be Chris Cooper.

#### Felix Rored

A FORTNIGHT ago, an unusualmeeting of the

Felix Board took place; 739 people were present. The motion to be discussed was that the names of amonymous writers on FELIX be disclosed to the Board, or to the College as a whole whichever was the fewer, and that their number

the fewer, and that their number be reduced to one, neither of whom should be of the other one's sex.

Mr F. Lecher introduced the meeting by talking of the "sobering responsibility" (laughter) that lay before the Board, He then explanded what FELIX was, and passed would complete of rectifications. round samples of past issues. Many present expressed admiration for the work that must have gone into let-tering so many thousands of copies, and drawing the skilful pictures. Mr Lecher then explained the many modern aids available to FELIX

### Shortage of books

Has the Union Bookstall no imagination or memory? As a first-year Enginering student I (among many others) have had several times to wait a fortnight or more until "the order comes in" when trying to obtain the recommended textbooks. I am informed that the Bookstall has held copies of these-small stocks which were consumed in the first week of term. When the majority of students buy their textbooks here, is it not reasonable for the Bookstall to buy large stocks of the recom-mended editions?

### Is Folk Club power-mad?

Yesterday evening (26 Jan.)
I was fortunate enough to be
in the audience of the Folk
Song Club's Concert in the
Upper Refectory. For this privilege, as a member, I paid four shillings—no small sum for a College function of this type—and with a ticket for a girl-friend who accompanied me that evening cost eight shillings.

We arrived at 8 mm, the

concert having officially com-menced at 7.30, to find a wall of backs of the large proportion of the audience who were standing facing us in the entrance. Undismayed we forced our way into the room. There was no ticket check and the ever-increasing number of people who pushed into the seetning mass of humanity did not and were not asked to

Thus we stood for an hour. unable to move in an atmosphere rapidly decreasing in oxygen content and unable to appreciate the first-class entertainment provided. Before leaving, dazed and disgusted, I did notice that a large proportion of the aucience were not of I.C.

It seems to me that the Folk Club, which has arisen and flowered during my three years at the College, has got rather out of hand. The Cont. on p. 14

-can someone help present us to do so? G. DEBDEN (EE) R.H. HARRIS, Chairman of the Bookstall Committee,

replies:—
The problem of stocking the correct number of text-books at the Bookstall before term starts has always been a difficult one to solve for the fel-

lowing reasons: 
1. Members of the teaching staff recommend large numbers of text books to be stocked by the Bookstall and indicate the numbers of students in the class, implying that all of them will buy the complete set, or at least a reasonable selection. 2. From bitter experience

The blame does not, however, lie solely here. Could of text books, only 20-50% of not the lecturer have invest-the U.G. students will buy the igated the availability of these recommended selection but books before recommending this figure varies according to them? There is little point in quoting references from a text when less than 100 tudents out of a total of 370 even the country of origin of

Therefore I suggest that the Bookstall should be able to order supplies of the recommended textbooks before the most returnable. Even if there course begins and that lecture were space in the Bookstall to ers and course leaders should stock all the recommended determine whether or not a particular book will be readily allow such prodigal buying, available. As freshers we were urged to buy at the ed books on our shelves at

4. The publishers are loath to print large editions because authors of scientific books write frequent new editions.
Thus, if we order too few at the beginning of the Session, it may be difficult to obtain extra copies quickly.

5. There is a large second-hand text-book market at I.C., the size and effect of which it

is impossible to judge.

6. Some bookshops offer an illegal discount on text-books, the effect of which is to draw the effect of which is to draw off an important and unknown portion of College trade.

I agree it is not a very satisfactory situation; we do our best under difficult circumstances. I am sorry it is not always good enough,

## Those Gates Fail

Last Thursday Selkirk and Keogh Halls had a fire practice Last Inursaly Seikirk and Keogh Halls had a nre practice, and the infamous fire escape gates on the Prince's Gardene balcony failed to open. We all the residents of staircase 6, Keogh Hall are absolutely disgusted by the policy of the College's senior officials concerning these gates.

On this occasion we were fortunate in that only sufficient time element for two or three people to be trampled to death

On this occasion we were fortunate in that only sufficient time elapsed for two or three people to be trampled to death in the melee around the gates, and perhaps a dozen burnt on the crowded balcony, before the Domestic Bursar saved the day with his formidable bunch of keys, How comforting to know that this gentleman is on hand day and night to save us from such perill How soundly we shall sleep at night, knowing that our saviour only has to descend 142 steeply winding possibly unlit steps before reaching the vital gates! winding, possibly unlit steps before reaching the vital gates!

Far better to stand the chance of losing one's property than

the possibility of a needless and tragic death. We, the undersigned, demand that these gates should be open day and night—fire is no respector of people's convenience. That they have failed to function once is criminal; that they should ever have the opportunity of failing again is insanity.

Chris Molam Pete Wallum, David Webb, Bill Shepherd,. Yawar Babar, Bruce Gregory Chris O'Donnell Sandy Davidson

Brian Lovett. Rog Thomson, Bob Saxton, Mahmood Saeed Dave Bulled, Malcolm Cox, Andy Keenan,

Dave Bryant, Keith Henderson Dave Lambert, Dave Sefton, I.G. Baldwin, Barry Clark, Pete Crockwell,

## Jerry Stockbridge

RACHMANN IS GONE, but his ways live landlords in and around South Kensington. Living in a Hall of Residence is so much cheaper that it is absolutely essential for you to "get next year. However, your bar to entry is the committee of the hall at which your application finally arrives, and the only evidence they have of you is your photograph and your replies on THAT form. It is with your needs in mind that I have designed this guide to an easy win in the "Hall Hurdle" by filling in the form to

maximum advantage.

The first thing to do, of course is to get one; Miss Burns is usually willing to satisfy here. You can find her up the spiral staircase

here. You can find her up the spiral staircase by the Southside Supermarket.

Now, armed with a copy of the regulations (yes, there are some regulations despite what anyone says) and 8251/6/2,000/1165/...S, you are in a position to apply. Page one is fairly straight-forward, beag largely factual history requirements, the scope for extensive lying is rather limited. A choice of hall is, asked for, and it is wise to specify especially if one hall favours your particular interests. IC Union men, Felix, Dramsoc and Co. are generally found in Beit; Rugby players are everywhere but in Beit; Rugby players are everywhere but mainly in Tizard. There is not much really between the halls, although Garden is fairly old and has some double and triple rooms for people

who like that sort of thing.

Your real scope for ingenuity comes on Page two where you will find four general questions about your school, interests, positions! and your expectation of hall existence. Number one asks what you have done since you left school. Only two column inches, they don't expect much. If you did a year in industry, says so if not, still say so, they won't check up and it sounds good. A trip round the world is a good one, but read some travel books in case the sub-warden invites you to dinner. Avoid at all costs such things as "did voluntary work in Africa" or "worked in a youth group in Spain", such "goodie" activities rarely go down well.

Moving on to Question 2, you will find another two inches and a cost of the solid forms.

other two inches and an extra eighth asking for your college record. A degree of accuracy is esyour college record. A degree of accuracy is essential here; saying you're "President of R.C.S." may be true but not patricularly useful. Membership of a leading sporting club is good, especially the Rugby Club, Soccer Club or Boat Club. Put them down even if your only contact was on Freshers Day. Avoid "I go to hops every week" "I went to Morphy Day." "I stood for eight hours in the rain waiting for the Queen Mother", "I went to Commemoration Day", "I go to hops every week without paying" may help in some halls. A long list of ridiculous clubs (no names mentioned) merely show, a weak will on Freshers Day and will wreck your chances. Any sign that you've done wreck your chances. Any sign that you've done some hard work at college is useful, try "I mended a desk in our lecture theatre" although "I'm up to date on sheets (problem variety)" may raise a laugh but you will still be commuting next year.

Cont. in next issue

### COOPER

such as printing, photography, etc.

The meeting then passed to the motion. Proposing it, Mr Ben Barker said he hoped no-one would accuse the Board of acting merely to defend itself; there were many other good second he could not be such as the said action.

other good reasons he could name, but which he preferred to keep anonymous. What the Board wanted was constructive criticism, which could only be provided by the best informed people. Perhaps satirical columns should be written by the people being satirised.

Miss Virging Lustworthy (Sil.

miss Virgir h Lustworthy (Silwood Field Research) complained of the crudely-written sex and violence she found in every Colcutt. She hoped it would improve. She approved of sex, but in the right places. A FELIX writer's column

was not one of them, Mr Mike Mill-stone. Halls representative, said he disapproved strongly of this Coalhole fellow's references to "overnightquest-manship". He had never heard any one else make such disgusting in-nuendoes against the Halls, apart from a certain Mr Irving; he would not be surprised to find they were

our and the same person.

Nor Phildin said he thought

FELIX had quite enough amusing material without resorting to such people's efforts. There were anagrams , scrambled sentences and guess-what-this-is pictures on every page. The so-called Careers Supploment had been a most amusing parody which could give offence to

It was a pity more space could not be found for pictures of pretty girls, which never did a paper any hand, he thought. Many suggestions were made in the next few minutes, for the inclusion of a pets page, old folks corner, Garth, investment

guide, etc. Mr Paul Kromeskie, Refectories Libel Consultant, said that he of all people should know how difficult it was to write something that briefly represented the true situation in all its complexity. The refectory menus had sometimes been accused of shortcomings in this respect. There distortion was never wilful however, but in Ignotus he had sometimes detected veiled re-ferences of an unkind nature.

Opposing the motion, Ian Bilious, the Editor, said he deeply resented this attempt on the freedom of the Press. The whole issue was deeply bound up with the idea of democracy and he could therefore see no alternative to a Blistering Editorial (uproar). Subsequently he would be ready to comply with Board's requirements, however, Mr Lecher described this decision as "statemanlike", and the motion was passed by a large majority, after several attempts.

Owing to pressure of time a

motion that Mr Bowells be appointed Taste and Decorum Adviser to FELIX with wide powers of de-tension and arrest was postponed.

#### Zamee!

VERY MUCH in decline since the emergence of Wellssoc is the Comic-srip and Science-Fiction Appreciation Society (SciFiSoc). one time chairman B.B. Burlesk, told me: 'Science ain't enough! You gotta have imagination as well!!
And pitchers!!! But when did you last see a college boy reading 'Eerie Creepies' or 'Horrible Space Monsters'? I suppose they all read that REALISTIC trash—novels—YIPE! poetry—YECHHH!!! And Wellssoc gave us the knockout blow—POW!—all those explosions—BAM!!—and TOP ROCKET SCIENTISTS wowee kinds!! And now the FILTHY COMMIE RATS are showing RED FILMS!! Give me BLUE COMICS any day!!

## DO YOU KNOW WHY UNILEVER RESEARCH IS A FIRST-CLASS CAREER CHOICE?

THE MAIN FUNCTION of Unilever Research Division is to help Unilever keep its position in the commercial and industrial world—by intensive research into the fundamental scientific aspects of products it sells or wishes to sell; and by the development of new or improved processes or products.

In other words, the scientist in Research Division is essential to the future prosperity of Unilever. And that is why you are given all the opportunities, facilities and rewards you need to make a first-class career.

#### Basic or Applied Research?

Unilever believes in giving the individual scientist full scope for development of his talents. You may be concerned with product development work, or with research into the science underlying the properties, manufacture or mechanism of action of our products, or you may be involved in a fundamental study of corre branch of science which will be of long. some branch of science which will be of long-term value to Unilever but has no immediate

term value to Unilever but has no immediate application in products.

In developing new products you will not be merely mixing ingredients. You will be investigating the logical outcome of the basic research carried out in your own or other Unilever laboratories. Of equal importance to the development of new products is the assessment of their efficacy in use. This means the design of objective scientific tests to measure the properties which are judged in a subjective manner by the consumer. In product development work independent and original thought on a high scientific level is as essential as in the pure or fundamental research which goes on in the same laboratories. The which goes on in the same laboratories. The satisfaction lies in seeing products on the market and patents secured rather than in published papers which are expected from our basic research.

#### How do you keep in touch?

As a scientist in Unilever you will have

As a scientist in Unilever you will have access to a wide range of specialised techniques, X-ray diffraction, I.R., U.V., N.M.R., E.S.R., Raman spectroscopy, mass spectrometry, electron microscopes and electronic computers. You learn what is going on in the other Unilever laboratories, both in the U.K. and abroad, by the circulation of reports, by conferences and by personal contact. Close contact is maintained with the universities

through university staff who act as consultants, and by Unilever scientists who work in universities. You are encouraged to maintain your own academic contacts and to make new ones, as well as taking part in the affairs of learned societies.

