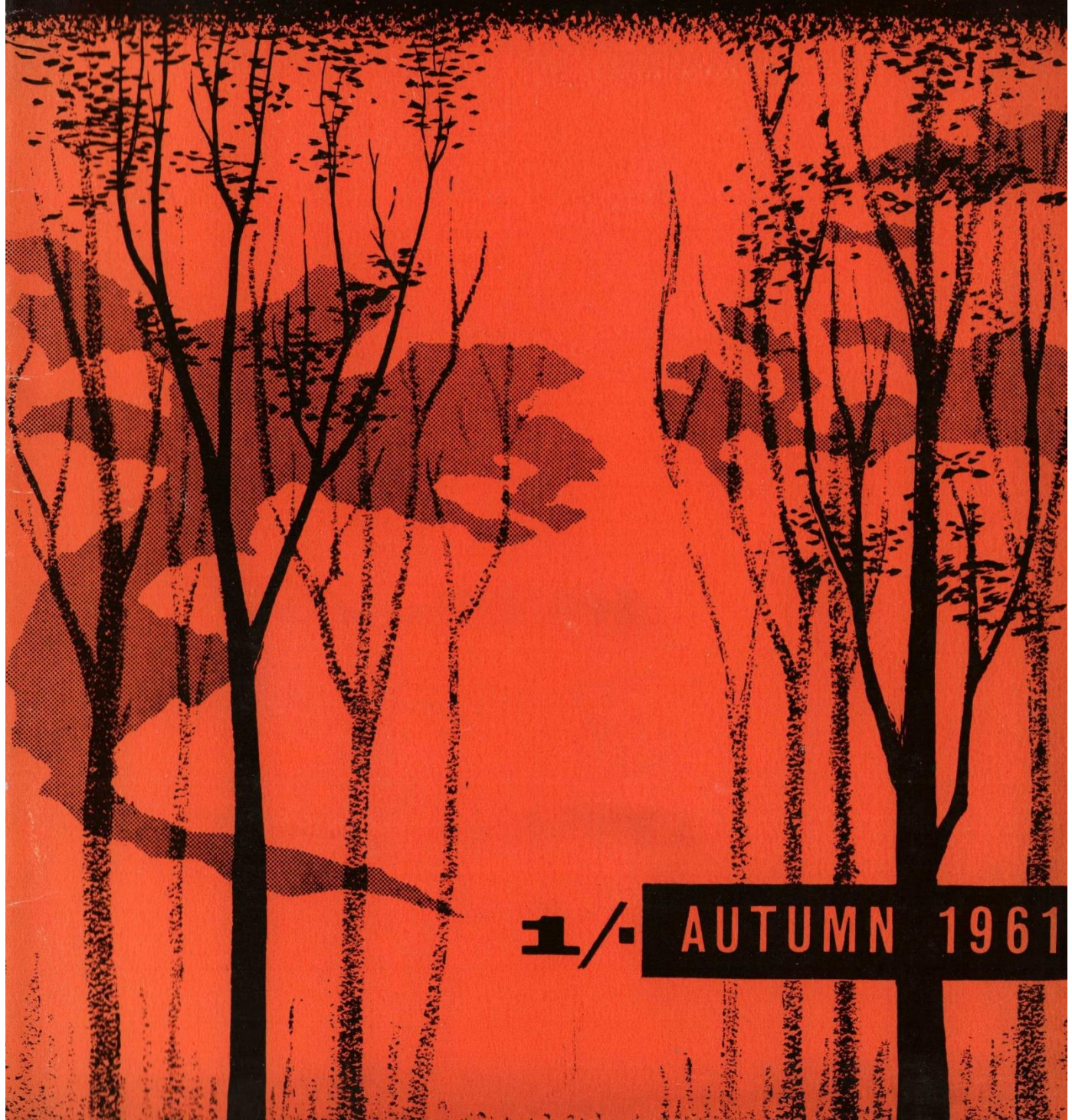


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NUMBER 34

AUTUMN 1961



Photo: Martin Whillock.

Harwell Craft Apprentices at the pit head of the Albion Colliery, Pontypridd (pronounced Pontypreeeth), South Wales. This was part of a week's study tour of industry in the Cardiff and Bristol areas, organized for the Training Scheme this summer by the Industrial Welfare Society.

Harwell apprentices are described in a number of ways: as *loathsome, too affluent, speed-crazy, skivers, poor innocent things* (this about the new boys up from Winfrith where the first year training shops are) and as *layabouts with white shirts and pastel ties, afraid of a bit of dirt*.

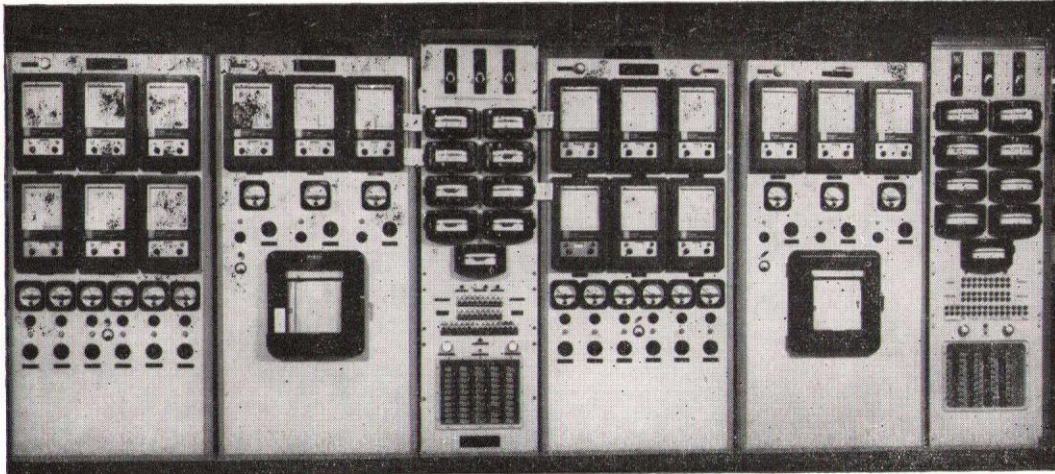
This genuine, unretouched photograph suggests that even in official hours apprentices *do* get dirty.

Said the Duke of Edinburgh recently: *With extended technical training and suitable administrative training . . . every apprentice would carry a chairman's pen in his tool kit.*



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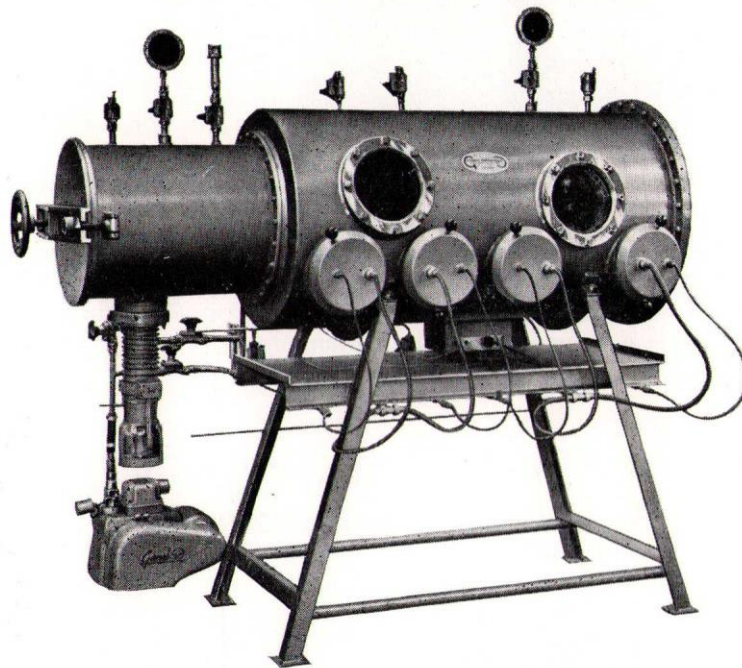
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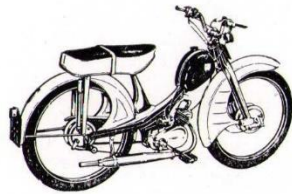
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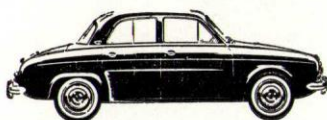
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EDITORIAL

Language is essential for human communications; but without the education to understand it and to use it the number of people with whose ideas we can be brought into contact is greatly limited.

It is interesting to remember that the belief that education is the right of everyone, irrespective of social class, only began to be accepted during this century. In Britain it is but gradually becoming an established fact as the Education Act of 1944 is being implemented. It is true that in 1802 a Factory Act required factories to give their apprentices some part-time instruction for the first four years in the three r's, but a hundred years ago the majority of children in the country had no opportunity to learn even to read and write. Voluntary societies — mainly the churches — provided most of what schooling there was. Gradually, there has become the State's acceptance of responsibility for the education of its citizens with the provision of educational opportunities previously the privilege of the wealthy. Who will deny that this was something we could not afford to do without?

In the future, historians will find much to analyse in this present era of the industrial revolution. That we made scientific strides they will have to admit, but will they say that we failed to see productivity in terms of personal efficiency, that the planners saw it in terms of material earning alone and not in terms of the intangible satisfaction that comes from pride in group achievement?

During the last quarter of a century, industry has become increasingly aware of the importance of industrial communications. It is a logical step that follows the provision of reasonable working conditions. Today, when there is a greater need for good human relations at work, there is greater need for the help of house journals in combating frustration and in achieving a sense of association among those who work in the same organization, especially when it is large.

There are some people, unfortunately — and there will be some in every generation — who will say that all this attention to people is inessential. They would be right — if man were no more than an economic unit.

People are important.



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THE APPRENTICES

On waking in the Hostel on a Monday morning the very first thought is that it is Sunday. We torture ourselves for those first few seconds as if we could make it Sunday by sheer force of thought. However, we see it is of no avail and then proceed to calculate how many more minutes we can stay in bed. To show willing, a hand joined to an arm struggles from the layers of blankets and sheets, fumbles for the bed-side lamp, switches it on and promptly returns to the warmth of the bed. The effort this entails is too much for the attached body so early in the morning, and it promptly falls asleep again.

All is not lost however. His room-mate awakes as the light goes on, a very useful allergy, and moving in a semi-trance throws off the bed-clothes. His arm describes an arc above his head until contact is made with the cord switch on the main light. With blinking eyes he kicks the sleeper (who grunts, turns over but does not wake) and proceeds to dress, then head follows feet out to the washroom. As he walks down the corridor, he is greeted by the sweet melodies of the "Dawn Chorus" of alarm clocks, each with its own distinguishing note — (not that they alone have much effect, but the winders revolving provide excellent bases for servo-mechanisms, tripping micro-switches to put on the radio, or for disturbing the equilibrium of deli-

cately balanced oddments arranged the night before, which, in falling, switch on lights by means of strings, or just cause a louder noise than the bell itself).

If a wash at this hour is a necessity, then it is advisable to make it a cold one, which will wake you up if nothing else, but if a luxury one is desired, i.e. warm, there is a great danger that once your hands enter that lovely warmth you are so reluctant to take them out that you fall asleep again. After a cold wash the participant returns. Being now wide awake he sees no reason to believe that anyone else has any right to the comforts of a warm bed. Consequently he thumps and kicks at his room-mate until the latter attains a state of semi-consciousness and sits up. However, by the time our hero has connected his razor, his room-mate has fallen back and gone to sleep again. The noise of the razor wakes him again (it has a big end gone) and being third time lucky he succeeds in climbing from the bed clothes into a sitting position. From here he can choose a shirt to wear (well — I say choose, he only has two and one of those is in the drying room), and then he gets dressed.

They both troop off to breakfast, bacon and beans again — still, the cornflakes are o.k. and as they eat, each consoles himself with the thought — Only Five Days to go.

A Portway Resident.

World Trends in Science

Daniel Behrman.

Science affects both directly and indirectly almost every human being. So vast is the field, and so rapid the growth of research in the past few decades, that it has been all but impossible to chart its progress. Now, a comprehensive survey of world scientific trends and technological research is being published by UNESCO. Prepared by Professor Pierre Auger, it marks a milestone in the history of international science and its uses for peaceful purposes.

THE HERCULEAN task of taking a global look at the world of science, detecting the principal lines along which research is being undertaken in fields running from cancer to fluid mechanics and then charting a future course of international action, has just been accomplished.

All this is under one cover and on 250 pages in "Current Trends in Scientific Research" which has just been brought off the press by U.N. and UNESCO. It is the work of a leading French physicist and former head of UNESCO's Department of Natural Sciences, Professor Pierre Auger, who has carried out this survey for the United Nations following a resolution passed by the U.N. General Assembly in November, 1958.

Some idea of its scope can be obtained from the massive support which Professor Auger was able to enlist in collecting his data. Among contributors are numbered no less than twenty-nine intergovernmental organizations, sixty-six international non-governmental organizations, national research organizations from forty-two countries and, last but certainly not least in importance, 255 scientific experts from the world over.

But a much more vivid idea of what this survey was intended to encompass can be found in Professor Auger's own introduction to his book. It is quite simple: of all the scientists and research workers since the beginning of time, 90 per cent are alive and working today! In our world of rapid change, Professor Auger notes, scientific activity is increasing at the rate of ten per cent a year—which means that it more than doubles every decade. Merely keeping abreast of this activity has become an impossible task: while there were only 1,000 scientific journals in 1850, there are nearly 100,000 today.

"Current Trends in Scientific Research" is therefore neither a panorama nor an encyclopaedia. It probably could be compared to a moving picture, edited from miles of film (in this case, mountains of data) to bring out the most important of all the events taking place before the camera's eye. Professor Auger has

used another metaphor: when a ship gives its position, it reports its latitude and longitude but always adds its direction and speed. The position of modern research is not a fixed one.

In his recommendations for international action, Professor Auger has selected, not necessarily the most important realms of scientific research, but specific tasks which are beyond the reach of national or private efforts. Here, too, are to be found a number of fields which tend to be overlooked because they do not promise immediate returns in terms of national policy or economic benefits, although their long-term promise is immense.

These are some of the highlights of his suggestions (unfortunately, space does not allow us even to summarize all of them):

- An international scientific conference to standardize measurements and remedy a "chaotic state of affairs".
- An international system to enable countries to communicate their meteorological and seismological findings to electronic computer centres for processing. Professor Auger points out that such findings must be processed immediately if they are to be used by scientists seeking more knowledge of our environment.
- More joint centres of high energy physics, such as the European Centre for Nuclear Research (CERN), which is now operating the world's most powerful particle accelerator.
- An information service on current research work to avoid waste and duplication, incurred all too often when institutes or laboratories in different countries spend years working on similar projects.
- An international study of the long-term effects of small doses of radiation.
- An international conference on artificial seismic shocks (earthquakes) induced by explosions. Interpretation of the results of such explosions is not yet clear.
- The establishment of a major astronomical observatory in the middle latitudes of the Southern Hemisphere.
- A scientific conference on cloud physics to assess the effectiveness of various methods now used to create "artificial rainfall".



Students come from all over the world to study reactor operation at the school at Calder Hall. Here Mr. H. Inagaki of the Chugoku Electric Power Co., Japan, Mr. A. O. Bull of Norway, Signor G. Groczeni of Italy and Mr. N. K. F. Mark of Sweden are seen at work with Mr. K. Frost, Manager of the Calder Operation School.