#### What vacancies are there?

Unilever Research has four locations in the U.K.—at Port Sunlight, on Merseyside; at Welwyn, Hertfordshire; at Colworth House, near Bedford, (with an out-station at Aberdeen); and at Isleworth, Middlesex. These are part of a world-wide organisation with laboratories also on the Continent, in the U.S.A., and in

In order to staff these laboratories Unilever Research always needs: chemists—physical, organic and some inorganic; biochemists; analytical chemists; physicists; microbiologists; chemical engineers; mechanical engineers; biochemical engineers; biochemi eers; biochemical engineers; and information

scientists.

There is also a smaller periodic requirement for graduates trained in veterinary medicine, including animal pathology and physiology; mathematics, especially statistics; systems analysis; operational research; radiochemistry; and in biology with specialised post-graduate training in subjects such as pharmacology and histology.

For entry to the Scientist Grade we want people with a Ph.D., or good primary degree, or equivalent. They must be scientifically creative and should have initiative, technical skill, and the capacity to relate their science to

skill, and the capacity to relate their science to our industrial situation.

The Research Assistant Grade is for graduates who want to make a career in the more experimental aspects of the work, and here there is a greater emphasis on technical skill.

#### What will you earn?

Salaries will reflect your ability, but you can use this general framework as a guide:
Scientists—the usual starting salary for a newly qualified Ph.D. is £1,300, rising to 1,500 after about one year's service. The new ringry graduate, recruited into the Scientist Grade, receives £1,000 and is awarded fixed increments for two years so that his salary reaches £1,300 on establishment. These rates are increased by up to £100 for every year of research experience relevant to Unilever's interests. In addition, an extra 5% of salary, with a maximum of £150, is paid to scientists in the Isleworth and Welwyn Laboratories since these are in the London Area.

Research Assistants—graduates in this grade earn a minimum starting salary of £80.

grade earn a minimum starting salary of £850. Relevant experience is recognised in starting salaries and the 5% London allowance for the

Welwyn and Isleworth Laboratories is also

Four weeks' annual holiday leave is given to established scientists, and three weeks to Scientists before establishment and to Research Assistants.

All graduate research staff become members of the Unilever Superannuation Scheme.

#### Can you get ahead fast?

You will find plenty of opportunities; it depends solely on your ability. Unilever Research is quick to recognise merit, and there's no question of 'standing in line' for promotion, which can be on scientific ability

#### Is there further training?

Yes. All scientists attend a week's residential Yes. All scientists attend a week's residential course on business principles within about two years of joining the Company. Other training, including management training, is later given as circumstances and prospects demand. Scientists with three or more years' service are eligible to compete for Unilever Internal Research Fellowships, which enable you to return to university for one or two years to undertake research of your own choosing. You may also be sent on temporary secondments to may also be sent on temporary secondments to other Unilever Divisions or to universities, either in the U.K. or overseas.

#### Do you want to know more?

We shall be glad to advise you at any stage of your scientific career, and especially to discuss the possibility of future employment with those graduates who are going abroad for post-doctorate fellowships. An appointment with a representative of Research Division when he visits the Physics Department on 10th March and Chemistry Department on 11th March, can be made through your own Department.

A booklet giving more detailed information on research in Unilever is obtainable from your

Physics or Chemistry Department, or from the Staff Officer, Research Division, Unilever House, Blackfriars, London, E.C.4, telephone FLEet Street 7474.





## Travel '66

Photo kindly supplied by the Bulgarian Embassy

## Bulgaria a new horizon

MANY STUDENTS who have visited Western European countries may feel that these are more or less old hat to them and that they would like to spend a vacation in Bulgaria.



SICILY

At Castroreale, near Messina, we have selected a tourist village for our 1966 Anglo-Italian Centre for young people. The village is situated by the sea within easy reach of the main tourist resorts, like Taormina or the Aeolian Islands, and in an ideal geographical position for excursions to sites of Archaeological interest. A fortnight there at the beginning of September will cost 49 Gns. by air and on full board basis.

For an additional 4 Gns. you can have 20 hours tuition in Italian. This holiday is also being widely advertised among North Italian University Students.

For additional details write to:

DISCOVERING SICILY 69, New Oxford Street, London, W.C.1

Bulgaria is a small country in Bulgaria is a small country in the Balkan Peninsula whose fertile plains and fields look like colourrul car Jets and who let 'how-car ped peaks and sun-drenched beaches are washed by the warm, blue waves of the Black Sea. A beautiful country impregnated with the aroma of rose gardens, blessed with an abundance of grapes and other fruits and vegetables, of tobacco, herbs and flowers. The mild Mediterranean climate low humidity beautiful blue skies and rainless summers make the country a natural holiday paradise.

summers make the country a natural holiday paradise.

Hospitality is traditional with Bulgarian people and is considered an outstanding feature which manifests itself in everyday life. Many villages still preserve the custom of special days of the year when all doors are open to visitors and it is considered a special honour to welcome those of other villages or more distant parts. Young girls receive the guests with joyful songs, and their hosts invite them to the most prominent places at the table.

It is impossible to describe all the rich variety of Bulgarian drinks and

It is impossible to describe all the rich variety of Bulgarian drinks and food, but here are some hints to bear in mind. Try the liqueur made from rose petals, Slivivitza (plum brandy) which is the national drink. Mastika (añ aniseed drink) and different kinus of red and white wines. Never leave Bulgaria without tasting such dishies as the best yoghurt in the world. Trator (yoghurt soupbeaten-up yoghurt with chunks of ice, pieces of cucumber, sprinkled with chopped walnut and other spice). Kebabcheta (meat grilled on cnarcoal) and Giuvetch (a vegetable hot-pot).

PRACTICAL HINTS

Visas should present no problem wheterspressed.

table not-pot).

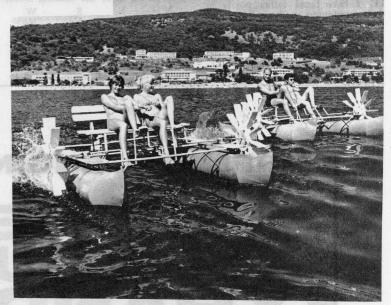
PRACTICAL HINTS

Visas should present no problem whatsoever and may be obtained in 24 hours at the Bulgarian Embassy (12 Queen's Gate Gardens, S.W.7). One pound sterling is equivalent to 5.60 leva in Bulgarian currency; in other words, for £1 you will receive the equivalent of 34 shillings.

A fifteen day holiday at the International Youth Centre at Primorsko (including travel by air) costs £65. There you will meet young men and women (aged 15-30) from as fa apart as Moscow, Paris, Prague, Warsaw, Zurich, Berlin, Copenhagen, Vladivostok and Havana.

The chalets are scattered anaid the green folds of the forest. The big beach restaurant is attractively decorated and serves an abundance of tasty dishes.

There is plenty in store: interesting conversations and fine concerts, excursions and sports, dancing in the evenings and gay fancy dress balls. But if it's peace and quict that you're after, then you can lose yourself amongst the miles of golden sands the forests that come down to the beach and the enchanting river Ropotam close by with its mass of white lilies and teeming with wild life—a veritable jungle.



THE FINEST INTERNATIONAL YOUTH CENTRE IN EUROPE

## Primorsko

ON THE

## Bulgarian Black Sea coast

In 1965 young people from 22 countries stayed here. Sports facilities, unspoilt beaches, and close by the jungle-like Ropotamo river.

15 DAYS BY AIR FOR ONLY £65 ALL



Send for full details to:-

Academy Travel Ltd

26 BLOOMSBURY WAY, LONDON, W.C.I



S. F. Gibson

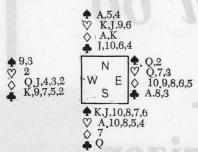
The I.C. 1st IV began the defence of their First Division title with two resounding 8-0 wins over U.C. 1 and the newly-promoted I.C. 11.

moted I.C. 11.

If the ultimate margin of victory is over 46 imps (International match points) in these teams of four matches, the points are divided 8-0, lesser margins counting 7-1, 6-2 5-3 and finally 4-4, when the difference is six imps or less. Over the vears, I.C. I have fared rather poorly in their encounters with I.C. 11, but this season proved an exception, the vast margin was due not only to superior play, but also to the run of the cards, which is shown in the following swing-hand taken from the match.

## First Team Triumphant

Dealer East. Both sides vulner-



At one table, with the first team

air	sitting	N-5,	the bid	lding wen		
N		E.	S	W		
10		No	No	No.		
2H		1D	2D	No.		
4N	T	No	4H	No		
6H		No	5D	No		
		No	No.	No		
n th	a freet	round	Courth	alastad to		

pas and await developments with his powerful two-suiter. North's hand is too strong for a 1 N.T. opener, and a 1 C bid leaves plenty of room for manoeuvring. East's 1 D of room for manoeuvring. East's 1 D intervention enabled South to make the imaginative bid of 2 D, which in this situation is forcing to game. North concluded that partner must hold a major 2-suiter, since with any other combination he would have found an alternative bid. The subsequent bidding sequence was quite orthodox. The 10 D lead allowed declarer to jettison a losing club from dummy at trick 2 and it also gave a clue to the best line of play to adopt. If East had held the A.K. of clubs he would surely have led one of them initially, and also the lead 10 D marked West with the J D and probably the Q D: Declarer reasoned therefore that in order to have sufficient strength even for a weak overcall. East must hold both

major suit queens, and playing in this assumption, North ended up with all 13 tricks for a score of plus

At the other table, the second team pair, although reaching the same final contract, bid the hand quite differently,

N	E	S	W		
3H	No	18	No		
48	No	4C	No		
No	No	6H	No		
	No				

No
South's 1S bid was based on distributed values, and in response to partner's 3H bid, showing a minimum of 15 points, the 4C bid is a stall requesting more information. 4S confirms 3 spades, and this paves the way for the final 6H bid. East, holding the guarded trump queen as well as an outside ace, wisely led the AC, which left declarer with an awkward guess in the trump suit. He elected to play for the drop of the QH, which did not materialise and the contract was thus defeated for a score of -100 to N-S, giving a swing of 16 imps to the first team.

### CHEMICAL ENGINEERS

ICI Mond Division manufactures more than half-a-million tons a year of organic chemicals, many of them based on petroleum feedstocks, as well as the traditional products such as chlorine and caustic soda. Capacity is being increased by a capital investment programme which is currently running at more than £20,000,000 a year, and in everything we are doing chemical engineers are key men.

To match the increasing technological complexity of our processes we are particularly interested in recruiting capable and enthusiastic young men to work on process design and development in its widest sense, from research to full-scale production. Effective use is made of such new techniques as the use of mathematical models in process kinetics, scale-up and control studies, and the application of computers to the design and optimisation of process flowsheets and equipment.

Young men are deliberately given wide experience and substantial responsibility which can fit them for the many senior jobs to be filled in the Division in the next 10 years.

If you wish to learn more about us, chemical engineers from Mond Division will be visiting you shortly and can be contacted through your own careers advisers. If this proves impossible, please contact:-



Personnel Officer (Recruitment), ICI Mond Division, P.O. Box 13, The Heath, Runcorn, Cheshire.



## Zinc water

THE NAME of Pilsner originates from the town of Pilzen in which beer is brewed. The first record of brewing in the town dates back to 1295 when King Wenceslas granted to the Burghers of Pilzen the right to brew beer.

The Burghers, of whom there were 270, were families who owned property in Pilzen. Over the years they found it more convenient to have a common brewery and a Master Bilwer was mach responsible for providing the hops and malt. After each brewing a committee of Burghers would taste the beer to test its quality; if it fell below the committee's requirements the whole batch was thrown away. In 1840 Pilzen laid the first foundations of a proper brewery; by 1842 it was producing its first beer About this time there was tremendous argument on the method of betwing—whether it should be bottom or top fermentation. Put to the vote it was agreed that bottom fermentation should be the method for Pilsner Urquell—which has continued to the present day.

The beer consists of three ingredients—water, malt and hops. The water is a very important commodity owing to its particular proportions of zinc, iron and other elements.

In the first stage the malt is boiled in water for several vate.

elements.