- A study of living conditions of certain populations not "enjoying" modern civilization, to learn why the incidence of cancer varies from one country to another. This is urgent because traditional ways of life are dying out faster than they can be studied.
- International measures for protection against pollution when it spreads beyond borders, as in the case of nuclear fall-out or river pollution.
- Improvement of traditional methods of fertilization and soil improvement by placing them on a scientific basis and, at the same time, international research to increase productivity of plants.
- An international co-ordination of research aimed at developing inexpensive nuclear fuels.
- An international conference on problems of energy storage, especially those arising in intermittent sources of energy such as wind or sun. In addition, international support is needed for development of the direct production of electricity through the light or the heat of the sun (through photoelectric or thermoelectric cells instead of the inefficient cycle of the steam engine).
- A series of steps to assist new countries to

formulate scientific policy and to train scientists, technicians and engineers.

Despite this arbitrary summary of Professor Auger's recommendations, it should not be assumed that he produced his survey by placing scientific disciplines in arbitrary pigeonholes. On the contrary, he brings out very clearly that the trend of the past years toward specialization is now being accompanied by a parallel movement toward unity in science. The old barriers are falling with the growth of new sciences bearing such names as astro-physics, mathematical chemistry or physico-chemical biology. At the same time, the role of mathematics itself has broadened to the point where it pervades all sciences, substituting precision and prediction for groping.

Another barrier is also crumbling: the one between applied and fundamental science. While Professor Auger notes that applied research has grown to the point where there is danger at times that it might squeeze out disinterested research—which would be as absurd as killing the goose that lays the golden eggs—there is now a fortunate tendency toward blending of the two.

The old distinction, therefore, does not stand up in the modern world. Professor Auger replaces it by a new classification of scientific research into four types:

—Free fundamental research or pure research; oriented fundamental research; applied research; and then the final stage of development work to secure economic or social benefits. All are intimately linked.

On the basis of the survey, Professor Auger has brought out a dozen main trends in world scientific research. He begins with the extension of physical frontiers, pointing out that, today, "the scientist can produce on the spot, in his laboratories, conditions which occur only in inaccessible regions such as the centre of the stars or the depths of the earth, or which perhaps do not exist anywhere in the universe".

Chemical frontiers, too, are being extended in the development of hitherto impossible purity of certain substances. At the same time, nuclear reactions have made it possible to extend the periodic table beyond 100 elements.

In both physics and chemistry progress is directly related to constant improvement in the accuracy of measurements which, Prof. Auger points out, automatically opens the way to new discoveries.

The third main trend is automation, a science in its own right. Not only is it revolutionizing industrial production, but it is taking the human error out of measurements.

The whole fascinating process of research on the earth's crust and in the ocean depths, the polar regions and the vastness of interplanetary space forms a trend which Prof. Auger succinctly sums up in one word—exploration.

"Man against nature" is a fifth trend, engulfing all our efforts not only to explore nature but to force it into a mould suiting our purposes. This trend, Prof. Auger remarks, has already added years to the human life span.

The study of natural equilibria and cycles is a trend of increasing importance at a time when man is modifying these cycles by transforming water conditions, using up coal and oil reserves deposited over eons and stripping the earth of its forests. This research is essential to economic planning today.

Dwindling of natural resources has intensified a scientific trend aimed at increasing our supply of energy. This has already led to nuclear fission energy and to research on fusion or thermonuclear energy. Side by side with this search for new sources of energy is to be found revived interest in old ones: the sun, the wind, the tides and waterfalls.

The problem of energy, Prof. Auger remarks, was mastered by the nineteenth century. It is the twentieth century that is mastering, in another major trend, the analysis of the structure of matter. We can now "see" the structure of solids, liquids, living cells or molecules through new techniques of analysis.

While science studies existing structures, it is also devising new ones. This synthesis of complex chemical systems is giving us substances such as plastics which imitate or improve the properties of natural structures. Mathematical research is closely tied to this trend.

Transport is another main field, and Prof. Auger divides current scientific research here into two aspects: electrical transport and material transport. Considerable work is being done to cut losses in the transmission of electricity, while there is a trend to simplify the movement of materials through the use of giant tankers or huge pipelines.

Communications, termed by Prof. Auger "the transport of complex patterns", are also leading scientists to seek ways of reducing losses in transmission. At the same time, methods must be found to move an increasing number of "messages" of all kinds over a limited spectrum of usable waves.

Finally, Prof. Auger singles out the interaction between the various sciences themselves as his twelfth main trend in the world of science, with mathematics in a royal role. "Almost as if they could foresee the needs that would gradually come to be felt by physicists, chemists and biologists," he remarks, "the mathematicians have nearly always evolved in advance the purely logical theories containing the required tools of thought."

In the eyes of Professor Auger, these present trends in science are not creating a science-fiction world dwarfing man into insignificance. On the contrary, he stresses that human biology is to be found at all levels of pure and applied research today. Automation has not replaced the observer, and the demands of the human mind are the very source of fundamental discoveries in science.

The interaction of all sciences and this emphasis on man are two overall movements which, the author of the report concludes, "are jointly making a powerful contribution to the unification of scientific thought".

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HABEN SIE UNE PLUME, SIR ?

I once knew a man who spoke seven, or it might have been eight, languages. His mother had been French, his father Italian, and he himself was born in Turkey. All grandparents had been of different nationalities, and, as the family was given to wandering around Europe and Asia, he more or less absorbed languages naturally which is, of course, much the easiest way.

I remember visiting an old school friend who had spent her first holiday in France. "The French they speak," said she, "is not the French we were taught at school," and we both lapsed into the thoughtful silence of those upon whom a pointless hoax has been perpetrated.

Linguistic ability has always aroused my wistful admiration because, in spite of several efforts to acquire it, I have met with no success, and I am wondering if there is a knack to it in the same way that some people are double-jointed, or colour blind. Failing this, the whole thing is one of grinding application, and even then results are not guaranteed.

My first effort was some years ago in Buenos Aires where my only friends were a French family who knew no English. With considerable exertion I drew on my memory of school French, and with the aid of a small phrase book and a pocket dictionary I did not do too badly. In fact, after three weeks — and exhausting ones they were — I began even to think in French. On the side, I was trying to pick up a little Latin-American Spanish (which is different from Spanish Spanish). I could count up to ten — and it is amazing how far this will take you — and I knew the words for "hot" and "cold", these painfully learned from the bathroom taps, having scalded myself under the impression that "C" for "caliente" meant "cold". This knowledge was quite useful in view of the custom of serving tea with either hot or cold milk, and I could state my preference with fluency. "Marmalade", of course, is the same everywhere, but outside Britain you never get it. We may be too literal. They invariably give you apricot jam.

Anyway, my stay there was abruptly terminated, and with it the hope of gaining any real proficiency. Chance next took me to India, and with the best of intentions I began to learn Urdu. To this end, I hired a scholarly Bengali who called every morning at seven, this being the time in the tropics when one's physical and

* "C" for "cultured". C.f. U and non-U.

mental powers are at their peak, if at all. After two months of excellent progress, I was confident enough to try out my knowledge. This was greeted with embarrassed stares, and I found to my discomfiture that I had been taught a number of words which, albeit expressive and unmistakable, were not used in polite society. By this time I had acquired a bearer, a middle-aged Madrasi, who spoke very understandable English, liberally sprinkled with present participles. The torpor induced by the heat, the smells and noise of Calcutta had meantime set in and, weakly, I took the line of least resistance. As a postscript to this episode, I later met a colonel's lady of the old school and, in speaking of India, I put forward my bearer as an excuse for my language deficiency. "It was always considered," she pronounced, "extremely bad form to speak English to one's bearer," a remark which completely flattened me!

After the war I spent two years in various parts of Germany, and there I really got down to it. Fortified with a set of self-tuition booklets and a paper-back entitled "Bill und Jock in Deutschland," I put in two hours' hard work each day. This only served to convince me of the grammatical simplicity of the English language. Why must they have all those declensions? No wonder so many foreigners can speak English! There is nothing to it; the grammar is cut down to the bone. I was also confused by the frequent introduction of the word "mal" which seemed meaningless. I said so to a German friend who bridled: "Your English word 'well' has often no meaning," and humbly I admitted it. Eventually I found myself in the humiliating position of using my four-year-old son as an interpreter in the kitchen. I never got beyond "tea" and — rather pathetically — "Can you speak English?"

My ambition, which had lain dormant for some time in England, was revived by a stay in Hong Kong. Even I was not insane enough to want to *write* Chinese. The written language is symbolic, there are thousands of characters and there is no consistency about their form, some being "C" and others "non-C"*. In any case, that business of holding the pen or brush perpendicularly rather put me off. My first step was to buy for ten cents a small booklet, "1001 Useful Phrases in Cantonese". This had sections headed "Speaking to your Driver",

etc., but a brief glance showed that it had not been written for me: the questions were not those I would be asking a driver in Hong Kong or elsewhere.

Nothing daunted, I purchased another volume entitled "How to Learn Cantonese". This was more like it, and, recalling my previous success, I laboriously mastered the numbers one to ten. Now, Hong Kong is a city of modern skyscrapers, and one seems to spend a lot of time riding up and down in lifts. I soon got into difficulties. In some buildings they count the ground floor as the first; and a mezzanine complicates the issue further. More often than not I either under- or overshot my destination, and the consequent trudge up or down humid staircases played havoc with my natural tranquility. What was more disconcerting was that none of my Chinese friends would agree that the phrase in the book was the right one. It was blandly suggested, as an all-round face-saving expedient, that I learn Mandarin (which only takes six years) and thus be understood anywhere. The end came when I realised that each vowel had nine inflections, and the sum total of my efforts, apart from the numbers aforesaid, was then "Tea" and "Good Morning".

Quite recently, here at Harwell, I tried to take down from a tape the English translation of a Russian report. The machine made the usual introductory scraping noises and then the voice projected itself in a decisive monotone with all the intensity of machine gun fire. The reader was obviously translating on sight and at a regular dictation speed in the region of 180 words per minute. Indeed he spoke more rapidly than I could hear and retain for more than a short phrase at a time, and his pace was such that whole sentences came over as one long word. I wondered sourly if familiarity with tongues had infected him with the laborious German characteristic of building up a compound word simply by lumping together a number of smaller ones, as, for instance, "menischenfreundlichkeit", or "untercheidungsvermogen." I suspected too that he could actually translate more quickly than he could dictate otherwise his speed might well have run up to a break-neck 250 words per minute and the whole mad libretto could have been polished off in a dozen monumental words.

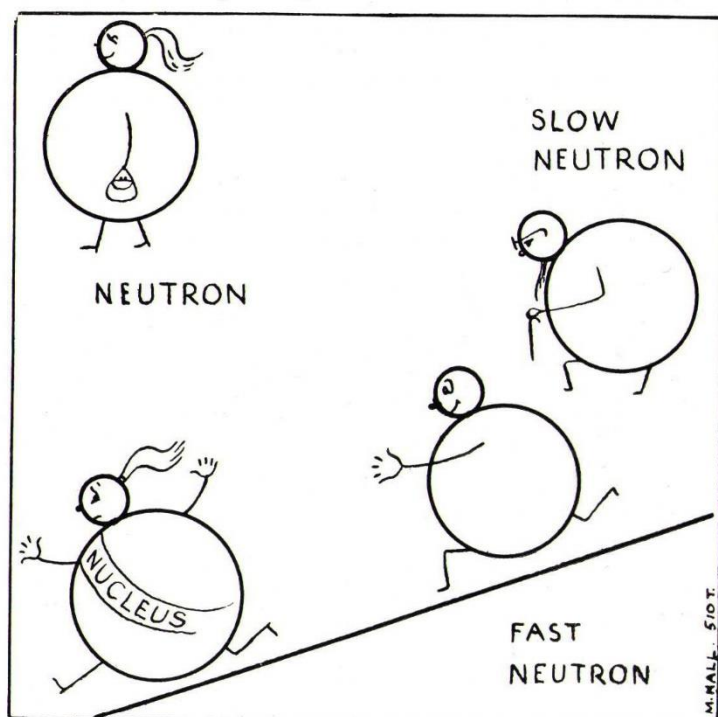
This brings me back to the contention in my third paragraph. How on earth can I learn this kind of thing? In contemporary teenage slang you are either "with it" or not. It's all very depressing.

PIC.

The Inarticulate

In ages past, remote,
When words were yet unknown
Earth's pristine loveliness
Was like a rose unblown.
No monstrous wars convulsed
The mountains, valleys, seas,
When love and hate were dumb,
Men's hearts were more at ease.

HERBERT BLUEN.





LAZY AFTERNOON

J. I. Dennis (Chem. Eng.)

ANNE. A. R. Kenyon (*Chem. Eng.*)



WARBOROUGH COTTAGES

J. E. Nichols (*Gen. S.E.*)

"Good Morning... the time is 7.30 a.m."

Patti Phillips (Gen. Admin)

A strange young man in a red blazer and white flannels bounded up to me, kissed my hand in true continental manner, and murmured "Enchante', mademoiselle" with a broad Cockney accent. This was my introduction to one of the famous Butlin's Holiday Camps. My friend Ann and I, along with about a hundred other potential campers, were met at Clacton station, and were quickly and efficiently rounded-up by the Redcoats. Our luggage was labelled and put on a lorry, and we were herded on to a bus like so many cattle bound for the slaughter-house. It was really quite frightening.

The reception hall at the camp was thronged with bewildered-looking people trying to fight their way in or out, while a studiously calm voice over the loudspeaker system endeavoured to get some organisation into the resulting chaos. We didn't really improve matters by discovering that we had forgotten our reservation forms, and at first we were afraid we would be sent back home, but after referring to a very complicated filing system and assuring themselves that we really had paid our £3 deposit, the staff allowed us to take possession of two sets of chalet keys, and arranged for us to be escorted to the chalet. A porter picked up our suitcases and raced off; we nearly lost him twice in the crowds, but caught sight of him rounding a corner marked XF 1-50.

Our chalet was No. XF 43. Considering that it was to be our home for the next week, it didn't seem very impressive. It was very small, dark and stuffy, and strange noises seemed to be coming through the floorboards. (We later discovered that we were situated directly above the boiler-house). The furniture consisted of a curtain-fronted wardrobe, a large chest of drawers, a wash-basin and bunk-type beds. I took the bottom bunk. I later found that there were quite a number of disadvantages in sleeping on the "lower deck". For one thing, I was for ever passing up things like writing paper, stamps, handkerchiefs, apples, cigarettes, to Ann, who considered that it was far too much trouble for her to jump down and get them for herself. I also had to see that the door was shut, the window open, the curtains drawn and the light out.

Getting into bed was quite a problem in itself. I found that by walking normally towards it, I tended to mis-judge the distance between the two bunks and hit my head on the dividing rail. On the other hand, if I crawled, I got splinters in my knees and ripped my "baby-dolls" on a nail sticking out of the chair. The wash-basin was most peculiar. At frequent intervals it regurgitated the dirty water we had flushed down it several hours previously.

The following morning we were woken by a disgustingly hearty voice, apparently just outside our chalet, announcing that it was 7.30 a.m., a wonderful morning (regardless of some vicious-looking black clouds on the horizon) and that breakfast for first-sitting campers would be served at 8.15 a.m. To our horror, we discovered that we were on first sitting, and were expected to present a cheerful smiling face to the world at that unearthly hour of the morning. For the first two mornings, we were good campers and made an appearance, but when, on the third, our waitress gave us a dirty look and caustically enquired whether we were early second-sitters or late first, we decided not to bother any more. I never liked breakfast, anyway.