In the first stage the malt is boiled in water for several hours in "kettles"—huge steel vats lined with wood. The solution is then piped to fermentation vats which are also of wood. The famous Zatee hops—one of Czechoslovakia's main exports and used extensively even in this country by many hreweries—

exports and used extensively even in this country by many breweries—are added together with some yeast. It is common practice with some breweries to add sugar to speed this process (top fermentation) but no sugar is added to Pilsner beer, so fermentation takes eight weeks. The turning of the froth on top of the vats to a brownth-white colour indicates that the beer is ready to be piped to large wooden tunnels below the brewery, where it is matured for six months. This brings out the full flavour of the hops and malt for which Pilsner Urquell bear is famed. Urquell bear is famed.

## WHICH WAY IMPERIAL?

## Adrian Fletcher Looks Around

IN THE PAST, criticism has been levelled at the Unions, especially the constituent ones, for concentrating too exclusively on Morphy Days and beer drinking. Most of this criticism has been rasther unfounded and wide of the mark, but nevertheless it has usually contained a grain of truth.

I remain unashamedly in favour of 'sport' functions, because I think they fulfil a vital role in getting people together enjoying themselves and giving us a much needed cor-

people together enjoying themselves and giving us a much needed cor-porate identity, but obviously they must be seen as one part of an existence and not the be-all and end-all of life. To attain its full potential, the student Union must always be considering new ideas and question-ing its present practices, the former being just as important as the latter considering few iteas and questioning its present practices, the former being just as important as the latter. Perhaps the fact that most of the comments and ideas reaching the Union Office here tend to be destructive is one reason behind the somewhat conservative outlook of the Unions in the past. It is undoubtedly true that being one's own pace-setter is not so satisfactory as having a third party in the background with a loaded shotgun. I suppose that the connection between my billing and the above is not immediately obvious, but as the rest of this article is concerned with new ideas, particularly in the constituent union/academic field, it is wise to state our "terms of reference" first.

> Academic matters

I.C. is a big college, 3335 students big to be precise, and it is correspondingly difficult to generalise

students big to be precise, and it is correspondingly difficult to generalise when academic matters are concerned. Let's start by stating that the obvious people on the student side to deal with academic matters are the constituent unions. Given this, what's the score to date?

C and G have the most developed formal relationship of the three colleges with a staff/student academic sub-committee meeting roughly biannually. This covered all the departments, and several of the ideas enverging from it have found their way into courses. Of crucial importance in the success of this venture has been the good will and trust existing between Guilds Union and the Scrior Staff. Mines rely almost entirely on informal contacts, which they find very effective, although they now have a student officer specifically to deal with academic matters. R.C.S. departments vary—Physics committee was disbanded because they found nothing to discuss in view of good informal contackts, while an academic committee set up recently in Chemistry seems, for various reasons, to have got nowhere.

It is interesting to interject here

nowhere.

It is interesting to interject here that the Manchester Conference thought that official representation in all but very small departments was essential, and that informal discussions stemmed from this.

About the future, the most important thing is that the constituent

A DRIAN FLETCHER looks at three of the many problems facing our Unions and their members in the light of (some of) his experiences as President, and the ideas put forward at the recent Manchester conference on European Technological Education.



unions and a good number of de-partments realise the existence of the above problems, and are prepared to work towards their solution. Problems will vary from the general—ESSTE recommended more general—ESSTE recommended more emphasis on the design and costing in courses, the wide-srread issuing of prepared notes before lectures, and more frequent examinations with emphasis on the open book type—to be specific—the provision of a tea machine for people studying Southside car parking! It is important to realise that no one approach ant to realise that no one approach is the best for all cases, and that offe must not try to superimpose a system that has worked with A on B, whose problems are different. What is significant is the fact that more than ever before, constituent college unions are concerned with these problems. What is essential, is the realisation that nothing can really be done without mutual trust and good will between staff and students.

> Onus on student

The second problem, touched on briefly earlier, is one of communication between the Union and its members. One has to decide basically whether the Union should go to the member or the member to the Union. Imperial College Union has, again by reason of its size, chosen the latter course.—je. we provide facilities, services, and opportunities for club etc. activities, which any student can use, the onus being on him or her to do so. The

onus on us as officers is to provide information on all these opportunities—hence the appearance for the first time this year of a year-book, union directory, and the very sccessful single "what's on column in this paper. We are also trying to make more effective use of the notice boards, but without doubt the most important feature in this field is Felix itself. That is why I find it rather tragic when some people, especially some sports clubs where there is a potential of building up 'college spirit', seem incapable of letting the paper know what soes on.

capable of letting the paper know what soes on.

Because of differences in the setupa it is impossible to learn anything direct from Europe in this case. By and large they do however, churn out the information than us, but much of it relates to academic courses which are already

covered here by the college publications. One German handbook goes so far as to comment at length on so far as to comment at tengual the merits and de-merits of engineer-in Germany and

Austria!

One must also, of course, talk in terms of ideas as well as concrete fixtures. What I said earlier about new ideas filtering through, applies more to the constituent Unions but is also true of I.C. Union, A breakdown in communication has occurred ff even one Union member feels that he cannot chat to one of the Union officers about an idea and get a sympathetic hearing.

## Education where and for what?

I noticed recently that "Education for what?" is the title of a Huxley society meeting in the near future. This question, and the equally important one of why people come nere in the first place, is a sphere in which the Union has hitherto played no part whatever. True the former problem is handled very efficiently by college appointments organisation, supplemented in two cases by the old student's associations. What about the latter? European Union publications often provide the only information students receive about their alternative places of study. Some other English University Unions operate systems which enable potential undergraduates to see the Union and chat to present students before they decide whether or not to accept a place. Strathclyde goes so far as to send student speakers out to local schools to give information and answer questions. In fact, because the two previous problems, I have considered tacitly assumed that a student has chosen the right course of study for him or her, this may well be the most important question of all. Well, if you think so, let's hear about it.

Imperial College Operatic Society present a double bill of

TRIAL BY **JURY** 

H. M. S. **PINAFORE** 

by W.S. Gilbert and A. Sullivan

in the Concert Hall, I.C.U., at 7.30 p.m. from MONDAY TO FRIDAY, 14-18 FEBRUARY 1966

Tickets price 3/-, 4/-, 5/- available in the Union at lunchtimes or from Rollo Green (ME1)

FELIX 10



## KEEP THAT BOY-FRIEND Hints for Future Housewives

#### **GETTING SHIRTY**

WASHING: a) Cotton shirts:—Remove collar stiffeners. Wash in a washing-machine, according to the instructions of the manufacturers, or by hand. Wash the shirt in a hot detergent solution. Soiled parts such as cuffs and neckband can be treated by brushing with a a nailbrush dipped in the washing solution before the shirt is put in the machine. Wring the shirt, Rinse twice in clean water, wringing after each rinse. after each rinse.

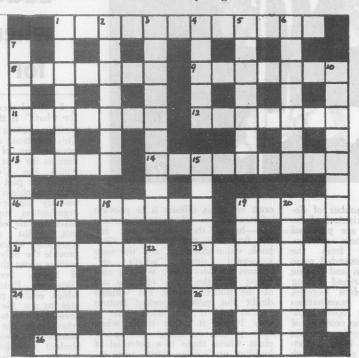
b) Nylon and "Terylene" shirts:—White or cream shirts should be washed separately from coloured garments, because of their strong affinity to any form of colouring matter. Shirts made from these fabrics should never be allowed to become heavily soiled before washing. First soak shirts in a hand-hot solution or detergent for ten minutes; lightly scrub the heavily soiled parts, e.g. cuffs, and neckband. Wash in a fresh, hand-hot solution, and rinse thoroughly. A minimum of two rinses is recommended. Do not wring or twist. Hang to dripdry on a plastic hanger or spin dry for seven seconds, then put on a hanger. An occasional light pressing will restore the finish. IRONING: For cotton, use a hot iron and iron shirt until completely dry. For nylon and

"terylene" use a warm iron. Iron in this order:—1. Iron the wrong side of all double parts. 2. Turn to the right side, place yoke flat and iron. 3. Iron neckband on right side.

4. Iron the cuffs, stretching and pressing fullness away from the edges of the cuffs. 5. Fold sleeves along underarm and iron within ½ inch of fold. Turn and iron on the other side. Refold and press the unironed part. 6. Now iron the main part of the shirt, starting with the back. Next iron the fronts stretching the front bands carefully to avoid creases. 7. Button shirt and touch up fronts. This is particularly important for a good finish. Hang to air thoroughly.

8. Iron detachable collar on wrong side first, stretching well. Iron right side until the collar is completely dry. Unless well stretched, collars may not return to their original size.

#### CROSSWORD No 226 by Roger Cook



**CLUES ACROSS** 

a tasty dish. (7,5)

8. I'm North-east in the diocese, upset by my foes. (7)

9. Railways consume this its gone for the wind. (7)

11. A row around the ship for a period. (7)

period. (7)
12. Three fold value from this warring house. (7)
13. Many a tear in the spring. (5)
14. Has a hat and keeps in front of the field. (9)
16. Made to rise from vile seat—

at tea? (9)

19. Exclaim that its yours. (5)
21. None in quagmires but often in fairy stories. (7)

#### Solution to Christmas Crossword

P	5	24	A	3		4	E	V	1	5	1	8	U	3
Y		U		A		E				0		A		1
8/2	0	M	U	4	U	5		91	A	N	G	M	A	N
0		M		4		M		E		E		B		G
81	A	1	T		1/2	1	R	5	T		13	R	E	E
E		N		13		5		T		14		1		
N		15	R	A	P	E	5	0	F	W	R	A	T	19
1				R		R		P		A				E
12	A	18/2	0	1	N	A	1	P	0	1	N	12		R
		E		3		B		E		N		0		C
20	A	D	E		25	1	0	T	5		22	R	D	U
1		R		23 B		E		H		294		R		L
25	N	E	R	0	Ü	5		26	B	5	C	E	N	E
U		3		N				N		1		N		A
37	E	5	1	G	N	A	T	E		28	A	T	A	A

Covers a foot and hits out? (5,2) A mite ate during a rest period?

Shut up in cone, with nothing to spend. (2,5)

26. Additional material to complete menial task, one point short. CLUES DOWN

A Mexican will keep it smooth running. (7)

2. Beginning to get the answer. (7) 3. A sentimental occasion to sling

4. Put it to rest the wrong way—you il have to pay for it, (5)
5. "L'etat c'est n.oi" claims the

Across the border to reveal the

plant (7,

7. Shut in the dark but gets a che? (4,8)

10. Fatima: just about mad after the day is gone south. (6,6)

the day is gone south. (6,6)
15. Try opinion of feeling after the cricket match? (4,5)
17. Six bears give up south-east, to finish throbbing (7)
18. Politician is hit for such a little devill (4,3)
19. Pick a place to rest. Worried about the airman's seat? (7)
20 Artist goes back down the lanes to the munition's yard? (7)
22. Iron alloy forms the central cylinder. (5)

#### **CROQUETTE AU GRATIN**

Ingredients: Two slices of bread and butter per sandwich. Grated cheese; Branston pickle; Fat for

Method: Take one slice of butter-ed bread and put a layer of grated cheese on it, Spread the Branston pickle on the cheese and put the other slice of bread on top to make a sandwich. Fry this sandwich both sides until crisp and golden. Serve hot

#### STAIN REMOVAL

ELEMENTARY SAFETY RULES: following rules must always be observed and, if you do not know what has caused a particular following rules must always be observed and if you do not know what has caused a particular stain, it is much safer to take the garment to a professional dry cleaner, rather than using trial and error methods which may well ruin the garment. 1. Act as soon as possible on the stain. 2. Test effect on colour on an inconspicuous hem. 3. Use cold or nearly cold water first. 4. Do not apply heat. 5. Work in a circle covering an area greater than the stain. 6. Never use acetone on material containing any acetate rayon. 7. Always rinse thoroughly and wash after removing the stain.

To remove a) Ball Point Pen Ink—Dab with methylated spirit and then rinse thoroughly before washing in detergent.

b) Beer—Dab stain with 20 per cent solution of acetic acid and thoroughly wash out with warm detergent solution.

c) Lipstick—Lubricate the stain with eucalyptus, then apply a few drops of ammonia to a clean cloth and dab stain gently. Rinse. Use a grease solvent such as carbon tetrachloride and wash in warm detergent solution. If any dye stain remains treat with a bleach according to nature of fabric.

#### **ICWA NOTES**

IF YOU want fresh air and a free afternoon's entertainment, come along to the Cross-Country Race round Hyde Park on February 19th. and sell some programmes. If you would like to do this, contact Jane Gaudwell, room 113 Beit Hall or via the Union rack.