Mealtimes were also the occasion of house meetings. There were four houses, two for each sitting, on each side of the Dining Hall, and about half-way through each meal, the house captain would address his flock. He usually gave details of outstanding events planned for the day, and always finished by asking "And which is the best house?" to which everyone was expected to cry "Kent!" (or York, Windsor or Gloucester as the case might be), and bang on the table with knives, forks, teapot or anything else that came to hand. By the end of the week we were rather disillusioned regarding the merits of Kent, which had disgraced itself by being placed last in the Swimming Gala, and were seriously considering asking for a transfer.

One morning, we decided to brave the world outside the wire and sunbathe on the beach. The tide was, so we thought, just on the turn, so we settled ourselves in a sheltered alcove in the sea-wall, after first carefully clearing away

the seaweed, ice cream cartons, jellyfish, etc., and lay down to enjoy the sunshine. It was pleasantly hot, and we were just catching up on several hours' missed sleep, when we discovered that something had gone slightly astray in our calculations—the tide was still coming in, and the water lapping at our ankles was unpleasantly cold! We didn't bother with the beach after that. The "watchkeeper" on the camp gate was undecided as to whether we should be allowed to re-enter the site (or camp) as we had forgotten our passes (or chalet keys) and had no proof of identification on us. However, he evidently thought that we wouldn't constitute any security risk, and we passed through.

A Bingo session was in full swing in the Sports Stadium, so, always ready to try anything at least once, we went in. The atmosphere was electric, and from the looks of concentration on the faces of the participants and the deathly hush that prevailed, we thought we had blundered by mistake into a reading room filled with intellectuals. Perhaps it was the announcement of "Seven and six, was she worth it?" as No. 76 came up that brought us back to reality, and made us realise that these were merely normal, healthy campers gambling away their week's spending money in the hope of winning a giant teddy bear. My first thought was that they were all obviously "round the bend", but my views changed considerably half an hour later, when I became the proud owner of a giant teddy bear. The atmosphere, too, changed considerably after dinner, when a wrestling match was presented. I have always found wrestling highly amusing on the television, but even so I was hardly prepared for the sight of a sweet old lady in the front row standing up, waving her knitting, and crying "Let's see some blood!" The villain of the piece was a bearded man with a silver lame dressing gown who fought both his opponent and the referee and offered to take on anyone else who was willing. No-one was. I think he was quite pleased when the audience booed him louder than they cheered his opponent.

After the evening meal, we usually washed and changed ready to go dancing. I must explain that in each block of chalets there were the usual offices and bathrooms labelled "Lads" and "Lasses". On my first day, I noticed the first three letters of the former, took it as short for "Ladies" and was half-way in before I realised my mistake. Finding a free bathroom was quite a problem too. It was no uncommon sight to see several girls wearing headscarves to cover their hair-curlers and clutching their

duster-coats-cum-housecoats round them, trying to look unselfconscious as they waited their turn. We never saw any boys waiting; perhaps they didn't bother to wash.

Our first port of call was, inevitably, the Pig and Whistle, where we fortified ourselves on vodka-and-lime in order to withstand the rigours of the evening's entertainment. This was a large room with a bar at each end and a small stage in the middle. The ceiling was covered with artificial hanging plants, skulls, spiders; in fact everything bar the proverbial kitchen sink. The "cabaret" consisted of five redcoats who played the latest from the Hit Parade—or at any rate they were advertised as doing such. The only songs we heard them sing were two that went out of date about three years ago, and even then it was difficult to hear the words over the weird noises made by the microphone. Two vodka-and-limes later we moved on to the Rock and Calypso Ballroom. There, a very good group played for jiving only, but after 9.30 p.m. it became so crowded that our stockings were in danger of being torn to ribbons by the ceaseless stamping of stiletto heels in our immediate vicinity, and we decided that perhaps we weren't really in the right mood for jiving. We ended up in the Viennese Ballroom. This was for strict tempo dancing only, but towards the end of the evening the officials weren't too fussy if a couple started charlestoning to a quick-step. The part we liked best was at closing-time, when everyone stood to attention and sang the Butlin's Anthem—"Goodnight Campers". This is a rather futile song set to the tune of "Goodnight Sweetheart" in which campers are advised to "drown their sorrows" and at the same time reminded to "bring the bottles back tomorrow" for some unknown reason.

After this we were always more than ready for our beds, but it was practically impossible to get to sleep until well into the early hours. Fellow campers were constantly charging up and down the balcony outside our chalet, apparently giving friends three blocks away full details of the happenings of the evening. Then there was always the problem of getting rid of our escorts. One night two invited themselves in and settled down on our bunks with an air of "I care not for thy plight Jack, I'm doing very nicely". It took us nearly an hour to persuade them that their chalets were really much more comfortable than ours. It seemed as though we had only been asleep for a few minutes when we were back at "Good morning Campers, the time is 7.30 a.m." again.

Notwithstanding, we had a wonderful time. ★



Not a photograph of the man who forgot his pass, but a picture taken at Harwell during a special training exercise at which a member of the Alsatian Security Service acted as a fugitive. To be exceptionally courageous and sagacious are two qualities most prized in police dogs; this one is described as having "a beautiful bite".

DURING SILENT HOURS—GUARD DOGS ON PATROL

THE DOGS and their handlers have become attached to each other and this inter-dependence, plus the previous training of both man and dog, is something that must be reckoned with by any would-be intruder to the site. The dogs, normal canine sensibilities have been directed and trained so that they are capable of scenting and pointing any individual who is behaving in a surreptitious or furtive manner. Should the person remain hidden he will be detected unfailingly by the dog who will lead his handler to the hiding-place.

The reader has no need to feel apprehensive, day or night, should he come on a team on patrol. The dog is friendly unless his handler is set upon or orders the dog to attack. A word of warning though, don't—and we mean DON'T—try to test the efficiency of the dog; just accept it as a fact.

We should treat the dogs and their handlers as our friends—just a man and his dog doing a job of work, and, at all times, act naturally. You know what we mean—paralysed from the ankles up!



"Kim" and the 1961 winner of the cup presented by The Alsatian Security Service which has agreed to its being called "The Boyer Cup". (Left to right) Pc. J. Robertson, Pc. A. Mows, Pc. A. Burgess.



Beginning of assembly for a Commando Raid.

Dalmation Island

R. T. FENN (Oxford Office)

BY A COINCIDENCE, the Adriatic Sea came prominently to my notice. My morning newspaper published a photograph of Sir Winston Churchill cruising in that area as a guest of Mr. Aristotle Onassis, two illustrations in my daughter's magazine were of the Dalmatian coast, and while reading my library book, "A King's Story", by H.R.H. The Duke of Windsor, I came to the point of his cruise in the Adriatic.

I recalled memories of my own visit to that stretch of coastline but, I hasten to add, not as a guest of royalty or millionaires, although it is true it was at Government expense—serving with the R.A.F. during World War II.

When stationed at Caserta, just north of

Naples, at the H.Q. Mediterranean Allied Air Force, I received instructions to fly to Brindisi the following day for onward routing to R.A.F. Station, Vis. My first reaction was "Where is it?", and by dint of raising various corners of a security screen I discovered that it was located on a small island just off the coast of German-occupied Yugo-Slavia, near Split.

A peaceable person by nature, I was not exactly overjoyed at the prospect, especially when my colleagues jokingly suggested that the only way to get there was by submarine or by parachute jump.

Next day my misgivings increased as, aboard a ramshackle Anson which had difficulty in taking off, we shuddered and strained up over

the Apennines. I suffered from air-sickness, my pulse rate was greater than the propellor "revs", and I was in no way helped by a steep turn out over the sea for the landing approach, where the waves seemed as high as the mountains over which I had just flown.

After spending the night at Brindisi and receiving further orders, I proceeded in the early hours of the morning to the docks where I boarded a nameless motor vessel—the sort that looked as if it was used for trips around the bay at half-a-crown a head. It was already packed from bow to stern with fierce-looking Yugo-Slavs—men and women—armed to the teeth with rifles, Stens, ugly long knives, and bandoliers galore of ammunition. They were Partisans returning to their native land to resume the fight against the invaders. Below deck, in the tiny engine room, I saw a brass plate recording that the ship had been constructed by Samuel Whites of Cowes in 1912! This was my mode of transport to the unknown island that lay ahead.

All that day we journeyed northward, hugging the Italian coast. There was barely room to sit down, but fortunately the weather was fine and not too hot. The sun sparkled on the dazzling, dancing blue water. The partisans sang, their deep, rich voices accompanied by the steady throb of the engine. The songs sounded passionately patriotic, although one tune bore a faint resemblance to "Roll Out The Barrel".

As evening approached, we stopped at Manfredonia, the reason being, I suspected, to allow the engine to cool down! Much later we re-embarked for a midnight dash in typical "cloak-and-dagger" style across the Adriatic.

The moon shone fitfully. Heavy, low clouds scudded across the sky. There was no singing. The passengers talked in whispers, and even the engine seemed muffled. At any moment I half-expected to see a U-boat suddenly surface and blast us out of the water.

I dozed in fits and starts; then, as the blackness of the night merged into the greyness of early dawn, I saw a smudge on the horizon. It gradually became larger and clearer. Activity aboard increased, the singing restarted and soared to new heights of nationalistic fervour. I stared with barely suppressed excitement at the increasing detail of the rocky, barren-looking island that lay ahead.

The boat swung round a small islet, manoeuvred into Vis harbour, went alongside a quay and tied up. I disembarked. I had arrived!

Vis, known variously as Issa or Lissa, has, I



discovered, an important and fascinating place in history, dating back over 2,300 years. The island was first colonised about 390 B.C. by Dionysius the Elder, a Greek king of Sicily, but became independent and made settlements of its own in neighbouring islands and the mainland.

The Illyrians — forerunners of modern Albania — under King Agrone laid siege to Vis 100 years later, but it was his widow, Teuta, leading the troops, who occupied the island in 232 B.C. After three years it was liberated by Rome and remained their protectorate for the next 150 years. In the civil war between Caesar and Pompey the Isthians, as they were then known, supported the latter, but following Caesar's victory they were deprived of all rights and many were massacred.

A spell of obscurity followed, broken by a brief settlement by Croatian Slavs in the 6/7th century and later incorporation in a Croatian kingdom. The maritime Slavs plundered the rich Venetian cargo vessels sailing up the Adriatic until Pietro Orseolo, Doge of Venice, in 1,000 A.D., despatched a punitive expedition and Vis suffered its second massacre.

With the disappearance of Croatia as a separate kingdom, Vis was swallowed up in the Hungarian Empire until 1420, when the whole of Dalmatia was sold to the Venetians for



Yugoslav Partisans return to their island home.

100,000 ducats. Although it had lost its importance, the island was attacked by Saracen pirates so fiercely and frequently that the main settlements were made up among the hills away from the coast.

After the fall of Venice Vis was included in Napoleon's Kingdom of Illyria, but the French never became firmly established, and in March, 1811, three British frigates and one corvette defeated a superior French naval force. British occupation followed, forts were strengthened, new ones built and naval facilities improved.

By the Congress of Vienna, 1815, Vis once more changed hands, becoming Austrian, and it was a principal naval base until 1880, being then too small for the newer vessels commissioned. In 1866, however, Italy, determined to recover lost territories, attacked Vis from three points, but the Italians were driven off by the Austrians, losing their flagship and other vessels in a sharp battle.

In 1918 the Austrians left Vis, which was promptly occupied by Italy until 1921 when it was included in an exchange of territories. In World War II, Germany invaded Yugo-Slavia and set up an "independent" State of Croatia, which Italy then persuaded to cede valuable

coastal areas and off-shore islands, including, of course, Vis.

Liberation came in 1943 with the collapse of Italy; and it was shortly after this that I arrived. The turbulent history that the island had known ceased, although a number of exciting incidents took place, including aircraft crashes, an explosion in the cookhouse boiler, a water-spout and a commando raid on the mainland from Vis.

The island, about four miles long and two miles across at its widest point, had an emergency landing strip used by aircraft damaged in raids on the Balkans and unable to make their base in Italy. Early one morning a Liberator came in to land, overshot and started to go round again, but did not respond to the controls, so the crew baled out. By some strange chance the aircraft did not crash immediately, but careered about in an erratic fashion, climbing, diving, veering left and right, until after about twenty minutes it buried itself, with an explosion and a burst of flame, in the middle of our football pitch! The Yugo-Slavs were most indignant, for they had a match arranged for that afternoon against the R.A.F.! Readers may remember that a similar aircraft incident

to that described above took place during the war at Liverpool when the plane careered round for over half-an-hour before crashing.

Apart from reducing us to bread and jam for dinner the cookhouse explosion, however, caused no serious damage, except that Yerka and Dobrilla, our two Yugo-Slav girl servants, lost their eyebrows and some of their hair. A roughly-built brick oven was heated by means of oil drip feed, and on the day in question a five-gallon drum of used engine oil had just been placed in position and the feed started when one of the girls knocked the drum over. "Mamma Maria!" was their comment when the explosion took place, and they repeated this for the rest of the day.

The water-spout was an awe-inspiring sight, and several of us saw it from start to finish. We were standing on a hill at one end of the island, looking over towards the mainland, when a sudden wind sprang up nearly blowing us over. Huge waves crashed against the rocky coast, and then they started a circular motion. From the centre rose a column of water spiralling upwards at a fantastic rate and moving across the

surface of the sea. At the same time, black clouds rushed through the sky, getting darker and lower, and started spiralling downwards to meet the upcoming column. They joined; the whole area became dark, but we could discern the waterspout rushing towards us. We were so fascinated that we just stood and looked. Suddenly the end of the island impeded the passage of the "spout", there seemed to be a loud crack and it disappeared with what felt like tons of water falling on us. It really hurt; we were soaked to the skin and dazed. The sky was clear but the sea remained a raging turmoil. We returned to camp, too stricken to hurry, certain that we would not quickly forget that experience.

After six months I flew back to Italy, and although it meant promotion I was sorry to leave Vis. Hard times, good times, meeting Marshall Tito, laughter, making new friendships, the rocky yet lovely scenery, all combined to imprint on my memory that small Dalmatian island.

★ ★ ★



Studio Atlanta

Mrs. E. M. Watkeys, who set a record for the greatest number of entries by one person in the 15th A.E.R.E. Horticultural Show, received the Katharine Williams Challenge Cup from Mrs. E. D. Vick at the presentation ceremony on Friday, 15th September.

Wakey-Wakey

—THE HARD WAY—



EXCAVATIONS AT POMPEII have uncovered a strange device like a giant hour-glass. When the lower half of the vessel was filled with sand, after several hours, it became detached—and fell with a loud “bang!” onto a sheet of metal. It was one of the world’s primitive alarm clocks, like the classical Greek device which caused water flowing from a basin to emit a whistling note at a certain pressure.

For centuries, in fact, the search has gone on for the perfect morning awakener (apart from the nudge or shove from husband or wife!)

Some ideas have been ruthless to the sleeper. At London’s Great Exhibition in 1851 there was an infernal “alarm bed” which deftly, pitilessly tilted the sleeper onto the floor at the hour set by the clock. A variation of this idea was the pillow-lever which at zero hour jerked the sleeper into a sitting position in bed. The Greeks had a clock which, worked by the un-failing Aegean sun, doused the sleeper with water at a certain hour. Still more drastic was a clock, used (appropriately) during the Napoleonic Wars, that wakened the sleeper by igniting a charge of gunpowder! Later came the ingenious idea of a Czech clock-maker. His lullaby timepiece played beguiling airs at bedtime; in the morning it set off a noisy combination of drums and cymbals playing a military march.

Some do-it-yourself alarms have been pretty intricate affairs. A few years ago a Scots game-

keeper removed the minute hand from a large watch and extended the hour hand by tying a match-stick to it so that it projected beyond the edge of the dial. When this came to his rising time it tipped delicately balanced pennies into a bucket of water several feet below—and the splash aroused him.

Fantastic was the device used by an Edinburgh University medical student. From the trigger of an ordinary alarm clock threads ran to a gramophone starter, a hammer (balanced gingerly over a tin basin), a window catch and the bedroom door. When the alarm shrilled the threads jerked so that the gramophone began to play a record, the hammer crashed into the basin, the upper half of the window came down and the door thumped open.

Not long ago a Manchester man invented an alarm clock bed. A bell shrills and before the sleeper can reach to turn it off a gadget pulls back the bedclothes smartly and a light flashes brightly into the sleeper’s face. Its inventor lost an average of £1 a week by being late for work, or even missing work altogether, through oversleeping—till he thought of his brain-wave.

Clever psychology lies behind what is claimed to be the unbeatable alarm clock. It rouses the deepest sleeper by guile, for its tick is scarcely heard, then, when it is time to get him moving, it sounds a melodious, bell-like tinkle. He thinks—don’t we all?—“I’ll let it ring till it stops . . .” But within sixty seconds the musical chimes change to a long, loud blast calculated to make the heaviest sleeper spring up.

America’s latest idea is the “waker-upper” for the deaf. It is a wrist-watch with a special buzzer that “vibrates” the wearer awake.

Birds and animals have been trained to help as early rising aids. The Romans had a water-clock that pulled a cover off a bird-cage, automatically awakening the sleeper with a song. Alexander Suvorov, the Russian general, kept



"You must have forgotten to reset the alarm."

a cockerel in his tent during his campaigns. When it crowed he rose; and then he perambulated the tents, crowing like a cock to waken his men. Likewise a Tsarist princess achieved constant punctuality by keeping a cockatoo in her bedroom. Each day at 8 a.m. it used to hop onto her pillow, peck her cheek and shriek, "Good morning, Mummie!"

Dogs, with their uncanny time-sense, have successfully been trained as morning alarms.

The owner of a huge Alsatian in Berlin taught his pet to wake him by licking the soles of his feet. As he was ticklish, this trick soon had him jumping out of bed.

However, for a crazy alarm idea you could hardly beat that of the Sunderland mother who, in 1951, told a juvenile court that she rented a radio and kept it switched on all night as an "alarm clock" to make sure her children got up in time for school.

No one, in fact, seems to be keen on early rising: Sunday is a blessed day to millions because they do not need to think about the alarm. How many people really believe the maxim "Early to bed and early to rise Makes a man healthy, wealthy and wise?" But its author, Benjamin Franklin, the American statesman, certainly did. On a diplomatic mission to Paris, in his 80th year, he was shocked at the late nights and late rising. He wrote to a Paris paper estimating that Parisians were "consuming 128 million hours of candlelight" by staying up late between March and September when they might have retired early and awakened early to "enjoy the pure light of the morning sun" for nothing. But his plea went unheeded: Paris continued to rise late.



Decorated vehicles at this year's Harwell Feast. (Studio Atlanta).





Photos: Steven Carter (Eng.)

Rehearsal Scenes from
“ KISS ME KATE ”

presented by
ABINGDON AMATEUR OPERATIC SOCIETY
 IN THE CORN EXCHANGE, ABINGDON

on Wed., Thur., Fri., and Sat., 25th, 26th, 27th and 28th
 October.

“Kiss Me Kate” is a play within a play. It concerns an American Touring Company performing a musical version of “The Taming of the Shrew” while its leading players live a parallel situation in their private lives.

The resultant continual switching from contemporary American to Shakespeare manners, costumes and speech makes it a most searching test of versatility in both acting and production, and there can surely be few amateur societies so well equipped to present this musical play as the Abingdon Amateur Operatic Society.

We wish the Society in general and the many members of Harwell who are taking part in the production every success.





By permission of the publishers

MAD'S MODERN HANDY PHRASE BOOK FOR THE TOURIST

When people go travelling abroad, they usually take things with them that makes their trip more enjoyable. For instance things like money! They usually also take those handy little "Guide Books" which help them get along in foreign languages. These guide books are crammed full of phrases like "How much is it?",

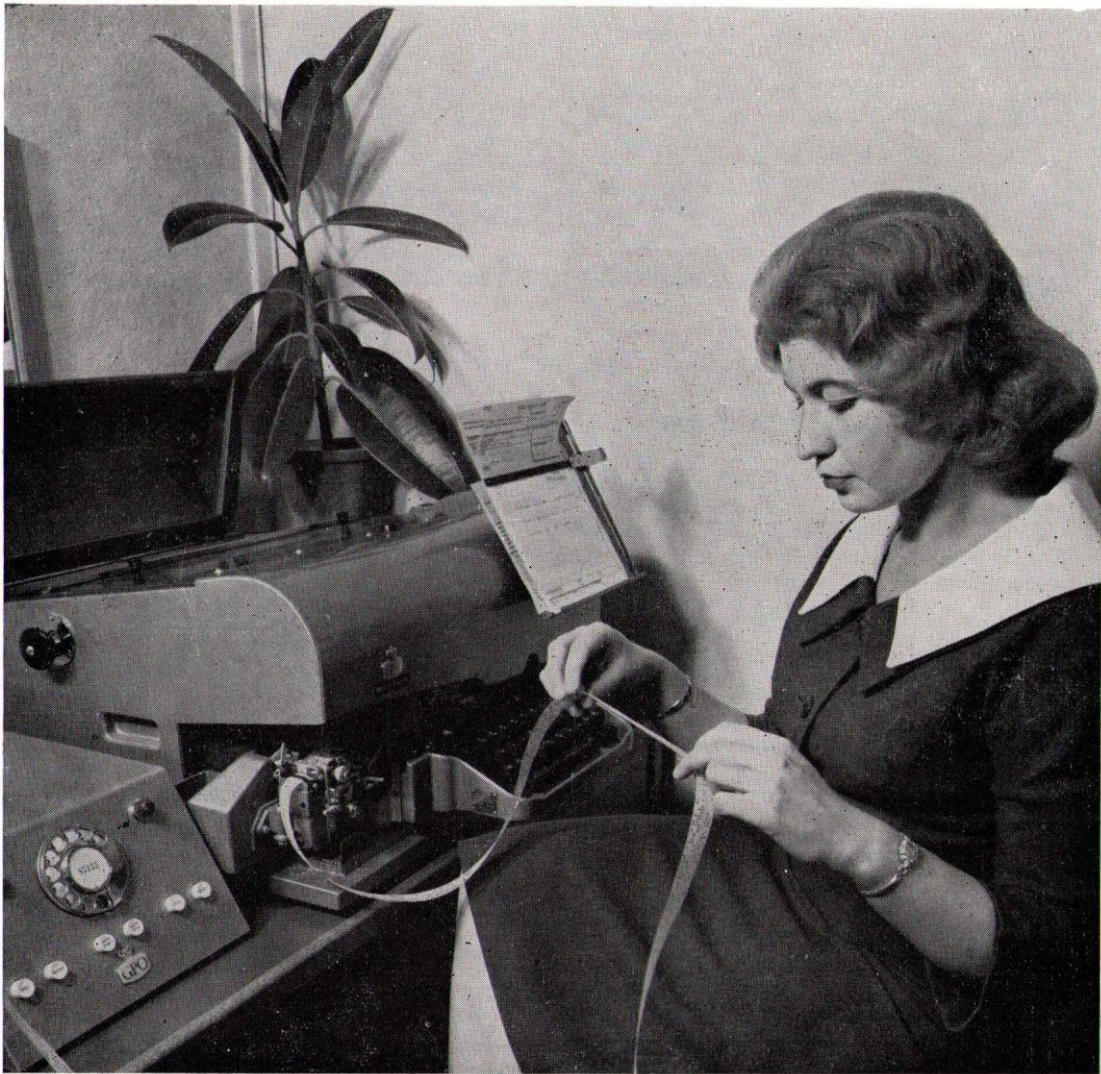
"That's too much!", "My toast is cold!", "My room is hot!" and so on. Well, perhaps these inept, simple-minded comments were good enough for travellers abroad in the past. Unfortunately, things have changed. People who go abroad these days need phrases to fit the situations they'll run into today! . . .

HANDY PHRASES FOR TRAVELLING IN RUSSIA					
When will I get my camera back?	Спальни—комнаты, принимают гостей в которых	Hchoo-vastat lay-dee hchye tsaw yoo veet lest-ni-yit?	Why was our guide liquidated?	Въ выхъ или въ круглый столъ и высокій буфетъ.	Iz hev-ree budd-hee hap-hee?
Has the chambermaid finished searching my luggage?	Поль ея устанъ коврами, и на спать люди.	Dyii-yoo hav yoor tsoop too-dyay?	Waiter, there's a dictaphone in my borscht!	Въ гостинной при съѣстные припасы хранятся въ	Tsam, hyu med tsee pahntz tu Jung!
Which corner of the room is mine?	Въ гостинной вис кухни пригото- вляють кушанье;	Izz dere hay dock-tur hintzeehowze?	The handcuffs are chafing my wrists.	Поль ел устанъ стѣнахъ висять пр коврами, и на	Cluz cuh-vor bee-fahr strah-kink.
What time is the ex-Commissar's funeral?	Столовая—комната, которой кушаютъ.	Vhat har lit-teel gowrls may-de huv?	Do you have a cell with a view?	Спальни ять люди; спальняхъ стоять кухни пригото	Vye du fahr-menz where rãhd suz-pehn-derz?
What time is the new Commissar's funeral?	Около стола	Vhat ist diss tzing cord luff?	Will I need my galoshes in Siberia?	Въ столовой стоя которой кушаютъ: и ужинають.	Hchow har tzings een Glock-hcha-mohr-hcha?
Our guide is very friendly.	Въ столовой стоя стоять иѣсколько	Tzee cho muz gho han.	Is this how you treated Mr. Macmillan?	Около стола	Veel tsöck-tsess spowr! Hchrock Hchun-tohr?
			I demand to see the British Consul!	Столовая—комната, высокій буфетъ.	Hchew kent du dzits tu mheel

TIMELY PHRASES FOR TRAVELLING IN AFRICA		
Where is the gan-grene repellent?	ልዩ የሆኑ ጉዳዮችን ከብዙ ጋመት ጀምሮ የሠራተኞች ድርጅት	Wharr wherr ooo whan dee <i>bahts</i> whenn owl?
There is a python in my sleeping bag!	ገሥታት እንደራሴዎ ተባብረው ይሠሩ ነበ	Cuht ahh-long dee doh-ted la-yin.
Please shoo away the vultures.	18 አባሎች አሉት ነው ምክር ቤቱም ያደርጋል ህ ላንድ	Boo-la boo-la boo-la boola
Faster! The Rhino- ceros is gaining!	በጠንባላው ጉባኤ መጠን ሲባባሳ	Mahl/Heez mah-kin ahz aht mee!
I can't because my gun is jammed!	ፈጥ ጉሮ (ሶፒያል) ሌላም ይህን የመብ መሠረታዊ የሆነው	Zipp-ahh-dee- doo-dah-zipp- ahh-dee-aye!
Will the claw marks fade?	ጽሑፎች ያቀርባል ቁን እያዘጋጀ ለጠቅ እንዲደረግ በተፈለ	Wharr dooh ail- lee-uhns gho tuh rey-giss-tah?
I am afraid I've lost my safari.	የቁጠባኛ	Shoh-mee dee war-ta goh-hohm
No, I do not want to be King of the Pygmies.	እስካሁን ድረስ (ኢንተርገራሽናል ዓፄ ምኒልክ ህ የተ	Yahs, whee hohv no Bah-Nah- Nahs.
Is there some way to bring my wife back to normal size?	እንዲሁም አባሎች ሥራውን ለማካና ገዳይ ውሳኔ የሚ	Hub-hah hub-hah good-rich rhub- hah?
I am a personal friend of Mr. Lennox-Boyd.	የኢሮካ ድርጅት ዳክሙ አሉ ህ	Ahnd thehn ah wroht "Stah-duh- sst."
Does the National Health Service apply in Mau Mau territory?	ጉባኤ የፈቀደለት ጊዜም ለበጥታ ም አገልግሎቱን አባ	Hoo puht dee Ohvah Awls een Miss-huss Murr- teez chow-dah?
Isn't it against International Law to eat British subjects?	በየካቲት ወር የጦር መሣፈያ	Dooh yeww may-ik dee-uz mih-stay- icks een Heen-gul- ish?
I demand to speak to the British Consul.	በሪምምነት እንዲሠ ነት እንዲያረጋግጡ ከጥና ጥና ሥራዎቹ	Yew cahnt dew dees tuh mee!

MODERN PHRASES FOR TRAVELLING IN The Middle East		
Room Service? There is oil coming out of my shower!	كرو وأعدده شرب مو سجات أعد	Dza bhasht freh-nd yore cahr-hast hev-er hahd!
Please do not auc- tion off my wife!	يكنية صندوق تسجيل الامر	Hit muhzt bhee jeh-lee cawze jahm dohn shahck lak-dot!
Are the para- troopers friendly?	البيان	How-r-yah gohn-a kip-em dow-non- ah fah-rm?
When may we ex- pect a border crisis?	التعوي في ضات المقاوول ظفوها	Hafta dey've zeen pah-ree?
Shouldn't they sweep up that U.N. observer?	شهد الدفات التاريخ	Howmah-nee hartz haff-yew broh-ken?
No, I am not sup- plying Soviet Russian arms	الشهر رسم	Aye thawt aye tol- yew tu-wayt in-de cahr
I demand to speak to the British Consul.	المقا الحالي العربية شهر	Yew kent doo-dis tuh-mee!
NECESSARY PHRASES FOR TRAVELLING IN CZECHOSLOVAKIA		
I demand to speak to the British Consul!	Připravte mi, pro- sim, horku lázeň a prínestel	Yu kłodz kent gat ha-vay vit diss!
POLAND		
What to you mean, there's no British Consul?	Czy mógłby mi pan wskazać naj- bliższy w ;	Doss-int Sall-vinn Floy-idd shtop hyere?
HUNGARY		
But I tell you I'm a British subject!	Vegye az ötödik utcát balra és a hatodikát jobbra.	Yuzz fur-hin-hars har-hall hah-lyke!
ROUMANIA		
What do you mean, you never heard of Britain?	Dorim o jumătate da sticlă de vinul rosu al tarei	Ch-aaaa-aaaalpl

Harwell Signals Office



TUCKED AWAY in a secluded corner in Building 77 is a single teleprinter — or, to put it technically, a switch-simplex circuit. Its very existence is probably unknown to seventy-five per cent of the A.E.R.E. staff, yet from this small room go signals to the other end of the earth. This printer links Harwell to a world-wide telecommunications network, giving either direct or relayed communication to every part of the world.

The Telex network is a private service of the G.P.O. which enables subscribers to communicate with all other subscribers on the same network, thus providing Harwell with direct communication between Government departments, A.E.A. groups and many commercial firms in the United Kingdom and on the continent. It is not uncommon, indeed, for Harwell to be in direct communication with commercial firms as far afield as Japan and Bangkok. Facilities to such countries are constantly being increased and, in the not too distant future, it will be possible to dial straight through to subscribers across the Atlantic. With the co-operation of certain allied military authorities, including the United States Forces, we are able to pass priority signals to Service networks for onward transmission to such destinations as Oak Ridge, U.S.A., enabling the internal transit times to be cut to a minimum. The record time to date is fifteen minutes from Harwell to Oak Ridge via a military signals centre.