DON'T FORGET to get your male friends nominated for Mr. I.C.W.A. to be chosen at the I.C.W.A. party on February 16th. Tickets 2/6. They need to be nominated and seconded by the male members of I.C. Nomination list is on the

male members of I.C. Nomination list is on the I.C.W.A. notice board. Mr. I.C.W.A. is the male representative on the IC.W.A. committee. male representative on the IC.W.A. committee. His responsibilities include assisting in the preperations of various I.C.W.A. functions during the year, having particular charge of the bar. He enlists the help of other males of the college to help decorate the Concert Hall for the I.C.W.A. Formal in March. Also in his favour is the fact that he is the only man who may not be forcibly removed from the I.C.W.A. lounge.

## TV COMES TO GUILDS

## **Electrical Department Experiments** in the Use of Television in Lectures

## Some Lecturers Prefer Television

CCTV IS the name plate which has been puzzling many members of the Electrical Department this year. It is the signature of the department's latest experiment into educational methods.

'CLOSED CIRCUIT TELEVISION' is the signal used at the start of each of the department's experimental programmes. On most Friday,s a cluster of technicians may be seen outside the lecture theatre on level four, which temporarily becomes Imprial College's version of the B.B.C.'s White City Studios.

#### Complete programmes produced

Some time ago under the initiative of the Communications Section of the Electrical Department a small scheme was started to evaluate the possible uses of television as a teaching medium within universities. This is part of a larger scheme which is looking into a whole series of teaching aids from the overhead projector to video-recorded programmes. The programmes produced so far are unpolished and suffer from many technical faults, at the moment they have come to a complete standstill because the very simple recorder that is

being used has had to go away for repair. Most of the faults which are noticeable at this stage are the results of the inadequate equipment that must necessarily be used for this small pilot experiment. The worst one being the break-up of the picture whenever cameras are changed, due to lack of proper synchronising equipment.

#### Visiting Lecturer's reactions

So far these programmes are being contined to the humanities part of the second year course to the humanities part of the second year course as this does not interfere with the degree courses. Already it seems that some visiting lecturers would prefer to give their lecture by recorded television as this enables them to use a greater variety of models and illustrations than would be possible in the conventional lecture. Experiments conducted in the USA also seem to show that in some cases a student is capable of sustaining more serious attention and of achieving greater retentivity with televised lectures, possibly because he' feels that he does not share' the lecturer with so many people. It is capable of being a more personal medium than many others.

#### Electronic Enlarger

The production of complete recorded programmes is not the only aspect of television that is under investigation. For the past year or

more an increasing use of television has been made within the live lecture, for enlarging demonstrations. Small models can be shown to large audiences, and demonstrations set up in a laboratory can be shown to an audience in a lecture theatre. This has obvious uses in other departments where, for example, a whole class can be shown the same microscopic sample.

#### Other Universities

Imperial College is leading the field in some spheres of the study and use of television as an educational medium, although other colleges have had all the publicity. Strathclyde in Clasgow and Leeds are both reported to be running extensive schemes but they are also interested in the part that universities can play in public education and broadcasting, Imperial College being mainly concerned with studies of the use of television within the college department. The scheme at Sussex is a very much smaller affair with only one camera and no recorder.

#### Cooperation with R.C.A.

One of the things that is growing out of this increasing interest within the Electrical Department in the use of television and films is the co-operation between that department and our neighbours in the Royal College of Art. One of the staff of the RCA, Mr. Trevor Scott, has been seconded to Guilds in order to help with the production of the television programmes and a variety of films that are being made in the college. By using some of the facilities, that they have in their film and television unit it is becoming possible for better productions be made than would be possible with the Electrical Department's own small resources.

Our thanks are due to Professor Cherry for answering our questions.

J. Cawson

## Start Made on Work Parties for Notting Hill Housing Trust

NOTTING HILL HOUSING TRUST WORKING VISITS

This term has seen the beginning of visits to the Notting Hill area for the purpose of decorating property bought by the Trust. Each Saturday morning, a dozen or so volunteers help with the work, which comprises painting, plastering, wallpaper hanging etc. The people concerned choose the number of hours they want to work, and a valiant few often spent from 9.30 a.m. to 5.30 p.m. on the iob. The Trust provide all the materials needed and free lunch is provided by Father Diss of the Anglican Chaplaincy.

The guiding influence behind the working visits is a new College society, the O.S.S.—Organisation of Social Services—run by Arthur Francis. As well as the help given to the NHHT, the O.S.S. have also started social work in other fields. During the week, members go to read to the blind. There have also been voluteers to work as supervisors at a children's "adventure" playground, and to work with young people in a coffee bar/youth club in the same area.



The Photo by Colin Harrison shows a party of students from Imperial College at work in one of the houses which is being renovated by the trust

### Felix interviews "University Challenge" men BAMBER GASCOIGNE Photos by Colin Harrison

by Hugh Jones and Tony Firshman

Bamber Gascoigne, "anchor man" of University Challenge, talked to FELIX in Bamber Gascoigne, the New Theatre public house, Manchester as he relaxed after the evening's recording. Bamber, wearing a brown suit and blue shirt, de rigour for such a personality, ordered a pint of bitter and settled back,

saying "Right, what can I tell you".

He said he became "Anchor man" of University Challenge after auditioning together with other journalists and actors—the company desiring to go outside the established circle of quizmasters to further the image of the programme as a more serious form of entertain-

ment.

In the earlier years, he used to set the majority of the questions, but nowdays he only sets the ocasional one, liking to pose the more frivolous question to lighten the proceedings. Asked whether his comments on wrong answers were original or provided for him, he replied that he was provided with the barest minimum solution to each problem but spent an afternoon reading round the questions in an encyclopaedia.

encyclopaedia.

He is thus able to anticipate many wrong answers and to provide just a little more information than is required. This fortunately gives an impression of great omniscience.

Setting questions he said, is a very difficult task. The compiling of the questions bears no relation to the nature of the teams competing, it being almost impossible to set "scientific questions"—these, of necessity are either of 'O' level standard, or if they are to test even a second-year undergraduate, require too detailed a knowledge of the subject to be answered by other than a specialist. However, the majority of people are likely to know about "literature on France".

on France".

Bamber describes his job as "leading the life of an academic, with none of the teaching responsibilities" and says that he receives six fan letters a week. He spends most of his time in either the British or Victoria & Albert museum's researching for the books he is presently writing on the history of the theatre.

It was his interest in the theatre which enabled him to become established in journalism. After graduation, (he read English at Magdalene, Cambridge) he spent a year on a Commonwealth scholarship in the United States studying the modern theatre, and while there he was asked by Hutchinsons to write a book on this subject. This necessitated a year's research back at Cambridge which he said he very much enjoyed. It was here that he decided to enter incurralism as a critic and began writing reviews. journalism as a critic, and began writing reviews for the Cambridge Review. He said it was, then a matter of hawking his reviews round the national press, eventually being taken up by the Spectator.

matter of hawking his reviews round the national press, eventually being taken up by the Spectator.

Leaving the Spectator, he became theatre critic for the Observer (until 18 months ago when Kenneth Tynan rejoined the paper). It was at this period that he was approached to audition for his present post and he is now concentrating on University Challenge. He suggested the television companies tend to turn to acting and journalism (sister profession) for their new talent. Another very good way of gaining an entree to television is to join a TV company straight from university as a researcher, with a view to promotion to director or producer, to the ranks of which they occasionally turn to provide new front-men.

Questioned about the element of deception in television—For example saying "see you again next week" to one of the teams, and in fact saying "hallo" again in thirty minutes—, he suggested that their was no more fraud in this than smiling at a TV camera, when in fact one was appearing in black and white in the homes of millions of people.

This contrast, he said, was unsettling to the novice but eventually it becomes possible to consciously charm a camera—although the presence of a studio audience in a show such as University Challenge was a great help—even more so up to six months ago when the audience in a show sat immediately behind the cameras, (Bamber now sits at one side, the control box immediately in front of him).

At this point, after over an hour of (energetic) conversation, Bem'er Gascoigne suggested the should perhaps speak to some of the other teams,





by Colin Harrison

Peter Mullings, TV director and producer, is an active man. His puckish face and eves reveal h's humour; his pen-and-pencil lined pocket betrays him as a writer and not the actor he once hoped to be.

lined pocket betrays him as a writer and not the actor he once hoped to be.

He is at present director of University Challenge, amongst other things, but his start was in the theatre. In 1945 he spent six months destroying his illusion that he could be a great actor and in 1946 became a stage manager. He continued in this line until the mid fifties when he ioined Granada as an acting floor manager—which involves responsibility for the scenery, props, etc. for each set. The next step was promotion to floor manager whose job it is to represent the director on the studio floor: to yell silently at studio staff or lead the audience in mock applause (why not use a record?).

It was not until 1962 that he became a director, having done a certain amount of producing already. A producer is concerned with organising and coordinating the production of a programme. He is responsible for the expenditure for the programme and, except in drama and similar material, he selects the participants.

A director deals mainly with the script; in documentaries he must occasionally rewrite some of it and have it approved by the author. During a performance he will be seated in the control and may, if the fancy takes him, gesticulate at the studio staff or merely wave his arms wildly in the manner of one caught in quicksand.

Mr Mullings recieved no formal training as a director, the method of initiation used by Granada was swimming-pool type—in at the deep end. So much so that his first week gave him control of eight shows. At first he worked quite a lot on advertising magazines, but in recent times he has concentrated on "University"

Challenge" documentaries and educational pro-

Challenge" documentaries and educational programmes. However, progarmmes are not his sole concern; at present he is engaged in the production of a booklet for the summer schools programme. This kind of work he prefers to do at home as there is less risk of interruption. The pressure of his work is variable: some days he may not go to the studios at all, on other occasions he has had to work until dawn preparing material for that day.

His relaxation is photography, although he feels that his work depends considerably on his photographic ability. It has then a lifelong hobby; he developed his first film at the age of ten and still has a monster lens with which he did much of his early work—until the tragic day when his camera could bear the weight no more. He views the coming of colour television with mixed feelings, "Rather like seeing your mother in law driving your brand-new Rolls over Beachy Head". Too often, he says, directors having no sense of form or balance produce monstrosities in black and white: with colour their scope would be widened.

After his early training in advertising magazines he is critical of contemporary advertising directors. One will come up with an idea and although he cannot explain its meaning, he may have the ability to convince the sponsor it is the right way, whilst the man who can think and explain his ideas is often incapable of communicating them effectively "The average life of a director is five years. What will Peter Mullings do for the remaining twenty years or so until retiring? He recognises that he cannot continue as a director; however, he hopes to use the experience he has gained in altering and ammending scripts to write original scripts and thus remain in the business; "there's not much else I can do".



It is for the scientist and engineer that the future holds the greatest rewards. More and more people like you are wanted. You will need to steer your career into a channel which will allow you to make the most of these opportunities. And one of the best and fastest-growing is the world of communications-in which the GPO plays the leading part.

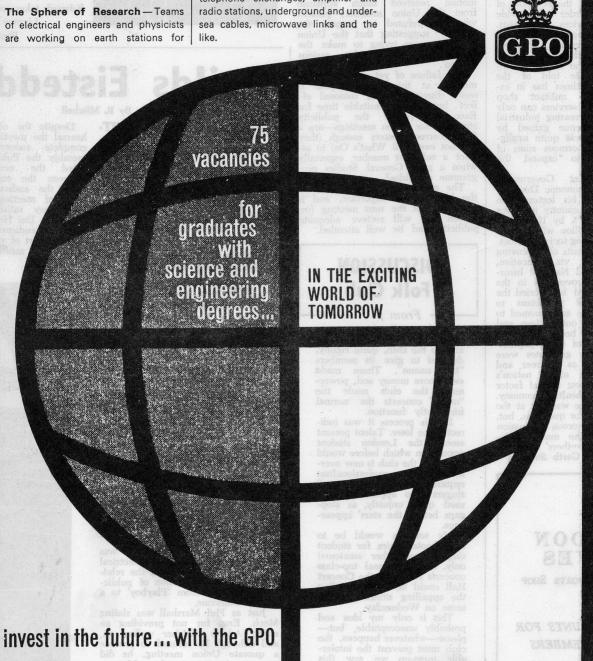
Qualifications needed-You need to be a B.Sc. or Dip. Tech., preferably with First or Second Class Honours (or in your Finals year). In GPO Communications you will have interest, variety and breadth of opportunity-and all that is necessary to succeed.

of electrical engineers and physicists

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Apply (quoting ref. GE/14) to the Director of Research Recruitment (N), Post Office Research Station, Dollis Hill, London, N.W.2.