From a security standpoint, a teleprinter land-line is classed as insecure, as there is occasional monitoring by authorised engineers and operating staff. The U.K.A.E.A. therefore safeguard classified material by transmitting it in cypher form.

The Creed teleprinter installed at Harwell is the most up-to-date in the country, incorporating an automatic re-perforator for cutting tapes and an automatic transmitter to aid in the speedy handling of signals traffic to and from other centres. The basic principle of the teleprinter is to transmit characters in the form of five-unit electrical impulses, which on receipt are reconverted into printed characters or into the identical function made by the sending machine. A page copy received in plain language can thus be logged by the re-

ceiving signals office and forwarded for immediate action.

Telex is a twenty-four hour switching service, and, although Harwell is not on a continuous watch, incoming messages during silent hours are still received and remain on the teleprinter until the following morning when they are dealt with in order of precedence.

"Without Error, Without Delay" is the motto of an R.A.F. relay centre in Signals Command; a worthy and inspiring motto, this, for all communications staff, whether attached to the Services or on a civil network, for if we are to transmit without delay then we cannot afford to have errors. While every effort is made by the operator to reach a high standard of efficiency, it will be appreciated that a vital factor towards the running of an efficient signals office is a well-presented draft copy of the actual transmission to be sent out. The co-operation of originating staff in preparing a signal on the correct form cannot be too highly recommended. If a message is printed in capital letters, is brief and concise, and gives all the information required on the form, no delay will be caused when the operator comes to transmit it.

At Harwell the revised Form 238 has recently been printed and is circulating slowly round the site. It has been designed to incorporate all the information required by the operating staff, paying particular notice to precedence and security classification. With this information to hand, the operator is able to transmit over any network. At Harwell, up to two hundred signals a day are handled on one machine by one operator who, apart from routine duties such as sorting, routing and logging signals, is also responsible for the cypher material. It will be appreciated that messages cannot be received over the telephone as, apart from the risk of error involved, there just isn't time for the operator to take them down!

When a long or a multi-address signal is to be passed over the circuit, it is more expedient for the operator to prepare a tape for automatic transmission. This tape will consist of the five-unit impulses in the form of small holes, each group of holes representing a letter, figure or machine function. This is the universal coding system used on all teleprinted networks, and is

known as the Murray Code, or International Telegraph Alphabet No. 2. Once a tape has been cut it can be fed into the autotransmitter as many times as required. Because it has been checked by the operator it will be one hundred per cent accurate, and can be transmitted at a constant speed of six characters per second.

Today the teleprinter is an essential link with the outside world. The service is constantly being modernised to keep up with the ever increasing demand for speed, but is by no means a modern invention. The first teleprinter as we know it with a keyboard came into service in the early 1920's, but it was not until the beginning of the last war that it really came into its own, when all three Services recognised its potentials for fast and accurate signalling. Teleprinters gave up-to-the-minute information to Air Traffic Control Centres and kept maintenance supplies moving fast to where the need was most urgent. Today this instrument plays an important role in the ever



No, No, Miss Bates! I can't handle that —
It's Jackson's pigeon!

expanding field of telecommunications.

Through this medium, Harwell is in contact with the world. With these connections and with the co-operation of other telegraph centres no distance is too great, no country inaccessible.

(Cartoon above by courtesy of "Civil Service Opinion")

TRUE STORY

SOME TIME ago discussions were held at Harwell with Dr. Roth and others from the Commissariat à l'Energie Atomique, Saclay, which lasted several days. On the last evening the guests were taken to the Swan at Streatley for an evening meal. The party dined well, perhaps too well, and while sitting over coffee and liqueurs in the fading light, conceived the idea of sending Dr. Roth's daughter a message in a gin bottle. The message was consigned to the Thames with due ceremony and subsequently forgotten.

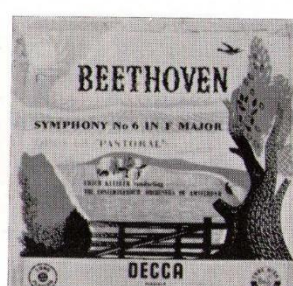
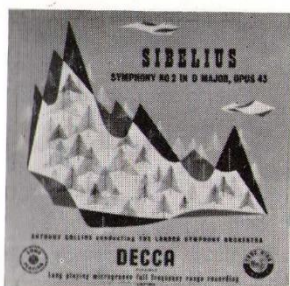
Some five months later Harwell received from Dr. Roth a letter which included the following: —

"May I take the opportunity to mention that we have not yet received the texts of the patents, though we have asked for them through the proper channels and we have been assured that they would be sent to us.

"In contrast with this disappointment, I was very gratified about a month ago to receive the message we had sent by way of insertion in the empty bottle which, as you remember, we threw into the Thames.

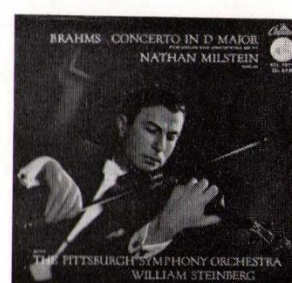
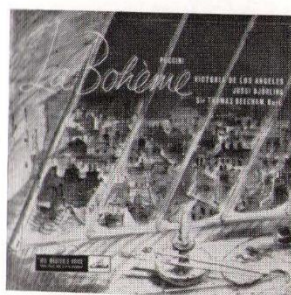
"Shouldn't we recommend these better means of communication to our respective organisations?"





Is This a Record?

V. J. Wheeler



Speaking of the gap between the "Two Cultures", C. P. Snow states that the scientist has regrettably little interest in the "Arts"—with the important exception of music: scientists in their thousands collect records, stand in long queues for concert tickets, and belong to active amateur orchestral or operatic groups. The question of the scientist's interest in music is a complex one, going into the whole psychology of the scientific outlook, and cannot be dealt with briefly here. One aspect, however, which applies to all those interested in music, scientist or not, is the subject of this article—the collection of gramophone records.

If one glances through the record catalogues one finds, for example, nine currently available versions of Brahms' Piano Concerto No. 1, six of Schumann's Symphony No. 3, and so on.

With more than two dozen record companies putting out between them about fifty new recordings per month, as well as twenty or so reissues and transfers, it is little wonder that the catalogues become thicker and more overcrowded very quickly. How is one to choose the best compromise between performance and recording to suit one's own taste? Listening to music is a highly subjective pastime, so the ideal would be to compare all the available recordings on one's own equipment. But time (and the co-operation of the record companies concerned!) precludes such a course of action, and one either has to resort to "pot luck"—the selection of a "favourite" conductor or striking sleeve design—or resort to the second-hand opinions of the critics. A recently added complication is the introduction of cheaper records

(largely reissues of older, successful discs) and the advent of various "Record Societies", introducing a further economic factor. The growth in the market of stereo and tape recordings promises to make the whole situation completely impossible within a very short time.

Several newspapers and magazines have a regular review of recent recordings, but usually only a few are selected for discussion from the enormous monthly output. The B.B.C. also arranges occasional discussions to compare either different versions of a specific work or "outstanding issues" of the month. In addition to these necessarily sketchy aids to record-buying, there are five main comprehensive reviews, published independently, which cover the whole range of classical records issued every month. These are: "The Gramophone" (General Gramophone Publications), "Gramophone Record Review" (Record Review), "Records and Recording" (Hansom Books), "The Monthly Letter" (E.M.G. Handmade Gramophones) and "Consensus and Review" (Henry Stave). There are, in addition, annual reviews which select the best recordings from the year's output, such as "The Art of Record Buying" (E.M.G.).

It is not surprising that the recommendations of these separate journals frequently differ. For example, the table overleaf summarises respective comments on various recordings of half-a-dozen works issued recently.

The Consumer Research Association publishes a monthly journal entitled "Which?", containing attempted objective comparisons of various makes of washing machine, hair restorer and many other items, in an effort to help the public choose the "best buy" from a bewildering variety. The analagous situation in the record market is that there exist *five* such advisory journals, each one probably giving a different answer! The question is: which one gives the most consistent and reliable advice?

The methods used by the various reviewing panels are quite informative, and in this respect—as well as in general presentation and scope—the journals may conveniently be divided into two groups. The first three mentioned ("Gramophone", "Record Review" and "Records and Recording") are glossy-covered magazines, containing many advertisements, interviews with "stars" in the musical world and articles on technical subjects, as well as the review section. In these publications, records other than classical are also considered. The reviewing panel is named, and the individual concerned in

each review is indicated. Usually, the recording under consideration is compared briefly with other available versions of the same work, and a recommendation made as to the best one. "The Gramophone", in fact, heads each review with a list of the rival versions, so that one can see at a glance just what the competition is. This journal is also acutely conscious of the fact that a "one-man" review has its obvious limitations, and publishes a "Quarterly Retrospect" in which the writer frequently disagrees with the comments of a colleague in a previous issue!

The second group consists of the other two journals ("Monthly Letter" and "Consensus & Review"), which are smaller, contain no advertisements or articles, and confine themselves almost exclusively to records of classical music. The reviewing panel in each case is anonymous. Each record reviewed is "graded", depending upon the quality of the performance and of the recording, and this is an aid to quick and easy reference when reading through the catalogue. For example, the "Monthly Letter" system awards two stars (**) for records which are thoroughly recommended, denotes extra special high-fidelity recordings by the letter S, and historical performances (such as those of Caruso or Rachmaninov) by the letter I. The "Consensus and Review", as its name implies, also contains a section in which the opinions of the other reviewing panels are compared and evaluated.

From all of them it can be seen that careful attention is paid both to the technical quality of the recording and to the performance as such. For those with poor playing equipment it is rather unnecessary to select those recordings especially suited for high-fidelity reproduction—just as it is wasteful to spend £200 acquiring elaborate equipment and then buying recordings incapable of putting it to the best advantage. For example, the recording of Beethoven's Symphony No. 3 recommended by the "Monthly Letter" as the best on an "all round" basis is that by Klemperer and the Philharmonia Orchestra (Columbia CX 1346), whereas the best *performance* listed is by Kleiber and the Vienna Philharmonic (Decca ACL 35). The table of recordings and reviews provides examples of good performances ruined by the engineers, and poor performances mercilessly well-recorded. This situation is all too common, but with such frequently recorded works the choice available usually means that at least one is acceptable. In several cases, in fact, three or four recordings are equally recommended, and

RECORDING	Gramophone	Record Review	Records & Recording	Monthly Letter	Consensus & Review
BEETHOVEN: Piano Conc. No. 2 Arrau, Philharmonia Or./Galliera (Columbia CX 1696)	Glorious performance. Excellent balance and tone-quality in the recording.	Sensitive, lively performance. Good quality recording.	Lifeless performance. Poor orchestral playing. Recording lacks colour	Fine, dignified performance—though lacking in imagination. Pleasant tone in the recording.	Delicate, attractive playing. Clear, well-balanced recording.
BEETHOVEN: Symphony No. 7 Suisse Rom. Orch./Ansermet (Decca LXT 5590)	Uneven performance. Vivid recording, but lacking in warmth.	Reasonable, but inhibited performance. First-class, vivid recording.	Unexciting performance. Over-resonant recording.	Eccentric performance. Poor orchestral playing. Good recording.	Splendid performance. Magnificent recording.
BRAHMS: Piano Conc. No. 2. Katchen, Lond. Sym. Or./Forensik (Decca LXT 5591)	Fine performance. Spoiled by incompletely mastered technical problems. Excellent recording.	Pleasant interpretation and recording. Great technical mastery by Katchen.	Good performance. Excellent, well-balanced recording.	Good, well-balanced performance. Very high class recording.	Athletic performance. Good recording.
DVORAK: Symphony in D Minor Prague Sym. Orch./Neumann. (Aria ALP 137)	Excellent performance. Recording a bit congested.	Excellent recording, of a most compelling interpretation.	Very fine performance and orchestral playing. Over-resonant recording.	Fine performance. Rich, exciting recording—perhaps a little resonant.	Lively performance. Good recording—though resonant.
RACHMANINOV: Piano Conc. No. 2. Baekkelund, Oslo Phil. Or./Fjeldstad. (R.C.A. CDN 1025)	Misses the music's full measure. Indifferent recording.	Average, routine performance. Unpleasant recording.	Strong performance, spoiled by orchestral mistakes.	Virtile, passionate performance. Unrefined recording.	Warm, rich reading. Not much virtuosity, but free from obvious fault.
TCHAIKOVSKY: Symphony No. 4. Berlin Phil. Orch./Karajan. (Columbia CX 1704)	Self-conscious, languid performance. Excellent recording.	Good performance of a highly individual approach. Superb playing. Several flaws in the recording.	Virtuoso, glossy approach. Excellent recording.	An individual unexaggerated approach. Unimpressive recording.	Very good performance. Smooth, warm recording.

once again the choice is left to individual conductor preferences.

A number of works, however, probably not regularly heard in the concert hall, have very few (if any) recordings in the catalogue. If these recordings are poorly reviewed, one is left wondering whether to buy—and risk a better version appearing on the market immediately afterwards—or to wait for an unspecified time until a better version appears. In some cases the recommended version of an infrequently recorded work is something of a veteran—Tortelier's version of the Elgar Cello Concerto, for instance, dates from 1954.

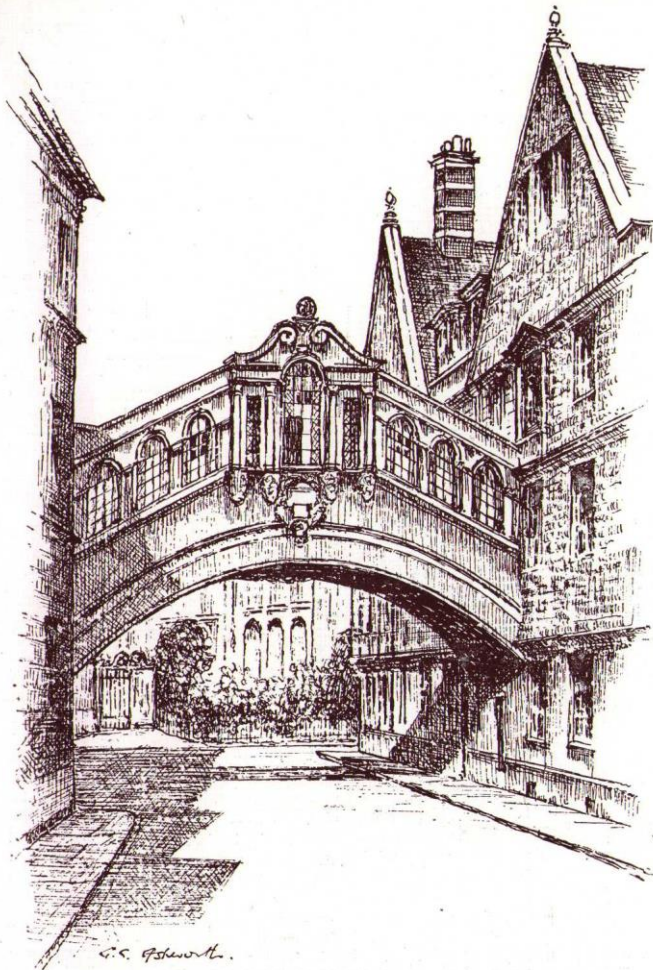
Occasionally, a conductor produces a "set" of recordings—usually together with one particular orchestra—and becomes the acknowledged interpreter of the particular composer concerned. Examples are the set of Sibelius symphonies by Collins and the London Symphony Orchestra, and the Brahms symphonies by Toscanini and the N.B.C. Orchestra. This is quite an achievement when one considers the consistently high standard of performance and recording required to compete with the rival versions, and in fact it usually occurs only when these rivals are few in number. The chances of a "set" standing up to the onslaught of a dozen or so alternatives for each work are very small.