### Modern **Economics**

### Teaching Essential

One in twenty-tour members of the country's working population is absent from work through illness, was one of the many facts and flugures that J.P. Carruthtrs M.A. used to illustrate his lecture on "How to provide good social services". An extra-mural lecturer for London University, educated at Clasgow and L.S.E., he researches for the Acton Society Trust, and his for the Acton Society Trust, and his lecture on Tuesday 1st Feb. was the fourth in a series concerning modern economics.

economics.

J.P. Carruthers argued that the politics of this century had been and would continue to be dominated by the need to expand the economy of the country, in order to provide adequate social services. Economists, he said, always disagreed about the priorities of social services, but were unanimous in regarding them as essential to the survival of modern industrial society. He told of the difficulties he sometimes has in explaining to more militant shop stewards that social services can only be improved by increasing industrial

stewards that social services can only be improved by increasing industrial output. Extra revenue gained by taxing the "rich" was quite negligible against the enormous sums of money required to expand the social services.

Using the latest Government White Paper on Economic Development to illustrate his lecture, he showed that if this country improves its economy by 25% by 1970, than a further £1500 million will be earmarked for improving social services. In explining the merits of improving marked for improving social services. In explining the merits of improving the social services viz. education, health, housing, and National Insurance, and the improvements in the economy thus gained he decried the present attitude of politicians to education, which, he said, seemed to be the poor man out. More and more schools were becoming inadequate in the face of rising population. Far too few graduates were taking up teaching as a career, and yet the education of a nation's people was the most crucial factor people was the most crucial factor in maintaining a healthy economy.

Far too little time was left at the end of the lecture for questions, but,

nevertheless, a vigorous discussion ensued between the more lively-minded of Mr. Carrothers' audience.

Garth Simpson

#### GORDON LOWES

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# Union Meeting Inquorate Livesey refuses instant debate

Despite appeals over the Union toudspeakers by President Fletcher. the IC Union meeting on the 27th January was inquorate. The motions to be debated—the loans question and the proposal that the President of the Union be elected by a free vote of the Union—remained undiscussed, although Fletcher proposed that the debating Society should hold a meeting to debate the presidential question. ential question.

ential question.

Mike Edwards, President of Debates, 'called upon to chair a meeting at an instants notice, handled meeting at an instants notice, handled the affair with great credit; David Livesey, called upon to propose the motion received much applause from the Union members present when he refused to propose the motion, suggesting that the Union executive were trying to make the Union play with 'this serious motion' Union play motion'.

The failure of yet another Union meeting at this time of year is easily dismissed as a seasonal effect, but this is a suitable time for fect'. but this is a suitable time for Exec. to review the publicity structure for Union meetings—are a few incorrect posters enough (they did not even tell What's On) to attract a sufficient number especially when a good General Studies programme coincides?

The matters to be discussed at the Meeting are important, and it is hoped that the next meeting (on March 3rd) will recieve adequate publicity, and be well attended.

### DISCUSSION Folk Club

From p. 5

original small hootenannies made a large amount of money and so the club, quite rightly, decided to give its members "big names". These made even more money and, powermad, the club made the "name" concerts the normal fortnightly function.

In this process it was indirectly the loser. Talent present among the London student population which before would appear at the club is now overawed by the professionalism. original small hootenannies

awed by the professionalism required. The four "amateur" singers who appear are now used quite unjustly, as stop-gaps before the stars' appear-

My solution would be to My solution would be to have hootenannies for student singers (and other amateurs) only, and occasional top-class concerts for which the Concert Hall could be hired, avoiding the appalling situation which arose on Wednesday.

This is only my idea and probably unacceptable, but—please—whatever happens, the club must prevent the intoler-

please—whatever nappens, .... club must prevent the intoler-saw this able mess-up we saw this week. This can only drive College members away, leaving the IC club to the teenage "fans". age "fans". ROGER KITCHING (2003)

Ed: Owing to shortage of space this letter has to be cut; the full text my be seen in the Press Room.





Edwards takes over from Fletcher; Livesey speaks

Photos: Colin Harrison

## **Guilds Eisteddford**

OBSCENITY AND LAUGHT-ER were the two most not-able ingredients of Guilds' Union meeting last Thursday, which took the form of a Festival of Music and Culture', or "Eisteddfod" (Dai Howell) Three members of staff agreed to come and act as judges of the entries, which came from the various departments in Guilds.

The meeting opened with the removal, by popular request, of two RCS men, cleverly disguis-ed as Icwarians. The usual business of a Union meeting was dealt with in typical Guilds style; Mr. Phil Marshall, Guild's Publicity Officer then introduced the various contributers to the

Chem. Eng. I provided the first taste of music, with renderings of well-known favourites on paper-and-comb and bottles. The Bluebell girls (most of whom were truly female) bemoaned (in sosng, of course) the moral state of Guildsmen, and the fate of Icwarians at their hands. Dave Stern of Civ. Eng. & gave a solo performance of a well-known song about belts and locks, which seemed to be appreciated more by the judges than the audience, since he was awarded first prize (a bottle of Scotch).

The first taste of culture was given by a group of Electrical Engineers who compared the relative merits of a selection of publications, ranging from 'Playboy' to a Parish magazine.

Just as Phil Marshall was slating Mech. Eng. for not providing a parter.

Just as Phil Marshall was slating Mech. Eng. for not providing an entry, Adrian Fletcher walked in and although he refused to provide a quorate Union meeting, he did agree to sing a song about Mooney food, (verses one and four only, the other two were not available at such short notice). Phil Marshall completed the Mech. Eng. entry with a ed the Mech. Eng. entry with a brilliant re-hash of the death of Nelson—he managed to dispense with the normal cast of two million. and took on the two major parts

Despite the obvious lack of rehearsal the meeting seemed to be a complete success; the Executive (notably the Publicity Officer) provided the necessary continuity between the entries and at all times the audience joined in the spirit of meeting. This must have been very satisfactory to Guil is President, Dai Howell, since he believes that audience participation is an essential part of any Constituent College Union meeting.



Hardy photo: Nigel Shindler

## Planning.or Life?

TWO WEEKS ago Professor R. S. Scorer, Professor of Theoretical Mechanics at this college, talked to the Huxley Society on the theme of 'Planning or Improvisation?' The audience was less than he deserved, but as usual we found that this only made the discussion afterwards more rewarding. He talked of many things: on the need to live life by a series of provisional hypotheses to avoid rigid planning, about the care we must take in our attempts to help the developing world without disrupting their traditional life. The fact of being happier in later life as a Professor than as a Junnor Lecturer. It was interesting that the last war seemed to have been one of the most influential events in the Professor's life, suggesting perhaps that a mandarin life of calm achievement does not teach one all one needs to know. The Professor held the typical humanist view that imaginative sympathy is sufficient for an appreciation of human suffering, without the necessity of intense experience. This thinker, at least, beheves you at least have to take the risk occasionally.

Have there been absolutes in humanity's moral history? The Christians insist there have; the humanist claims that morality is culturally determined, largely if not wholly. Certainly there has been moral invention; but to accept historical relativism is to bow the head to brute insensate forces, a superstition humanists should have

### Con. Soc. in Sth. Ken.

A DEBATE was held on 28th. January at South Kensington Conservative headquarters between I.C. Conservative Society and South Kensington Young Conscriptives. The motion before the house was "This house believes that the Component should believes that the Component should believe that house was "This house believes that the Government should make further provision in health, welfare and education in the form of tax rebates." This motion was proposed for I.C. by David Reich, ex-President of debates, and seconded by David Darbyshire, Vice-Chairman of I.C. Con. Soc. It was opposed by Kelth Brian, a renowned speaker in debating competitions, and seconded by Molcolm Hoskins, membership secretary of South Ken. Y. C's. in the chair was Dr. Peter Draper, an ex-member of I.C. now cnairman of South Ken. Y.C's. and a lecturer at Sir John Cass.

As usual Mr. Reich rose to the occasion with an eloquent speech and was very ably supported with an excellent and direct speech from Mr. Darbyshire. The opposition strongly attack of the principles behind the motion but where unable to find an adequate alternative. After a sometimes heated debate from the floor, the motion was put to the vote being carried by 33 votes to 26 with 8 the Government should make further

the motion was put to the vote being carried by 33 votes to 26 with 8 abstentions.

This meeting, it is hoped, was a prelude to further joint meetings. The South Kensington Y.C's. programme can be obtained from the Con. Soc. notice board in the Union entrance hall.

#### QUOTE from an I.C. Hop:

It is not only the groups that attract people, "I come to I.C. hops because the girls are prettier here.", was the comment of one U.C. visitor.

outgrown; one that abolishes the basis of respect for ethics in fact.

By and large, the meeting approved of improvisation if not of living dangerously. If these were doubts, they were probably due to a confusion of having a clear-cut objective with rigid planning.

### Spoilsport

Twelve(!) people were apprehended by an I.C. security guard at mid-night of Tuesday plaving football in Prince's Gardens. While no doubt ACC would applaud the spirit be-hind their action the Potter was not pleased and persuaded them to return to Southside whence they came. came.

P.G. CONFERENCE

#### The New Testament

GORDON PHILLIPS, the senior Anglican Chaplain to U.L. has a wide education in mathematics, philosophy and theology. He led a conference of twenty I.C. Anglican and Methodist postgraduates on Sunday 30th January. priorities of social services, but we are unanimous in re

The subject under discussion was "How far are the gospels reliable". More and more emphasis is being placed these days on an understanding of just what the New Testament

ing of just what the New Testament documents are, and how we are to make use of them.

Many people, both inside and outside the church, still think the

gospels claim to be historical accounts of happenings in Perestine in 30 A.D., and on this basis many are bound to reject them. However, the application of enlightened scholarship to these texts show them as collections of incidents and teachings used by the early church to preach the gospel. By viewing them in this way, we overcome our difficulties over facts, and may concentrate on the meaning and truth of the rate on the meaning and truth of the gospels.

Alan Gadd

#### I.C. Reaches Finals

I.C. closely defeated L.S.E. in the semi final of the BBC World Services "Quiz International" recorded last Wednesday. The score was I.C. 33 pts. L.S.E. 32 pts. and I.C. now go through to the final to play either University College or King's College today (Wednesday) at the BBC's studios at 201 Piccadilly, at 6.45.

## THEENGINEER Engineers in the chemical industry can fairly claim to face a wider range of interesting problems than in any other industry. ICI is in the forefront

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# group meeting in room 616, Tizard Hall at 5.45 p.m. Westminster Hospital Nurses Home Hop. Eight till Midnight. Tickets 3/-. 20, Page Street; nearest Tube:

St. James' Park.
I.C. Dancing Club. Learn dancing

Union Building.

with Ronnie Ensum. 7.30 p.m. Beginners Ballroom. Concert Hall,

Union Building.
Saurgle. A college review, presented by Battersea C.A.T.
C. & G. Engineering Society.
Sherry party, guest speaker Mr. R. J. Ashby. Elec. Eng. Snr. Common Room at 6.00 p.m.
I.G. Art Club. Relax with paint. R.C.A., Huxley at 6.45 p.m. each Thursday.
The Mother Earth. Presented by the Aetherius Society. Some occult

The Mother Earth. Presented by the Aetherius Society. Some occult revelations, concerning the Earth. Room 452 Mech. Eng. at 7.00 p.m. Buddhist Culture Society. "The Importance of Meditation". Talk and demonstration by the Ven, Malia Vijit at 7.30 p.m. in Elec. Eng. Common Room (level 6).

Teaching Week. Joint Worship led by Mgr. Coonan at 6.15 p.m. in the Concert Hall followed by a party at 7.30 p.m. in the Union. Bar. Everyone is welcome.

"Alcoholism" Teaching Week 1966.
1.10 p.m. Room 303, Mines
Buildings.
Friday's Prayer. Today, and every

Friday, Islamic Prayers will be

FRIDAY 11

#### WEDNESDAY 9

I.C. Folk Song Club. Sandy and Jeannie Darlington will sing

Jeann Beauty and Jeann Beauty and Jeann Beauty and Jeann Beauty and Appatachian songs. Inckets 3/- and 4/-.

zz Musicians Convention. Presented by Battersea C.A.T. Arts Festival at 100 Club, Oxional Street.

Street.

"Christ in Industry". George Woodcock and Tom Chapman—Teaching Week 1966. 7.30 p.m. in the
Senior Common Room, Southside.
U. C. Folk Song Club. With Frankie
Armstrong and Michael Jessett.
25 Gordon Street, W.C.1.

#### THURSDAY 10

Felix Staff Meeting. 12.45 p.m.
Press Room (top of Union).

I.C. Rover Crew Meeting, to discuss

comping expedition. the summer camping expedition. 12.35 p.m. in 303, Mines Extensexpedition. ion.

Religious Structures in Britain in A.D. 2,000. A lecture given by Prebendary Gordon Phillips and arranged by the University of London Anglican Chaplaincy. 1.30

London Anglican Chaplaincy. 1.30 p.m. Physics Buildings,
South America II. The second in a series of lectures on the continent.
Today's lecture will be given by Dr.
H.F. Robinson and is entitled: A Historical Survey. 1.30 p.m.
Physics Building.
Catholic Society. Focus Discussion

Gate. Allnight

St. Valentine Pyjama
With the Animals and 4 Dance. supporting groups at Battersea C.A.T.
Aimez-vous les Femmes? Film pre-

held at 1.30 p.m. in 11 Prince's

Aimez-vous les Femmes? Film presented by the Film Society. Also shorts: "Feast of Horror" and "Love, Speed and Thrills". 7.15 p.m. in the Concert Hall.

Canterbury Hall of Residence, present "Canterbury Downtown Ball". The John Morgan Quartet, and Brian Something and the Whatsits. Dress optional. 9-12 p.m. £1-1-0 double.

Folk Dancing Club. All are welcome.

Folk Dancing Club. All are welcome at 7.15 p.m. in the Union Snack Bar.

#### SATURDAY 12

I.C. Exploration Society Hop. In the Concert Hall, The Exiles, and upstairs, the New Sedalia Jazz Band. Union at 8.00 p.m.

Day of Renewal. Led by Father C.
Bryant. 1.00 p.m. in the Union Senior Common Room.—Teaching Week 1966

#### SUNDAY 13

West London Anglican Chaplaincy. Confirmation Service at 9.00 p.m. and Joint Worship at 3.00 p.m. at St. Augustine's, Queens' Gate.

Jazz and Folk-in the Union Lower Lounge provided by I. C. Jazz and Folk Song Clubs. Small

nominal charge may be made.

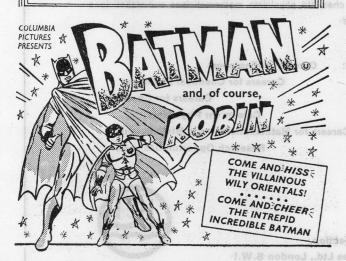
I.C. Jewish Society. Presents a joint social with Battersea and Chelsea Jewish Societies in the Union Lounge, Chelsea College at 7.00

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From Thursday February 10th GALA ROYAL EDGWARE ROAD, AMB 2345 Progs commence weekdays and Sundays 2.45 and 7 o'clock

#### Engineers in the MONDAY 14

MONDAY 14

I.C. Christian Union. A discussion on Summer vacation activities.
1.10 p.m. in Aero 266.

Anglican Chaplaincy, Methodist Society, Catholic Society. Open meeting, Room 303 Link and Spur, Mines Extension.

"Trial By Jury" and "H.M.S. Pinafore"—presented by I.C. Operatic Society, in the Concert Hall, The Union. 7.30 p.m., each night this week. Tickets 3/2 4/- and 5/-.

"General Relativity"—a talk being being given by Prof. H. Bondi, F.R.S., to the Mathematics Society at 4.00 p.m. in the Main Lecture Theatre, Huxley Building.

I.C. Dancing Club. Classes with Christine Norman. 7.00 p.m. Latin American, 8.15 p.m. Jive and Rock. In the Upper Refectory.

H. G. Wells Society. "Water Pollution Problems in Britain". A talk given by Dr. R. W. Edwards. 7.30 p.m. in Room 408, Electrical Engineering Building.

Valentine Party—given by the I.C. Conservative Society with South Kensington Youth Conservatives.

### TUESDAY 15

Contemporary Theology. J. J. Parker. Arranged by I.C.C.U. 1.30 p.m. Physics Building.

Musical Forum and The Listener. The second of a series of lectures given by Denis Matthews, international concert pianist, and Visiting Lecturer at I.C.

Economics of Everyday Life 6. "How to keep Britain Solvent"—a survey of our balance of payments problems; given by J.P. Carruthers, 1.30 p.m. in the Physics Building.

Wine Tasting Society. Mr. Gerald McCarter, director of Maurice Mayer will be giving a lecture,

and tasting, on the subject of Moselle wines. 5.35 p.m. in the

Moselle wines, 5.35 p.m. in the Union Snack Bar.
Catholic Society. Focus Discussion Group meetings in Tizard 547 and Selkirk 475 at 5.45 p.m.
St. Godrics College Dance. Porchester Hall, Bayswater. (Nearest Tube Royal Oak). Dancing 7.30-11.30 p.m. to Derek Pyke and his Band and the Remainz. Tickets 3/6. Bar. 3/6, Bar.

C. Dancing Club. Instruction by Ronnie Ensum. Classes: 7.00 p.m. Beginners Ballroom, 8.15 p.m. Intermediate Ballroom. Upper Re-

fectory.

#### WEDNESDAY 16

West London Anglican Chaplaincy, Eucharist 8,30. Concert Hall.
Catholic Society, 8.55 a.m. Mass in 11, Prince's Gardens.
Semi-final of the Gutteridge Cup. Rugby, versus the College of Estate Management, away. Support really welcome. Free coaches from the Union.
Mr. I.C.W.A. Election, At tonight's party in the I.C.W.A. lounge this year's Mr. I.C.W.A. will be elected. Tickets 2/6.
Jazz Stomp in the Upper Refectory,

Jazz Stomp in the Upper Refectory,
Union Building with the Ken
Gibson Big Band and the Splinter
Group. Entrance 2/6 and 1/6 for

u. C. Folk Song Club. With Tony Rose. 25 Gordon St. W.C.1.

#### THURSDAY 17

Felix Staff Meeting, 12.45p.m. Press

Rover Crew Meeting at which Lavenham Guildhall project will be described, 12.35 p.m. in room 303, Mines Extension.

Mines Union Meeting. "Where and When is the next Mines Night"—1.15 p.m. in the Mining Lecture Theatre.

Democracy and Distribution of the Press of the Night of th

Theatre.

Democracy and Dictatorship in South America, Dr. Pe ter will be giving this lecture, the third on South America in a series. 1.30 p.m. Physics Building.

"The Political Scene", A talk given by Liberal M.P., David Steel.

Catholic Society. Focus Discussion group meeting in Room 616, Tizard Hall at 5.45 p.m.

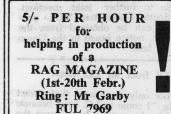
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452. Mech. Eng. at 7.00 p.m.
International Relations Club. Focus on Kashmir: Joint meeting of International Relations Club and Indian and Pakistani Societies. Guest Speakers include Prof. Hugh Tinker. 7.30 p.m. in Physics, Lecture Theatre 1. All welcome.
Buddhist Culture Society. "The Essence of Meditation"—talk and dehonstration by the Ven. Maha

honstration by the Ven. Maha Vijit at 7.30 p.m. in the Elec. Engineering Common Room, level

I. C. Dancing Club—dancing classes with Ronnie Ensum, 7.30 p.m. Begnners Ballroom, Concert Hall. Union Building.

#### FRIDAY 18

Folk Dancing Club. All are welcome at 7.15 p.m. in the Union Snack

#### SATURDAY 19

Forum Christianity 1966. Organised by U.L.U. Social Committee. Speakers include Cardinal Heenan, Lord Soper, Enoch Powell, Wayland Young. 1.45 p.m. Senate

Hyde Park Road Relay. Inter College relay race—90 teams. Start

lege relay race—90 teams. Start at three from Rotten Row.
C. Cross Country Club Hop. With the Deacon Lewis Group, in the Union, at 8.00 p.m. plus supporting Beat Group.

#### SUNDAY 20

St. Augustine's, Queen's Gate. Sung Eucharist—9.00 a.m. Evesong 7.30

Jazz and folk in the Union Lower Lounge provided by I. C. Jazz and Folk Song Culbs.

#### MONDAY 21

Anglican Chaplaincy, Catholic Society, Methodist Society. Open Meeting 1.10 p.m. Room 303, Mines Extension.

I.C. Christian Union. "If God knows all, why pray?"—Dr. A. J. Broomhall. 1.10 p.m. in Aero 266.

I. C. Dancing Club—dancing classes with Christine Norman. 7.00 p.m. Latin American, 8.15 p.m. Jive and Rock. Concert Hall, Union Building.

Building.

H. G. Wells Society. "Teaching of
Business Administration". Prof. S.
Eilon of Mech. Eng. I.C. 7.30
p.m. in room 408 E.E.

#### TUESDAY 22

Pancake Races around Beit Quad.
Executive versus I.C.W.A., and others, 1.15 p.m. in the Quad.
C. and G. Engineering Society.
"Electrical Technology in the steel incustry". Mr. T. Ellis. Mech. Eng. 452, 1.15 p.m.
"The Origins of 20th Century Art" Trevin Copplestone's first talk in a senies on Modern Art. He is both an artist and teacher. Physics Building, 1.30 p.m.
Catholic Society. Focus Discussion groups in Tizard 547 and Selkirk 475 at 5.45 p.m.

I. C. Dancing Club.—Dancing classes with Ronnie Ensum 7.00 p.m.
Beginners Ballroom, 8.15 p.m.
Intermediate Ballroom, Concert
Hall Union Building.

#### WEDNESDAY 23

West London Anglican Chaplaincy.
Ash Wednesday Eucharist, 8.30
a.m. Concert Hall.

## new men... new knowledge... new problems to be solved...

Today's children will grow up in a world that is being remade before their eyes. They will have a wider range of opportunities. They will also face problems calling for new solutions. Today's children need the most imaginative and creative teaching. Teaching by men and women who are among the ablest of their generation...graduates who are among the most outstanding of their year. Teachers have greater influence on future generations than any other profession.

#### What does Teaching offer you in return ?

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Teaching is a vigorous and growing profession. It offers the graduate greater opportunities than ever before, both in developing professional skills and in achieving posts of influence and responsibility - often far earlier than in many other careers. For example, nearly half of the men graduate teachers between 25 and 29 hold such posts and receive salaries well above the basic scale, About half of those in their 30's are heads of departments, earning up to £2,330, or hold even higher posts. One fifth of those now in their 40's are headmasters who may earn salaries up to £3,850. The prospects are even

better for graduates with first or second class honours, or a higher degree.

#### New ideas - new initiative

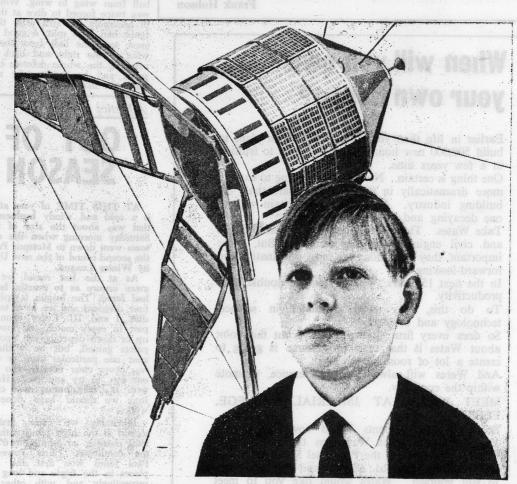
The mastery of teaching skills and the evolution of new methods are a stimulating challenge. New discoveries and new knowledge present teachers with problems for which there are no precedents. New communication techniques and aids must be developed.

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Some graduates feel uncertain whether they are temperamentally suited to teaching. The one-year post-graduate training course equips you to start your career confidently on a basis of practical experience as well as theory.

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Talk things over with your Appointments Board, and ask for the new booklet, 'Careers in Education for Graduates', or write for a copy to Room 114 (22E/1) Department of Education and Science, Curzon Street, London, W.I. It describes the schools of today and the kind of teachers they need; their salaries and special



He needs trained minds like yours to fit him for tomorrow's world

## Sportlight

## CHEERS ALL ROUND

I WAS VERY pleased to see a sizeable and vociferous band of supporters along the touch line at the last Rugby Cup match. They were rewarded with a good hard game and I'm sure that their presence was a great encouragement to the team, helping them to finally overcome L.S.E. in the closing minutes. Amongst those watching was the President who sets a good example to others by attending every I.C. cup game:—he even came to see the Nos Galan team off from Westminster at midnight,

Westminster at midnight.
Whilst I'm on this theme; I hope there will be plenty of support for the Hyde Park Relay (see this page) and also plenty of helpers. With over 500 runners and the hop to run afterwards the Organisation presents a formidable problem for the Cross Country Club and they need every help they can get. There are very many small jobs that need to be done both on the day and at most times from Friday tea-time to Sunday afternoon (18th-20th). It is an important event and worthy of our best effort so if you can come along please do:—Stoats members please note. please do; -Stoats members please note.