What is the advantage of building up a record collection? Is it worth perhaps two pounds for every disc, and the expense of equipment to play them on? The advantages are that one can hear a particular work at will, in armchair comfort. The disadvantages are the lack of concert hall "atmosphere", and—most important—the fact that one tends to become too used to one particular performance, against which all others tend to be judged. With this reservation, a growing record collection used as a supplement to concert-going can provide an immediate reference library to the major classics, and can also be used to explore fields of music not often broadcast or performed. If one has access to a record lending library, this enables other versions of one's own collection to be played, as well as making the exploration process cheaper! This is probably the ideal system, and provides a way of comparing one's own opinions with those of the professional critics.

A small record collection, therefore, may be confidently based on the advice contained in the five journals mentioned, and a large collection may also be used to provide a basis for competing with the critics on the "jury". In this way one's knowledge increases and with it one's enjoyment of concerts and new works in the world of music.

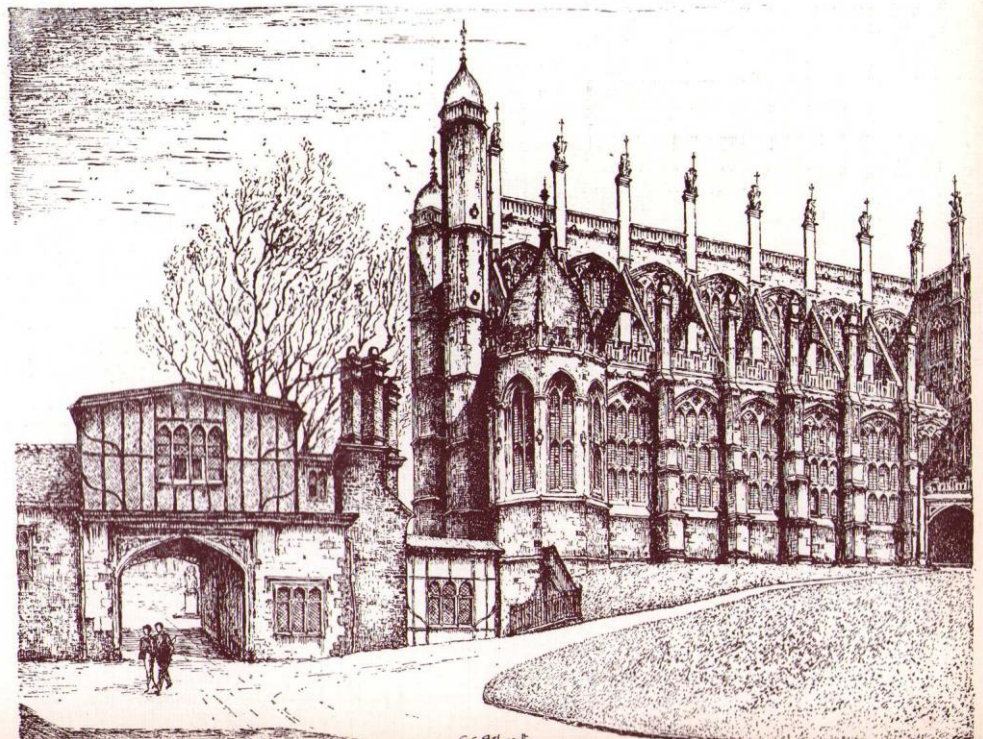


Ray Kenyon (Chem. Eng.) and George Sneddon (Eng.) prepare for a practice shot of Dorothy Phelps in Studio of the Camera Club.



HERTFORD COLLEGE,
OXFORD

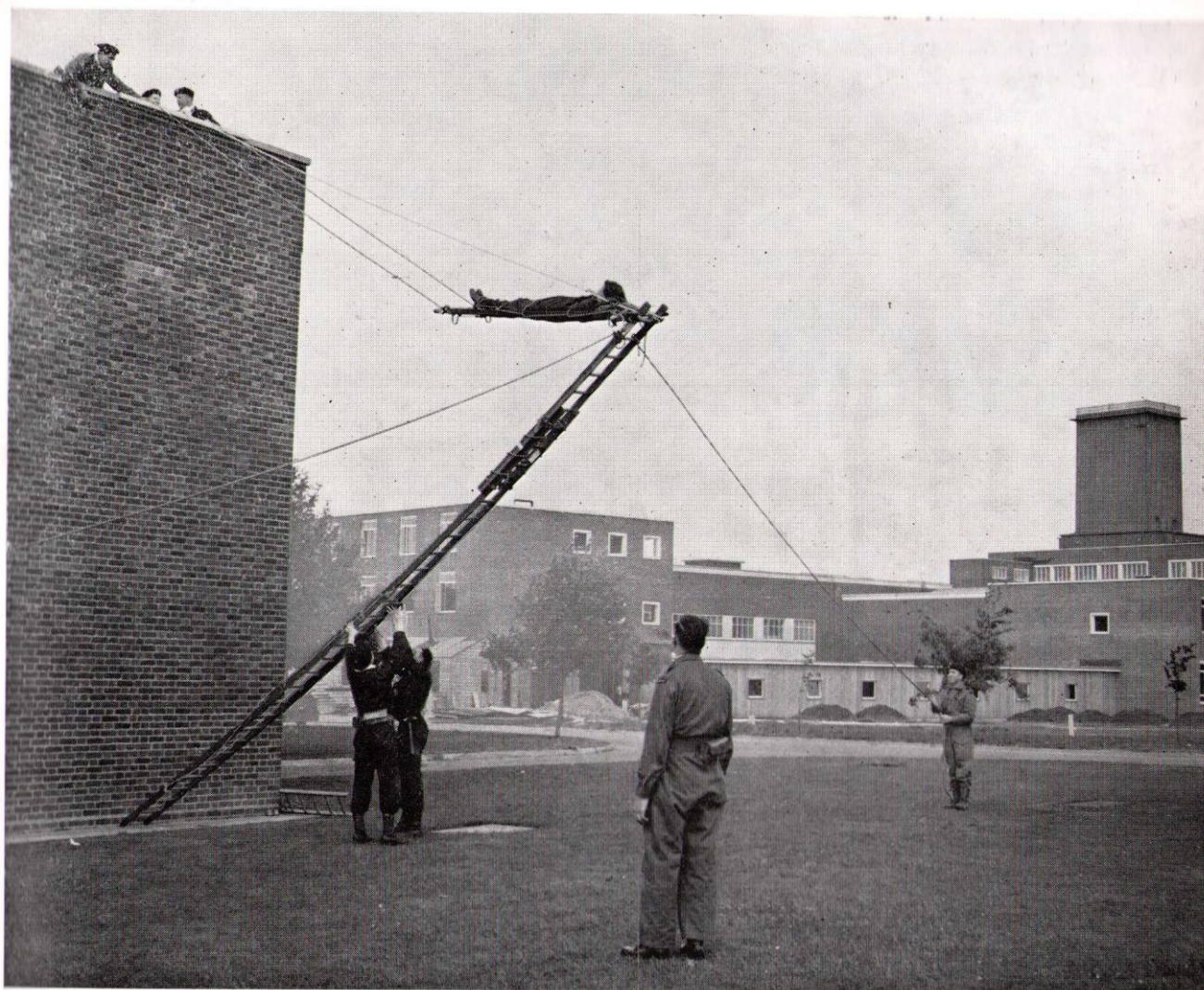
ST. GEORGE'S
CHAPEL,
WINDSOR





AUTUMNAL DAYS

B. Riley (Met.)



THIS PHOTOGRAPH shows a recent demonstration given at Building 364 by the A.E.R.E. Industrial Civil Defence Service Rescue Team. This is one of the methods by which an injured person can be brought down to ground level by trained personnel using improvised materials, or indeed can be raised to ground level from below it. The method adopted in a rescue depends entirely upon the injuries of the patient and the circumstances attached. This is the method to be adopted when the injuries of a patient are such that he must be kept horizontal and is known as the "Ladder

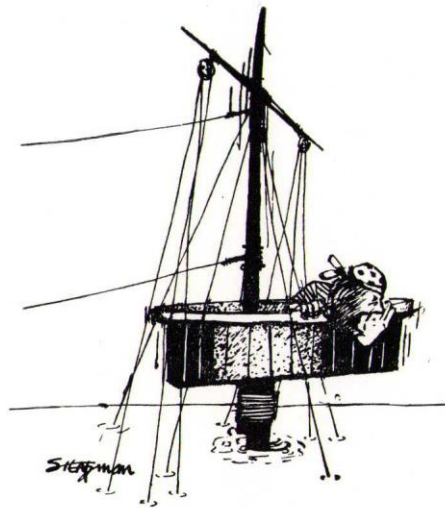
Hinge". All known methods are regularly practised by the Rescue Team with live 'casualties' and a high standard is set.

Although the team is small considering the size of the Establishment, it is fully trained to advanced First Aid level and is capable of dealing with the majority of incidents that can arise. The members, in their own free time and at their own expense, travel to various parts of the country, giving demonstrations and engaging in competitions, their last being at Hayes, Middlesex, in which they were placed second against National teams of very long experience.

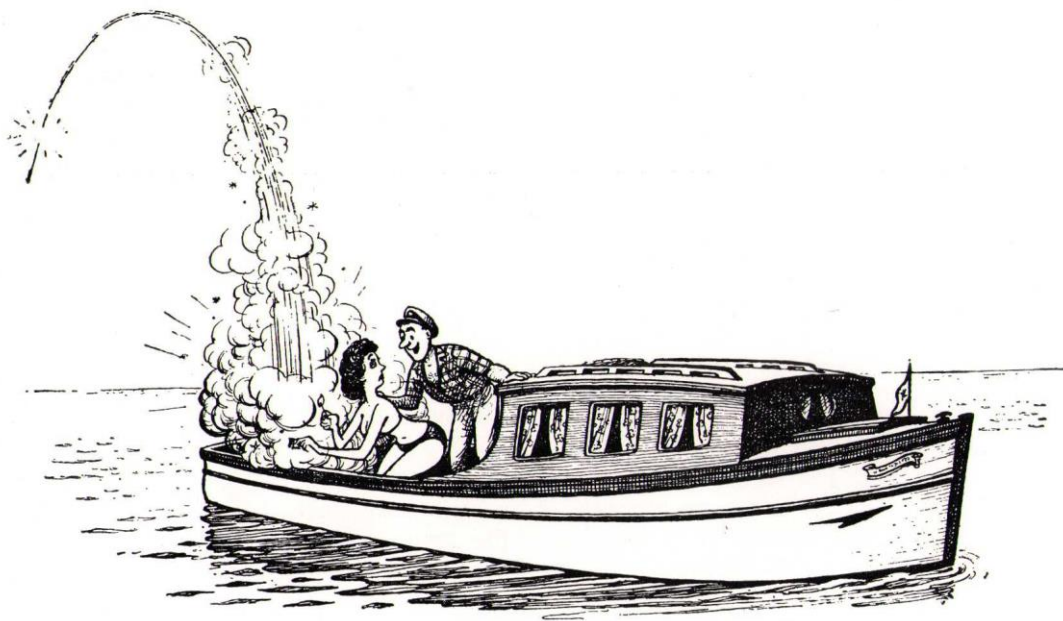


"Not just now for me, thanks. I have to drive."

Reproduced by permission of "Punch"



"Abandon ship!"



"I'll decide when we're in distress, Miss Peterson."

The Bronzewing Sails On

*Of all those who wander in and out of our midst
there is none so little understood as the mate!ot.*

Woke at 0800 feeling fine, having slept like a log. Boat moving around much more now, so I guess the wind must have freshened quite a bit. Just as well we swapped jibs last night. Felt ill as soon as I got up. No-one wanted breakfast, thank heavens (me cook today, Valerie skivvy). As much as I could do to make tea. We had the forenoon watch, so as soon as tea was made I took over the wheel from Jill and left Val to do the washing up. (Pull up the ladder, Jack, I'm in the fresh air). Stayed at helm till noon. Sighted Barfleur light at 1045 dead ahead, so I reckon the tide *did* carry us up-Channel after all. It was flooding strongly when the wind was at its lowest. Not to worry. We'll get there somehow—who cares when? Stayed on course till fairly close inshore, then followed coast line into Cherbourg.

1600. Secured all sail in Outer Harbour and proceeded under power. (At the risk of being boringly repetitious, we had no reverse gear). Came to a stop in the harbour, dropped the hook, and Joe Soap went over the side in the dinghy to take a warp to a buoy and pull the stern round. It wasn't a bad theory, really. The trouble started when the anchor dragged (again?). The old boy from the Harbourmaster's place came out in his boat, latched on to our warp between me and Bronzewing and promptly proceeded to tow us in. One manpower, sculling over the stern with a single oar, and he practically towed us in. I was simply ignored. We got a line on to (a) a buoy and (b) another ship; he put a line from our stern to the jetty and disappeared. We merely had to haul ourselves into position and secure. *This* we did without mishap. We thought we'd made a bit of a botch-up of that operation, (there had been one comment from a nearby yacht "... b---y amateurs who don't even know what they're trying to do, let alone what they're doing") but our high spirits and self-respect were later to be restored in no uncertain manner.

The old boy certainly picked a good billet for us—I mean, we could have been nearer the Cherbourg Yacht Club, but not much. We were on the inner line of ships, stern to jetty, bows tied to two buoys. Within three minutes of securing, Mike and Diana were ashore in the

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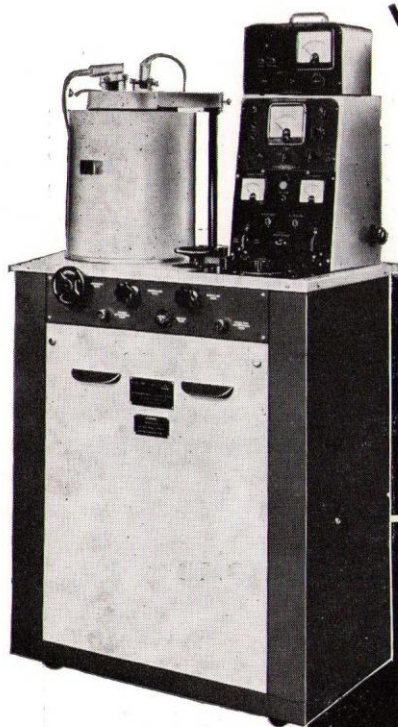
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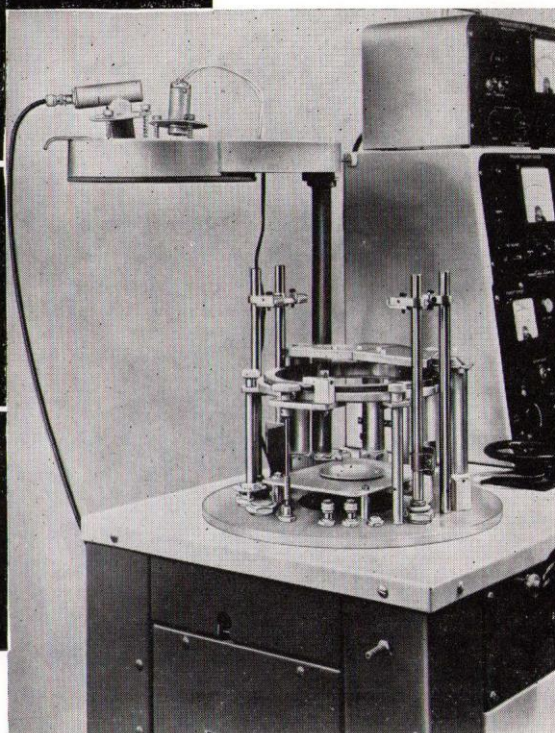
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dinghy to the Yacht Club for a bath—a bath each, that is. We immediately hit upon the idea of securing one end of a heaving line to the stern of the dinghy and the other end to the Bronzewing's stern. When the tide was in, just pull yourself along the stern warp and step ashore, and anyone who wanted the dinghy later simply pulled it back to the ship by the heaving line. When the tide was out, it was a bit more complicated. The steps leading up the wall were upstream from us, so although it was simple to get ashore, going under the stern lines of the other boats, care had to be exercised when pulling it back, or you'd find yourself pulling it over a warp it had gone under on the way out. This could lead, to say the least of it, to an entertaining contretemps for the onlooker.