## WANTED FIGHTERS

On my ocasional trips to the Gym (I have been known to train sometimes) I have noticed that the Boxing Club is at last stirring from its years of hibernation. Under the leadership of Tony Collings, several students are holding regular practice sessions and it would be good if there could once again be a full-blooded Boxing Club in college. There must be some people here who have fought before or have the necessary abilities and with the frequent tournaments at the Albert Hall it should be possible to arouse some interest. However Tony will not be with us much longer and any prospective pugilists need to meet soon and decide upon some action.

The same suggestions could well be aimed at Boxing's equally dormant partner—Gymnastics. It is in some ways the nearest thing to pure sport and would again be a useful addition to I.C. sporting life. However it is not a sport to be practiced alone so, once again, get together; via me if it helps.

Frank Hobson

## When will you own your own house?

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One thing is certain. No industry is going to expand more dramatically in the next 20 years than the building industry. It's got to, or Britain will be one decaying and overcrowded slum.

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So does every firm in the country, but the point about Wates is that their programme is going to

create a lot of room at the top.

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MEET WATES AT IMPERIAL COLLEGE, FEBRUARY 18th

See your Appointments Board now and get an appointment to meet Wates on the above date. Or you can write to the Personnel Manager, Wates

Ltd., 1260 London Rd., S.W.16, and arrange a time to suit yourself. Wates would like you to meet

WATES BUILD WITH CARE

graduates who have joined the company in the last ten years, and get their viewpoint.

Soccer

## I.C.GO DOWN — to 10 men!

I.C. started this match against the Cup holders in excellent style, combining well and moving the ball quickly and accurately from man to man... the forward line continually broke through the Kings defence and Hopwood was unlucky to see his header go just wide from a Crawford free kick. Such was the pressure exerted by I.C., due mainly to the wing forwards snapping up chances, that it took King's ten minutes to launch their first attack.

King's were lucky to survive this King's were lucky to survive this early period, but once they had settled down their football matched that of I.C.'s. The play was a delight to watch with both teams fighting hard for the ball and using it intelligently. I.C. still had the edge thanks to the defence maintaining a tight hold on the opposition forwards and still managing to distribute the ball to the forwards

#### Good King's form

Good King's form

However, towards the end of the first half King's at last showed their cup-winning form, and were gradually overcoming the college defeuce by the speed with which they interchanged position and switched the ball from wing to wing. Woitowicz was twice forced to dive at the feet of oncoming forwards after the defence had been split. A good King's move took the ball from their left wing to the right and back again, catching the whole defence by surprise, and he inside right nodded home the first goal.

I.C. fought hard to erase this goal and several times forced the King's defence into a muddle. An intelligent move on the right wing ended with Hunt firing a low hard ball across the goal but the keeper was able to grab it before the I.C. torward could reach it. Only a minute before half time the King's goalie had to leave the field with a sprained ankle won cutting out a sprained ankle won cutting out a high cross.

#### College fight back

The second half began with the ball moving from end to end; but then I.C. began to recover their earlier form and were unlucky not to force the equaliser. Bentham and Widelski were particularly prominent but the King's defence held tight and must be congratulated for the way they with stood I.C.'s attacks with only ten men. with only ten men.

#### Final goal

As in the first half King's fought back into the game and were again forcing the college defence into mistakes. From one of these the centre forward pounced onto a poor pass, evaded a tackle by Fairholme and placed a good shot into the corner of the net from the edge of the penalty area.

I.C. put all their energies into attack in an effort to save the game. Eastell. Bentham, Hopwood and Widelski all forced the King's defence into hasty clearances and once

fence into hasty clearances and once again the opposition were pinned in their own half by some stout tackling particularly from Holmes, Johnson and Fairhalms son, and Fairholme.

John Todd

Athletics

## OUT OF SEASON

AT THIS TIME of year athletics is a cold and windy business; and that was about the size of it last Saturday morning when the college team went down to Motspur Park for the second round of the new University Winter League.

As at the last round we came away unsure as to exactly how me had fared. The league is split into four divisions and we have teams in

four divisions and we have teams in divs. I and III. Every team takes part in every match and movement up or down depends, not upon total points gained, but on wether you beat one particular team or not—it was percentaged. was never clear exactly who it was our turn to try and beat. However with I.C. contributing most competitors we should have done quite well.

well.

Inevitably we came first and second in the high jump with Leon Hall clearing an admirable 6'0 for the conditions. Chris Power and Paul Jones won first and second places in the triple and long jumps respectively and with other third and fourth places the results, when we get them, should be reasonably inspiring.

On the track we were not nearly so successful. The conditions, windy, soggy and very slow so that the captain's astronomical time in the half mile still left him in sight of the

half mile still left him in sight of the

#### SPORTS SHORTS

Soccer R.C.S. R.C.S. beat Mines and won the Tech Cup having already beaten

The 5ths v 6ths needle match ended in a 3-3 draw.

Rugby
Next round of the Cup v C.E.M. away Wed. 16th.

Cross Country
A surprise win over a strong St. Mary's team by 28pts-32.

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## A GREAT FINISH

SHRUGGING OFF the effects of a four week lay off and the absence of a key player for almost two thirds of the match, I.C. brought a damp and gloomy Harilington to light with a final five minutes of superb rugby. During this period they scored two tries, giving them victory over L.S.E. by 9-3 and a place in the semi-final of the Gutteridge Cup.

For the greater part of the afternoon the game had been exceedingly drab and consisted of long periods of indecisive play punctuated by over optimistic penalty shots at goal. The early ascendency of I.C. was brought to a premature halt after 25 minutes when scrum half Davies was forced to leave the field with a cut eve. His place was taken by wing forward Bentley who turned in a brave performance, but condemned to a slow service behind a seven man pack, he recieved an unwelcome amount of attention from the L.S.E. forward during a second half when I.C. were rarely on the attack.

#### indescision

The set scrums went in I.C.'s favour throughtout the game, Howell taking the heads 6-3, including one vital ball under his own posts. In the loose, however, I.C. often failed to press their advantage and many good movements finished with a slow heel or unnecessary loss of possession. The lineouts were generally even but frequently ended in indecisive mauls or with the award of a penalty.

indecisive mauls or with the award of a penalty.

Amongst the I.C. backs Chappel was always dangerous, Ballard made the most of the few chances he was given and Riley on the other wing though tightly marked succeeded in slipping the leash during the dying minutes. At outside half Mills kicked well and did his best under what must have been intolerable circumstances while behind him full back Molam although often erratic, kick-Molam, although often erratic, kick-ed some long touches and made a brilliant run that was the highlight of the first half.

by Mills took I.C. on to the offensive. Further attacks ensued but keen marking and poor handling prevent-ed any decisive break. Then came the injury to Davies and strangely enough a period of I.C. pressure which ended with them taking the lead in the 35th minute—Ray kicking a relatively easy penalty to make the score 3-0 at half time.

#### L.S.E. press hard

L.S.E. press hard

The restart saw h.c. soon on the defensive, with L.S.E. exploiting the blindside weakness and the half way not ten minutes old before L.S.E. levelled matters with another penalty. The absence of Davies now appeared to be having a telling effect and while all I.C. movements were swamped in the covering defence L.S.E. looked increasingly dangerous. Another L.S.E. penalty shot hit the upright, stretching I.C. supporters' nerves to breaking point (judging by the squeals of Miss Pocock!) but somehow the storm was weakened and in fading light and drizzle a draw began to seem inevitable. seem inevitable.

#### final fling

final flung

Then, with four minutes left, a line out on the far side saw the ball whipped out to Riley who, for once finding room to move, beat three men before being forced into touch. From the resulting line out came a maul and from the maul burst Ray, flattening two would-be tacklers before feeding the ball to Riley, who found Casson at his elbow to take the pass and go over for a try hotly disputed by L.S.E.

The kick failed and with only seconds lfte, L.S.E. kicked off. A



Bentley collect from the lineout with winger Riley ready for the pass. Dai Howell looks somewhat pregnant.

Ray, although perhaps out of position, led the side in an exemplary manner, was a tower of strength in the mauls and made several powerful runs. The remainder of the pack responded magnificently to him, in particular O'Reilly who for most of the game did his utmost to do the work of two players.

The match began with a fruitless 50 yard penalty shot (one of 13 attempted by both sides) by L.S.E., who then exerted early pressure. However good forward play combined with some skilful angled kicks

clean catch, two passes and there was O'Reilly tearing up field (at a speed that would have shattered his record for the Knightsbridge run!) only to be brought down some 15 yds. out. At last came the elusive quick heel and a flowing movement saw Chappel make the half break, completed by Ballard who scored a fine try wide out. This move proved the final one of the match and the wristle followed close on the conversion attempt to herald a deserved I.C. victory



Mitch Davies clears from the scrum shortly before he came off with a cut eye in the first half. Photos by F.D.H.

Road Running

## IT'S OUR BIG DAY

ON SATURDAY WEEK I.C. takes it's annual dip into the sporting limelight of the country. February 19th is the date of the Hyde Park Road Relay when teams of athletes from Universities, Technical and Training Colleges all over the British Isles converge on the Union to fight for one of the two cups awarded.

Run round a three-mile course enclosing the Serpentine the race will be contested by over ninety teams of six runners each, forming the most representative student

still very strong though they have no outstanding stars and Borough Road, with the ever improving Tony Moore could run them very close. Loughborough are naturally strong, as always and there are many, fast-improving teams, who could spring a surprise. The prospects for the medal for the fastest lap (which seems, incredibly, to improve every year) include people like internationals Mike Turner, Pete Yates and John Hammonds.

teams of six runners each, forming the most representative student sporting gathering that is held. Even B.U.S.F., and U.A.U. do not combine students from the Universities of Great Britain, Northern and Southern Ireland, "Techs', T.C.'s and military academies:—we do.

The outcome of the race is this year as much in doubt as ever it was. Last years winners, Leeds are

## 21st FEBRUARY and MARCH 2nd

On 21st February and 2nd March Esso will visit the Imperial College of Science and Technology, London to meet Chemists, Chemical, Electrical and Mechanical Engineers and Mathematicians.

We need graduates in all these fields to help us to expand and modernise Fawley Refinery. If you are interested ask your Appointments Officer to arrange an interview. Ask him too for a copy of our booklet 'Careers for Science and Engineering Graduates at the Esso Refinery, Fawley'. Alternatively, write for a copy and for any other information you require to:-

J.G. COOPEY, Employee Relations Department, Esso Refinery, Fawley, Southampton.



# TELLA WEEKEND DEADLINE

## CHEMISTRY EXAM CRISIS OVER?

THE PART ONE Final Examinations for second-year Chemistry undergraduates have been returned to their original dates. This was the result of discussions between IC President Adrian Fletcher and the Head of the Chemistry Department, Professor R.M. Barrer, last Wednesday.

Professor R.M. Barrer, day.

However at the time of going to press it seems even more likely that the national rail strike projected for Valentine's Day will take place. To guard against this ten rooms have been made available in Halls of Residence for those entrants who live a considerable distance from the College.

As a further safeguard the suggest-

As a further safeguard the suggestion made by Mike Scott, RCS President, that the exams should be deferred until the afternoons in question has been implemented.

## Scaffolding to go?

A 20% INCREASE in parking space has been achieved in the Southside (residents') car park by the efforts of the Car Parking Committee.

Ten places have been gained by the removal of five vehicles which did not belong to current Southside residents and were not registered with the College, and another five which were registered but were in a state of disrepair are either being repaired or have been removed.

One vehicle having neither in-

One venicle having neither insurance nor taxation has been moved to the Imperial Institute Road, while the owner considers his position, where, not being registered with the

College, it is committing a trespass (as it was in the Southside park) and will have to be moved.

The scaffolding presently in front of Southside would disappear under a schoole put forward by the Committee to introduce diagonal parking unttee to introduce diagonal parking places to the road in front of Southplaces to the road in front of Southside. This scheme would give a net
increase in the number of places
available, while giving due allowance for (improved) access, and
would remove the ugly scaffolding.
rlaces would be reserved for the
other (non-college) users of the roadway (Air Squadron etc.) and for
motor cycles and delivery vehicles.
It should be noted that the roadway in front of Southside is a
general I.C. parking place, but that
the car park and ramp on the Eastside site is for Hall residents of
Southside only.

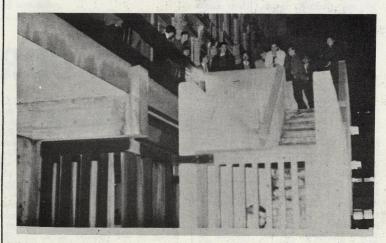
The committee have also suggested that a gate be installed at the

The committee have also suggested that a gate be installed at the rear entrance to the Southside park, to prevent access to the park from that unlit direction at night—this to help prevent some of the frequent thefts. The gate would cost £40 to install, and as the park will be closed on the commencement of East side is unlikely to materialise.

I. G.

## "Mod" Battle at Hop

Until last Saturday, although the "Mod" representation at the Hop had been steadily increasing throughout the year, there had never been any serious trouble. The fellows had been merely content to dence among themselves—practising the latest steps—or to jour at their girl-friends. Unfortunately, they now seem determined—practisely because of their increased numbers—to disrupt the dances.



## BALCONY ESCAPES FAIL TO OPERATE

"I am very worried about the present cituation"—so said the Domestic Bursar on Friday after the

present shuation—so said the Domestic Bursar on Friday after the fire practices in accomodation buildings on Thursday.

The practices, following letters to the Secretary of the College and the Lomestic Bursar after the inadvertant ringing of the fire alarm bells in Southside and pointing out that no practices had been held in that building for two years revealed defects in the Southside alarm systems.

Several of the alarm bells failed to sound and the automatic locks on the balcony escapes failed to operte—see letter on inside pages. Mr. Anthony, fire officer, commented that he was, in the hands of the maintainence departments, but that more regular checks would be introduced, including monthly fire practices. Domestic Bursar Mr. Domestic practices. Bursar

Seaford who had unlocked the mal-

Seaford who had unlocked the malfunctioning door using a key, commented "I'm worried; I live at the top of the building" and said that he had instructed that if there was any doubt as to the reliability of the doors, they were to remain unlocked. Southside has been the source of much controversy over its fire precaution—the LCC would not allow the building to be used without the construction of the balcony stairways and also insted that the alarm bells be replaced as they were not loud enough; since then the charges for the bells have been replaced as they firstwere not powerful enough, and gates have been receted at the feet of the balcony stairways—Mr. Anthony commented "a move in which security and fire safety conflicted."



Bradford Jowestt and a D.K.W. formerly in Suthside Car Park

Plates and offset printing by WEST LONDON OFFSET CO., 86, Lillie Road, London. S.W.6. Tel.: FUL 7969

On Saturday at about 10.00 p.m., a group of approximately two gozen congregated near the stage and then in single file barged their way through the dancing couples towards the main door. Here they regrouped and charged four abreast towards, the

the main door. Here they regrouped and charged tour abreast towards, the stage, cornering someone whom they immediately knocked to the floor. Girls ran away screaming and couples fled in all directions. Several people then rushed downstairs to bring reinforcements from the bar, but the fighting had subsided before they arrived on the scene.

This type of behaviour cannot be tolerated; it has never happened before during my three years in college. The number of male outsiders at our dances will soon be in the majority, and, together with their thirteen to sixteen year old girlfriends, they will completely monopolise the dances. Surely nobody at I.C. wants their presence because they tend to attract very young girls and offend the type of women we would like to see. The dances are run primarily for the benefit of our own students so that they—being in a practically all-male institution—can meet women of the same age and outlook from other colleges.

We must therefore restrict entrance to students only, otherwise we will become the local "Mod" meeting place. Other colleges are barring their entry, nd unless we do the same I.C. will be—as we are to

barring their entry, nd unless we do the same I.C. will be—as we are to some extent at present—a cheap night out for many more undesir-

This means, regrettably, a form of segregation, but many private dance halls have to enforce discriminatory regulations to promote an agreeable atmosphere for their particular clients. We have now been forced to

Barrie Pichler

#### **MECH ENG**

Cont. from p. 1

gree Kelvin, and candela (luminous intensity). These have the following unit symbols assigned to them: m, kg, A °K, cd.

The United Kingdom is starting to change to a metric system at a time when a newly rationalized set of units is coming into international use, and thus will not have to make two changes. The International Organization for Standardisation has adopted the SI, and it is expected that it will become the generally accepted system throughout the world.

## Ubbelohbe joins A.R.C

Professor S.R.I.P. Ubbelohde F.R.S., head of the Department of Chemical Engineering and Chemical Technology at I.C. has been appointed member of the Agricultural Research Council.

FELIX LATE NEWS FELIX LATE NEW FELIX LATE NEWS FELIX LATE NEWS 'IATE NEWS

### Editor T. Doe. Assistant - Nesta Ploadon

RAIL STRIKE.

Plans have been made to accomodate extra persons on the College site in case of a rail strike. These plans, include providing beds on gallery levels of Southside Halls, in

the Union building, and in other College buildings.

The arrangements made by the Domestic Bursar will enable 163 men, 6 women and 34 staff to be accomodated, at 24 hrs notice if necessary. It is intended to provide for those nece sary to the smooth and safe running of the College, and then make other beds available to staff and students who otherwise would experience great difficulty in getting to College.

A LETTER FROM THE PRESIDENT .- Dear Sir,

Although it is not my normal policy to burden your columns with my correspondence, I feel that as Mr. Livesey's extraordinary letter ib the main issue directly challenges my personal integrity, some sort of reply is necessary.

I shall ignore the references to a witch-hunt, and the allegation that the executive is trying to prevent a lobby by "fixing" dates. Any reference to people with more than Mr. Livesey's meagre knowledge of these topics, will confirm that these comments are in the first place wildly wide of the mark, and in the second, downright untrue.

With regard to the second paragraph, the executive was concerned and interested enough in the subject of loans to accord a 100% turn-out at the Union meeting to listen to the views of the Union Members. The only trouble was that not enough of the latter were interested enough to turn up also. (Certainly this was not due to lack of publicity)

I am not particularly concerned with the fate of Mr. Livesey's motion as it is

purely parochial and whichever way the vote goes, I do not believe any world shattering changes will result. I was extremly disappointed however that the loans topic, which could possibly vitally effect many first and second year undergraduates, also received the "couldn't care less" type arproach. However if Mr. Livesey expects me to do some penance and look humble after inquorate meetings, he is being rather short sited and stupid - he may be aware that I have other responsibilities which also demand attention.

Your correspondent appears to have lowered himself to the ranks of "student politicians" - a breed of which I.C., to its credit, has nearly always been thankfully Adrian Fletcher.

Editor: When asked to comment on our two correspondents letters, the following wish to make it known that they fully concur with Mr. Fletcher's views:-

C. Molam, M. Scott, D. Howell, P. Dean and R. Gash. AISO - after a petition signed by 270 people was received by the executive, it has been decided that the ordinary Union meeting shall be brought forward from March 3rd to Feb. 24th to consider the report of the committee on loans.

RCS UNION MEETING - In spite of a poor publicity, the turn out was fair and two important constitutional changes received their first reading. After the second reading of a "publicity committee bill" had been passed, the new committee was elected. Appetites for THE SMOKING CONCERT on FEB24th. were whetted with an amusing sketch from R. Lethbridge. Forthcoming exchange visits with Sweden and Spain were announced and the Chairman of Ents., gave details of a joint dance with Hanovor Lodge (400 women) on Friday 18th Feb. The meeting closed at 2.20p.m. with a Kangela.

BEAUTIFUL STUDENT -- (see last issue) -- no entries, so the Editor has declared the IC stage in the competition null and void.

STUDENT COLOUR -- At a recent conference at LSE it was revealed that the circulation of "Student Colour", the FELIX-inspired colour magazine to be distributed with student newspapers, seems likely to exceed 50,000. This supplement is hoped to appear in autumn.

COUNCIL SHORTS -- from Council Meeting yeaterday night

HANDBOOK -- Ian Kershaw, Secreatary of RCS, was appointed Editor of the EC Union Handbook

for 1966. No decision has yet been taken on the choice of printers. MIKE -- The siren in mascot Mike's burglar alarm system is to be mounted on the outside of the Union Building. GILBERT AND SULLIVAN GROUP -- £117 worth of wigs were stolen from the Union following last term's production of the "Mikado". The carriers arrived 24 hours after the arranged time and found -- no wigs : THE HALLS REP on Council heard for the first time of the Southside Gates' failure to open in the recent fire practice (see main issue). His comment, "Oh, excellent !"
COUNCIL is to investigate the possibility of placing "No Parking" signs in the centre of
Exhibition Road, opposite the Southside access road. This follows Sunday's four-car

R.J.M. pile-up.

COLLISION IN EXHIBITION ROAD.

On Sunday evening a Southside resident was involved in a car collision whilst turning right out of Princes Gardens into Exhibition Road. A Cortina was partially obstructing easy access towards Hyde Park from Southside, and as he was pulling out in his car, an Austin, he was hit byy a Sumbeam sports car and was pushed into a parked Anglia: this in turn hit a parked van Both the Austin and the Sumbeam were badly damaged , and the Anglia's rear was somewhat bent. After the law took the required particulars, both cars were pushed away and the Anglia left.

SUBSIDIES FOR THE DINNERS; NO CHANGES TO CHEER STUDENT:

Prices for the dinners in Hall are to be increased. Since the begining of the year the basic cost of the dinners has risen to 16/\* compared with 14/6, and it has been decided to leave the subsidy at 8/6, meaning that students (or staff who bring student guests) will be charged 7/6 in future. (This with the compulsory charge of 1/6 makes the total cost to the student 9/=).

the total cost to the student

The subsidy for the wine hall dinners (an extra 2/= for wine ) is to be reduced to the 8/6 for ordinary dinners, so that the wine charge will now be 7/= instead of 5/=, which with charges for the dinner, and a compulsory port and sherry, makes 17/6 in all to be paid by the student. Members of staff dining for their own pleasure or entertaining people from outside the college will recieve no subsidy, and will pay, for example, 26/= for a wine dinner.

The subsidy is made from the interest arising from the Centenary appeal fund, says

President Fletcher, and so cannot be raised at will to meet increased costs,

SHAFE OF THINGS TO COME?

The headline in yesterdays Sennet reads as follows: "After last week's Sennet article on the I.C. chemistry exam skock, Professor Barrer has reversed his decision to put the date forward by one week'. This of course is a misprint and should read: 'After the articl -es in Felix, the Daily Telegraph, the Daily Express AND Sennet excetra---- If this trend cotinues can we expect the following headline from Sennet in a few weeks time?:

'After the article in Sennet last month President Johnson has ordered all his troops

home from Vietnam!??.

T.P.C.D.

SHORTS

CHAIRS: The chairs for the lower lounge were not a particularly good buy, Adrian Fletcher commented, telling Felix that the new chairs purchased this session and scheduled for a ten year life in the lower lounge, will probably have to have their arms repaired soon--but not this session --- and the question would have to be looked into before next year.

NEW HALL ACCESS: A new access road to the Southside car park will be constructed in Prineess Gardens to the west of the present power plant and in front of the future New Hall.

NEW BEER: A new bottled beer is now on sale in the Southside bar. It is Pilsner Urquell-one of Europe's favourite beers, from CZechoslovakia. An article on its history and method of production appears on page 8.

RAG MAG CARRES ON: The L.S.C. is in liquidation but the Rag magazine is being produced by: University College, Queen Mary College, Northern Poly., Goldsmith's College, West HamC.A.T. and Sir John Cass College. This is all that remains from the sad history of London Students' Carnival, forced into voluntary liquidation last month.

RETIREMENT: Bookstall manageress, Miss Larkom, is to retire at the end of this academic year, due to health reasons, after a long association with the Collegee. The Union is to advertise for her successor in the near future.

APOIOGY: Bo was not booked as was stated in the last issue of Felix,

STOUT V. LAGER. ?: the Guinness company recently supplied the bar with twelve Waterford glass glasses. Now only four remain, of the remainder several were known to have been broken, but the rest seem to have been stolem. On the other hand six glasses supplied by Pilsner have remained intact and all acounted for-there must be a moral somewhere!

FIRE GATES. The Southside fire gates whose electrical opening mechanism failed in the recent fire practice, are to be left open until the mechanism is proved to be functioning perfectly, according to a directive from the Domestic Bursar's office.

TEACH-IN ON GOD. A most successful Monday programme, with others to follow during the week.