As previously mentioned, self, the Engineer, is cook today, and there you have my full qualifications for the post of cook—none. As cook, decided on sausages, eggs, beans, with tinned fruit and cream. Valerie wouldn't trust me with the sausages. I don't think she trusted me with the eggs either, really, but she just couldn't manage the lot on her tod! She starts to load lard into the frying pan, ignoring completely my information that one only needs very little, sausages having plenty of their own. No, she ladles in the lard, and goes to work. By the time she'd cooked twenty bangers, there was a good inch of fat in the pan and said bangers were swimming merrily all over the place—if the sun had been shining they'd have been sunbathing round the edge of the stove; there was enough solidified grease there to make 'em feel at home. Val and I had our meal around 2000. As they finished their meal, various members of the crew were disappearing shorewards to sample the gay night life. When David volunteered to wash up, Val went thataway, too. I had hoped to have a bath and shave at the Y.C. (this was blasphemy to the 1st Mate), but it was after 2100 when we finished dishing up, so just had a quick wash, and ashore with Roy and David, the only others left on board, to investigate the possibilities (if any) of aforementioned night life. I'm glad I put that "if any" parentheses there. If this is Cherbourg on a Saturday night, give me Harwell village any time. At least I could nip along to the White Hart and have a pint or three of decent beer. We saw Dick, Derek, John, Jill and Val in the Y.C. writing postcards, but carried on without stopping. Wandered around for a while, and finally settled in the Restaurant Regina. They had some delectable shell fish on display, and David had a yen for some sea food. Roy and David split a lob-

ster between them, and I had shrimps—first time in years. We split two bottles of wine between us, and I had 20 Senior Service. Total bill 37.50 N.F. With the tip, that works out at £1 each — 2½d. I could have done it for less in Abingdon. I reckon, personally, that it was David's French that put the bill up, but we won't talk about that. Back on board around 2330, coffee and bed.

As already mentioned, the fo'c'sle deck and hatch leak, so that after 30 hours at sea, and rain most of the time we were in Cherbourg, the girls' bedding was pretty dampish. In fact, sodden would be a better word for it. Therefore Val and Jill borrowed sleeping-bags and blankets and kipped on the deck in the aftercabin. Diana's bedding was also wet, but she elected to use her own bunk, which was just as well, for there was no place else for her to sleep, anyway. This was the night we found that the 'midships hatch leaked too. When it had rained while we were on board previously, the dinghy had been stowed over the hatch; this night the dinghy was alongside in the water, and pleuvait-il! It pelted down. I awoke around 0400 to the sound of a steady drip, drip, drip. Stuck it for a while, but it was fair driving me round the twist. Eventually gave up the struggle, turned out to mop up the puddle already formed and leave a couple of deck-cloths there to catch the drips.



Sunday 10th

0645. Shipping forecast:— Wind W to S, force 4-6, rain in squalls, poor to moderate visibility. So I reckon we stay here today.

Valerie cook, David skivvy, today. The old faithful bacon and egg for breakfast—scrub round me. After breakfast, all hands to clear up and stow—find where things are, put 'em where they should be. Derek polishes the reflectors in his beloved lamps. Some time today I intend to visit the Y.C. for a bath and shave, no matter what the 1st Mate says or thinks.

Time now 1045—missed the Archers. They wouldn't let me listen all through the week either, on the grounds of conserving the radio battery. I am not getting the co-operation I reckon I deserve!

1115. Ashore for shower and shave in Y.C. Smashing, or in the vernacular—"Quelle belle douche!" Finished the morning off with several

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Back on board for lunch, then make-and-mend-routine, i.e. head down until Di returns on board and tells us all about the delicious cream cakes and peaches she bought ashore. Roused thus into our normal state of semi-consciousness, John goes to check his tidal charts or something similarly wierd; Dick decides to settle harbour dues, so self took him ashore. Back on board, and continue with tidying up ship, followed by Seamanship Course pt. II "turks' heads". Val doing her nut (were that possible) in doing a turks' head. Mike and Di go ashore looking for goat's-milk cheese. That's as good a story as any, I suppose.

1820. David decided to have a go at a Mrs. Beeton cake-mix or something. Should have mentioned that this was preceded by a couple of hours work mainly by Roy, trying to persuade the burners in the oven part of the cooker to work. It was calculated (I think) that since one of the burners didn't work properly, if the cake was left in for one third as long again, that would do the trick. The difficulty was, the cake tin would have to be mounted on a turntable to get it evenly done all round. Finally decided simply to leave it in till it was done.

1850. First turks' head completed by John. Only trouble is, he didn't know how he started it.

2055. The "Sargasso" from Venezuela, enters harbour.

2115. The "Sargasso" leaves harbour.

And that was a most entertaining twenty minutes, I can assure you. Over 100 tons, she obviously intended to tie up at one of the buoys, which are meant for much lighter vessels—this was daft to start with. She came into harbour at "full ahead", went "full astern", dropped anchor, dragged anchor (we are relieved to find we are not unique in this ability), crashed down on to the line of boats and forced them all to windward, broke one boat adrift, and dragged a buoy before giving up and belting out to sea again at "full astern".

And we thought *we'd* made a mess of tying up!

2115. Those in the Y.C. returned on board to find the results of David's cake-making ready for consumption by those who dared. For sponge cake, it was pretty good shortbread. It must be said, though, that at least it was edible. Roy certainly thought so, for he polished off half by himself. I suppose it would be regarded as nasty of me to mention that (a) Roy was

never even slightly sick throughout the cruise, so must have a strong stomach, and (b) he had about half a pound of strawberry jam with it.

David had volunteered to make ham omelettes all round, and with him, to think is to act. Just to make life more interesting, the first nine eggs were all bad—somewhat disconcerting to say the least.

While David was doing his chef act, he vociferously deplored the habit, prevalent to too wide an extent, of people tasting what they are cooking. "Disgusting habit" says he. "Should never put hand to mouth while cooking other people's food. If you want to taste, use a clean spoon and then put it in the sink to be washed. To put hand to mouth is unhygienic." Dick suggests that if he (David) feels so strongly about hygiene, he should wear a face mask while cooking. Voice from the rear suggests he should wear a face mask, period. Meeting breaks up in disorder.

Anyway, omelettes a la First Mate. Delicious! My compliments to the chef. I think the compliments astounded him more than did the fact that the omelettes were edible! Those omelettes were the first things cooked on board that hadn't been fried or come out of a tin. Except the spuds, of course.

2215. Folk still eating and nattering, so impossible to get to bed. The girls are of the opinion that we don't sail until around noon tomorrow, so they can get up as and when they please. Can't convince them that if the 0645 forecast is favourable we sail at 0800, which means up at 0700 *at the latest*. They'll learn.

2300. Started turning in when the "Blue Jackaroo" broke adrift, so Roy and David were away in the dinghy for an hour tying her up again. The fact that they were away an hour doesn't mean it took an hour to tie her up. Oh! no. They were invited on board and cracked (and if I know David, that means "killed") a bottle of wine with the owners.

2359. Shipping Forecast—force 5 to 7, occasional force 8, rain, moderate visibility. Looks as if the girls knew what was coming. We certainly ain't going no place in that weather.

Monday 11th

David cook today. Porridge, cereal, old faithful bacon and eggs, etc. Jill, John, Dick and self



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went ashore a.m. to sort out the arrangements for the duty-free goods, and to decide on what perfumes we wanted. We were faced with such a wide variety that we couldn't make up our minds. I soon gave up, and simply picked a famous name at random—Schiaparelli sounded best—and had two bottles of that. Not John! Oh, no! He had to sample the lot practically. A squirt on the back of one hand, then on the back of the other, then on his palms, then the inside of his wrists, then the backs of his wrists, and when he'd done, he couldn't remember which perfume had been squirted where anyway. Came back on board smelling like the old proverbial. (Though, to be honest, I never heard of one that smelt quite like John!) Returned on board to pass on the info. that the ship's order of duty-free goods would be coming aboard, suitably escorted by a gendarme, as is the custom, between 1600 and 1700. Some of us, (self included, of course) immediately ashore again into Y.C. for an aperitif, in the form of Cinzano-on-the-rocks. Joined there by Mike and Di, who had gone ashore earlier and were in the process of returning for lunch. While we were there, the "Cymbeline" came in, on charter, to my everlasting shame, to the R.N.S.A.—i.e. a naval crew. Talk about a mess-up. Cor! Dropped anchor to swing the stern around, dragged anchor, (all the best folk drag anchor), emulated "Sargasso's" example to a lesser extent and then gave up and anchored in mid-harbour till the wind dropped a bit. We, of course, were all highly entertained by this carry-on, watching, as we were, from the calm safety of the Y.C. I mean, we thought we'd made a botch-up of entering harbour, but the way first the "Sargasso" and then the "Cymbeline" entered harbour, both making a far worse job of it than we did, made us feel much better about the whole thing. Mike had his binoculars with him, and self discovered two or three rather attractive Wrens amongst Cymbeline's crew. Mike ventured comment on this, and was promptly slapped down by Di.

Back on board for lunch—stewed steak, boiled spuds, mixed veg. Vote of confidence in David as cook. Time now around 1500-ish, and nothing else to do for most of us except wait for the duty-free goods. David, of course, had to wash up. Two or three went ashore for no apparent reason—probably couldn't stand the tense atmosphere. Or maybe it was the company. I can't remember who went, anyway. To ease the tension and pass the time, Roy makes tea, only to find all the milk is sour. At last a use for Dick's beloved lemons—Russian tea! It

would have gladdened his heart had he been there. (If you work that out, he must have been one of those who went ashore after lunch).

1700. The cigarettes and wines come aboard. The bloke wheeled his barrow along the jetty accompanied by the gendarme, with Dick and Derek in close attendance. That means that Derek must have gone ashore after lunch, as well. We carefully load the stuff inboard, and Roy cracks his bottle of Drambuie—drinks all round. Roy and I happened to be on the upper together just after we'd finished our drinks and were invited aboard the "Patapsco", the N.Y. job lying alongside us. The owner, an American, and his crew, a Norwegian, showed us over the craft, and it was a beauty. Smaller than Bronzewing, but beautifully laid out—every inch utilised to the maximum advantage. And talk about equipment—echo sounder, 500 watt generator, radio transmitter/receiver, plus two other radios, stainless steel fittings, nylon ropes. Made Bronzewing look a bit shabby, like. We had previously assumed that Sven's (the Norwegian) complete knowledge of the International Code of Flags was just part of his thorough training as a seaman before the mast. We found the real reason on board Patapsco—a card bearing the entire code was pinned inside the door of the heads, right opposite the throne, where it could be studied at leisure. Returned to Bronzewing for the evening meal—most of us are going to the circus this evening (2000 kick off) so the meal mustn't be too late. The meal was Welsh rarebit. Mike lashed out with a bottle or so of wine with the meal, self passed the Drambuie around afterwards, so everyone was in the right frame of mind for a good old sing-song, with me on the mouth organ. The 1800 Shipping Forecast had been favourable, so over the Drambuie and between songs, we reached the decision to sail tomorrow.

A dinghy came alongside about 1845, manned by a bloke wearing the old familiar No. 8 shirt, asking did we have any sailmaker's kit that he could borrow, as they had none and had split their m'sail on the way over. We did. Assumed he was from Cymbeline, but he wasn't. While we'd been having lunch, "Sperling" also chartered to R.N.S.A., had come in and secured, all unnoticed by us. That means that at least they made a reasonable job of entering harbour, or (a) they'd have taken longer and we would have seen them at it, and (b) we'd have heard the tumult and the shouting. Why he should have rowed down to us, I don't know. Unless it was because nearly every other vessel wearing a British flag was also wearing a R.Y.S.

or R.O.R.C. pennant or something similar. Or then again, it might have been that the boozy voices raised in raucous harmony made him think that at least one vessel was manned by approachable-type beings.

About 1930, those for the circus went. Mike and Di went ashore, but not to the circus, while Dick and I stayed aboard. I had volunteered to ditch the gash—we had so much that it was getting difficult to move in the galley. We had intended to ditch in the afternoon, when the tide was ebbing, but we had to wait for the duty-free stuff, as the dinghy was needed for that, and guess which was most important! Anyway, loaded gash into dinghy, shipped outboard motor, and away to the inner breakwater (can't ditch gash in the harbour,—simply not done, old chap). I don't really know how long I thought that operation was going to take, but it darn well wasn't as long as it actually took. I thought "Ditch gash, back on board, collect gear, up to Y.C. for bath and shave, stow gear on board, then over the Cymbeline looking for 'old ships' (and good-looking Wrens) then finish off with a quiet solo run ashore." Ha Ha. Two stinking rotten hours it took! Got back on board at 2105, wet through. To sail in a sea like that in Bronzewing would have been fine—these choppy wavelets wouldn't have even splashed the fo'c'sle deck—but in a dinghy loaded with gash, it was rough. Anyway, I got soaked. Dick, by the way, had been getting rather worried/annoyed. Worried, because I was so long gone he began to think I'd sunk, annoyed because he thought I'd gone ashore without returning to Bronzewing, and he wanted to go ashore himself.

2130. Dick went ashore, I finished cleaning up, pulled dinghy back alongside with the heaving line and was about to push off ashore when I suddenly remembered our sailmaker's kit on board "Sperling". If we were sailing tomorrow morning, ten to one there'd be so much to do that it would be forgotten. So, around to Sperling to collect said sailmaker's kit. Invited aboard, supplied with a can of beer and commenced the noble task of drinking same. Conversation with sundry members of Sperling's crew—all male—elicits information that Sperling is chartered to Fleet Air Arm part of R.N.S.A., while Cymbeline is chartered by a lot of flippin' bootnecks (Royal Marines to you). No wonder they made such a hash of entering harbour. I can hold my head high again. Eventually gravitate to Y.C., to be joined there later by Sperling's crew. Had a rare old time until the circus party returned.

When I said, at the beginning of this epic, "being an account . . . as seen through the eyes of . . ." I meant just that. I can only write of things I saw, heard, or was present at. I mean, I can't write about things I don't know happened, can I? This circus outing is a very good illustration of same. Roy was one of the circus party, and he was back in the Y.C. well before midnight, while the rest of 'em didn't arrive till some considerable time after that. It might be interesting to find out just what they were up to during that extra time!

Back on board and turned in by about 0130.



Tuesday 12th

0645 Shipping Forecast say wind W. to S.W., force 4-6. According to the synopsis there's a belt of good weather heading our way from the Bay of Biscay. Bet it reaches us just in time for the journey back to Birdham! Anyway, we sail this a.m., may be to go through Alderney Race to Sark or Guernsey, depending. Me up first and put kettle on, closely followed by Derek, who wet the tea. Females wanted cup of tea in bed, and in a moment of weakness, I took it to them. Never again. Valerie and Jill didn't even drink theirs! And they wonder why they're called layabouts. As for Valerie—well, no-one's ever seriously challenged her claim to the title of Horizontal Champion. Moved around making a bit of a noise, suggesting that they all get up and prepare for sea. Did they? No. Eventually had breakfast around 0830. Scrambled eggs, but Derek put a bad one in it somewhere, so I played safe and had none. Went ashore for a bath, and to the astonishment of all, the First Mate came too. Astonishment—nay, consternation! If it had been his birthday we would have understood, but to come right out with it just like that—"I'm going to have a bath"—shook us rigid. Finished bath off with a drink, then back on board to prepare for sea. Dick and Derek went mad in the galley and stowed *everything* away. David meanwhile went out in the dinghy and changed out warps for slips, for'ard and aft.

1115. Slip and proceed. Under power to Outer Harbour, then made sail—main with two reefs, and the working jib. A boat coming in (crew dressed up to the eyebrows in oilskins)

said the weather and sea outside were O.K., but it was a bit rough through the Race. When we got outside and saw what they regarded as O.K. and thought of what they would regard as "a bit rough", we decided unanimously not to go through the Race. Accordingly, Roy asked John for a course to Alderney, and eventually we got there. Dropped the hook in Braye Harbour at 1730. Of Alderney, my eminent predecessor, long may her lum reek (or words to that effect) wrote "The sun was high, the water clear, and all was peace . . . the day was whiled away sunbathing . . . faces glowing from the sun . . ." and so on ad inf. The only thing that was high when we got there was the milk. As for sunbathing . . . Jill went for a swim. Right from the start I thought "There's something about her. She'll bear watching." She was too darn quiet all through the cruise, sitting there in a corner of the cockpit, happily smiling to herself. Now I knew it—stark raving bonkers. Why go for a swim when its pouring with rain? All she had to do was stand on the fo'c'sle. She would have frozen, of course . . .

The voyage to Alderney was uneventful, really, and though the boat pitched and rolled quite a bit, it wasn't uncomfortable. Valerie has, at odd times, stated a desire to polish the brasswork around the cockpit. This p.m. the bug really got hold—turks' heads and whippings went by the board. She armed herself with steel wool and metal polish and went mad on the hub of the wheel. Got one half done, then calmly asked David to put the helm over so's she could do the other half. He almost did, until John screamed "North Seventy West" at him. That finished Val's bulling!

Mike took Roy ashore to see the Harbour Master and on the way back bought some mackerel from a fisherman who had just come in. Last year they put a line over the stern and caught fresh mackerel. Only time we did that, John started to take a log reading from it, so we had to give up. Diana gutted, headed and tailed them and stuck them in salt water in a bucket, presumably for tomorrow's breakfast. Sorry, in the bucket.

1905. H.M.S. Squirrel, ex. M.G.B. Fishery Protection Vessel enters harbour and goes alongside jetty with a bump. As soon as they had tied up first thing done was one rating aloft to rig T.V. aerial. No kidding—B.B.C. and I.T.V. What is the Navy coming to?

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Wantage & A.E.R.E. v. The County Champions

Roy Marshall, (Captain) of Hampshire Cricket Club watches the Rev. Pickles, Captain of Wantage and A.E.R.E. Combined XI toss the coin for innings at A.E.R.E. on 3rd September.

Hampshire batted in a light-hearted way and reached 204 all-out at tea. Henry Horton gave an attractive display of strokes in his score of 52. Both Peter Stewart and John White bowled well for the home team and White claimed the three formidable wickets of Gray, Marshall and Ingleby-Mackenzie in two overs. However, 'Butch' White struck out at everything and his 38 included two immense sixes into the crowd.

The A.E.R.E. and Wantage batsmen all played attractive cricket and no less than six were caught in the deep field. David Laitt was top-scored with 42, including one six, and Ralph Austin hit a quick 22, but the spin-bowling of Marshall and Ingleby-Mackenzie was too clever for the later batsmen and the last wicket fell on the stroke of seven o'clock.

HAMPSHIRE 204
WANTAGE & A.E.R.E. 117



The result of the toss: the Rev. Pickles leads the combined team to take the field (Photos: Studio Atlanta)



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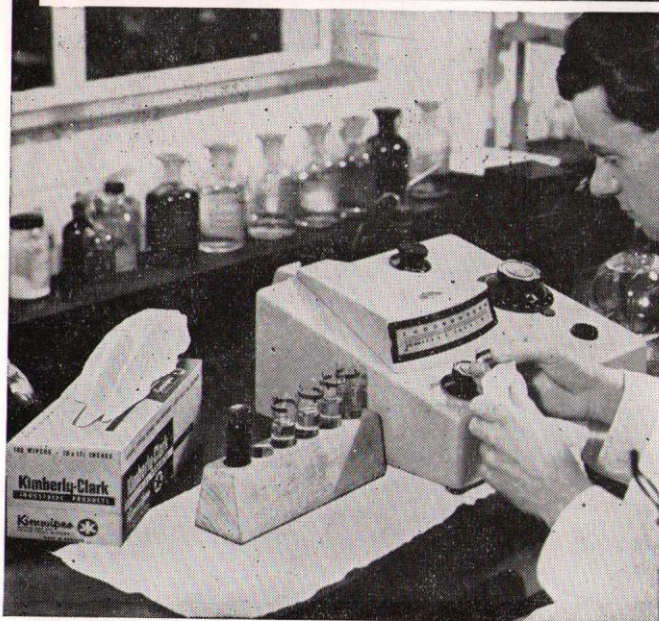
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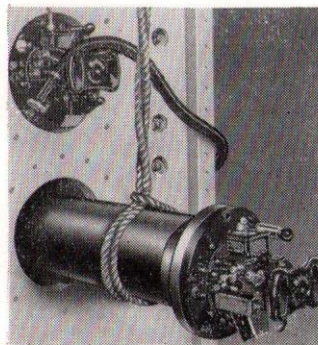
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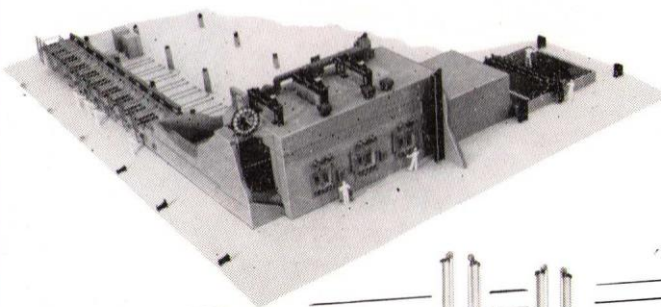
A machine used for the production of radio-active isotopes, enabling up to seventy samples to be irradiated simultaneously in a nuclear reactor. The samples are contained in standard isotope cans, and any one of them may be inserted, or withdrawn after the appropriate irradiation period, without interfering with the reactor, operation. The illustration shows one machine in position in a reactor, while a second is being installed.



(Photograph by courtesy of the Atomic Energy Authority)

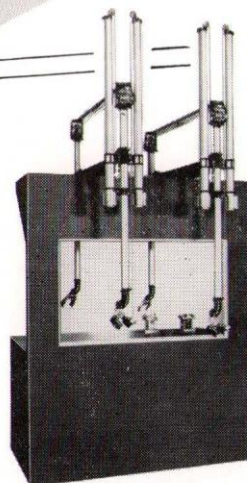
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This laboratory, designed by HOBSON in collaboration with the Central Electricity Generating Board, will receive radio-active irradiated fuel elements from C.E.G.B. power stations, remove them from their travelling containers, strip off the enclosing can, carry out measurements, take X-ray photographs, machine specimens from the uranium, etc. These operations are carried out in the caves to protect the operators from dangerous radiations. The specimens are then sent by the transport system to the cells for more detailed examination under shielded conditions.



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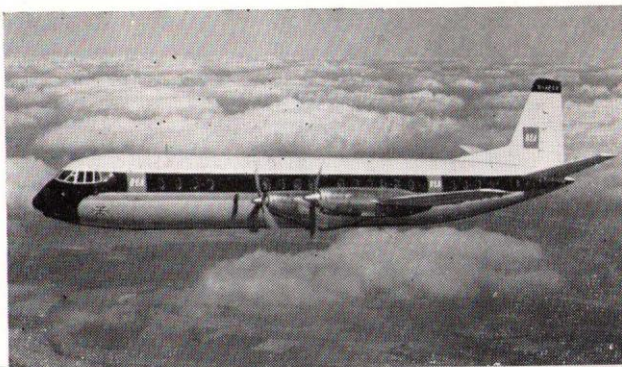
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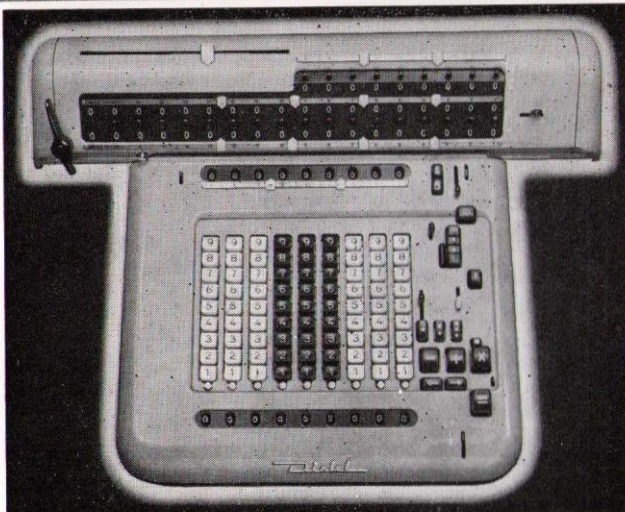
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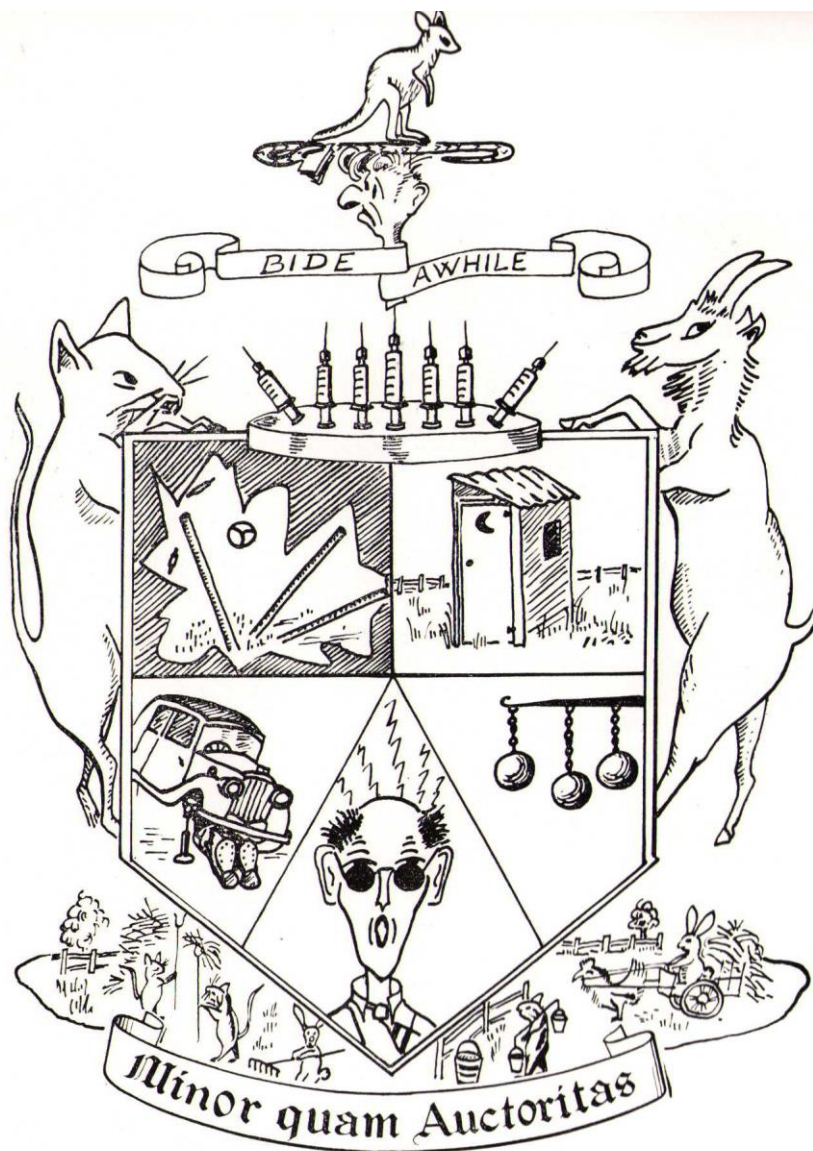
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THE COAT OF ARMS OF M.R.C. UNIT — DESIGNED BY HOMOLKA

The Coat of Arms depicts the historical source and the modern activities of the Unit.

The field is vert and the charges quarterly and excessive. On the sinister side (the sinister chief) is a council en privy dormant. On the dexterous side are a wicket in the form of an escutcheon blot and — the only true dexterous devise — a vehicle en ramp. At the base and just round the sinister bend is a figure guardant depicting one of the lesser bemuses with glasses sable and impinged with irradiations rampant.

The supporters are a very dexterous souris mutant and the sinister but still mythological goat ascendant.

A crown of syringia on a petri vessel invertant impales a subordinate (en frustrata) with a mantling a tape gules around his neck (sable). Above his head is a wreath in the form of a serpent vorant papier or adminadder. On the ground but apart from the main charge is an anima firma, sejant, trippant and dormant.

At the crest of the achievement and just clear of the serpent vorant is the non-mythical kangaroo figure benign and regardant. The motto, from the Latin, probably means, "Money is not Everything."

Another entry will be published in the next "Harlequin" with the results of this five-guinea competition.

The power of the ...



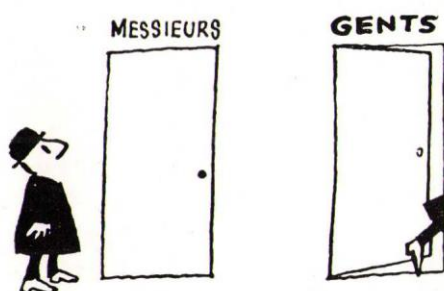
OFF-BEAT PHOTOGRAPHY. Entries for this competition have arrived too late for inclusion in this issue and will be printed in the Christmas issue. Other entries on the lunatic fringe of orthodox photography will be accepted for the competition up to press day. FIVE GUINEAS will be awarded, and all photographs will be eligible also for the Ten Guinea Competition for the best idea of the year.

1961 awards

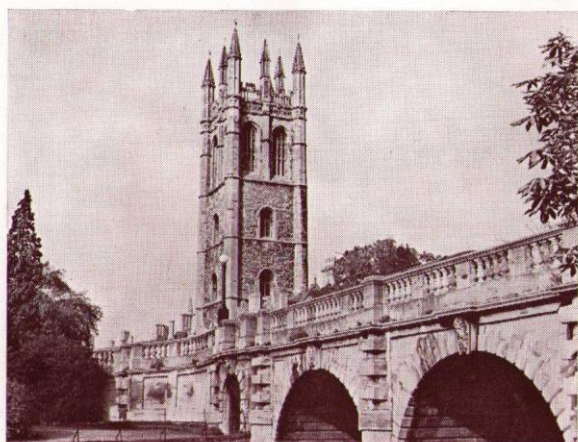
I. For the best informative article, not commissioned	...	...	Ten Guineas
II. For the best humorous article	...	...	ditto
III. For the most original idea	...	...	ditto

Below is the closing date for
Round Four contributions
for sections I, II and III.

... right word



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