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#### Summer Harlequin 1964

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#### Foreword

#### from the Director of the Rutherford Laboratory

I am very pleased to see the Rutherford Laboratory featured in *Harlequin* at this significant time in our development, illustrating the close relationship we have

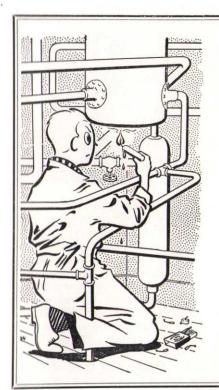
enjoyed with the A.E.R.E. since we became an independent Laboratory.

The Editor's kind invitation to contribute the Foreword to this issue also gives me an ideal opportunity to place on record our gratitude to the Authority, and to the A.E.R.E. in particular, for their many services to us throughout the design and construction of our Laboratory. As we grew in size and strength, we were able to take over progressively the functions of an independent organisation, but we still depend on the Authority for many things. We continue to benefit from the excellent A.E.R.E. library and medical service, and from some administrative services such as stores, transport, grounds department and photographic section. The Authority places all our contracts, and as we are for the time being funded on a sub-head of the Authority's vote we depend heavily on the London Office. But most of all we value our very close scientific collaboration with the A.E.R.E. This particular link is strongest with the physicists of Nuclear Physics Division, but we also work closely with Electronics Division (many of whose members are housed in our Laboratory), Theoretical Physics Division, and Chemistry Division (who manage our Radiochemical Laboratory in exchange for a little "house-room" — an informal and friendly arrangement which has been of enormous value to us).

We are engaged in exciting work at our Laboratory — work which is at one of the frontiers of modern science. Experiments on our two accelerators are directed towards adding to knowledge of matter in its smallest components. This knowledge is of prime importance in scientists' attempts to understand the laws of Nature. Over the past few years an enormous amount of data has been collected at the high energy physics laboratories throughout the world, and gradually some sort of order is beginning to emerge in our understanding of "elementary particles". For example, in 6 world, in 6 world, and gradually some sort of order is beginning to emerge in our understanding of "elementary particles". For example, in 6 world in 6 w over 100 in five or six years, we now know that most of them are not "elementary" after all. A kind of spectroscopy is struggling to emerge, just as atomic spectroscopy emerged from earlier studies of matter on a rather larger scale. Unfortunately our instruments are more expensive and more complicated than those used by atomic spectroscopists. Nimrod would have been frightening indeed if we could have foreseen it 25 years ago. But the expense and complication demand largescale collaborations between scientists, and our purposes and policies are bound up intimately with universities, their need to be active in research, and their rôle in the educational process. This has proved to be one of the most exciting and challenging aspects of our work, and ultimately, I think, the most rewarding. It has brought us opportunities to be "outward-looking" on a scale denied to most Government laboratories.

We now have to establish a scientific reputation as a Laboratory; the remarkable success of our Mother Establishment, the A.E.R.E., is a spur.

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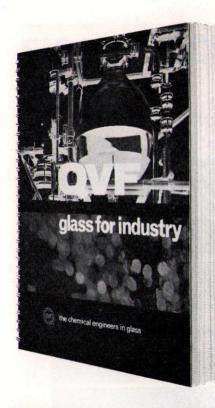
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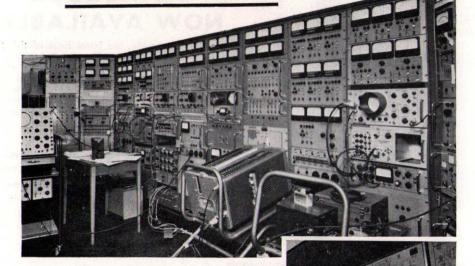
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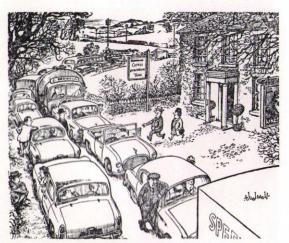
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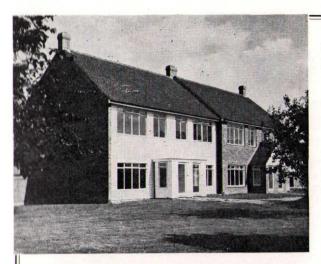
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The cover design of this issue, like that of the summer issue last year, experimented with a new technique. In this case a normal photograph was subjected to a creative darkroom technique by the Public Relations Photographic Unit at London. The method is repeated solarization and involves exposing the film to white light during development, continued development producing a partly reversed image.

## this selection

SUMMER 1964	The Rutherford Laboratory	14
Vol. XVI, No. 2 (45)	Pearlies	20
	Summertime	21
Editor	The Science Museum, Oxford	22
D. A. TYLER	A.E.R.E. Photographic Exhibition	24
Calas Managar	I Regret Any Inconvenience	28
Sales Manager  J. DALEY	Dumbo	29
	Man's Best Friend	30
Treasurer D. C. WALL	I Hate My Boss	. 34
	Outward Bound	39
DR. R. B. JACOBI	Shape of Things to Come	- 5
		1

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#### **EDITORIAL**

"Harlequin" has ceased to be the leisure magazine of Harwell. As the Research Group grew we were glad to include new organisations such as the laboratories at Wantage and Culham. We have been glad to find also, at our back door, in the Radiobiological Unit of M.R.C. and in the Rutherford Laboratory of N.I.R.N.S., both readers and contributors from outside the Research Group. In the future we propose to be more "outward looking" and to take greater account of this wider field to be served.

As it matured, the Rutherford Laboratory required a new postal address, "Chilton" instead of "Harwell", a move which not only achieved a quicker delivery of mail — when mail was arriving — but a clearer independent identity. At the same time, there are occasions when it is convenient to regard ourselves as one community.

A recent meeting of Berkshire County Council concerned itself with the delay in building the new Oxford-East Ilsley road that must replace the present road via Rowstock Corner. Our community has five County Councillors, one from A.E.R.E., two from Culham and two from the Rutherford Laboratory, and it was one of these last, Coun. Alec Spurway, who added this weight to the argument of his A.E.R.E. colleague: "The Ministry of Transport cannot be aware that there is a town of 8,000 people called A.E.R.E. Harwell on this road."

When in its pages "Harlequin" refers to the communities of Harwell and Chilton in this shortened form of "Harwell", it will be appreciated that it does so for reasons of brevity. To coin a hybrid term similar to "Oxbridge", such as "Harlton" or "Chilwell", would be to add to the confusion. We hope that if we refer to "our community" or to "our readers" this will include everyone who wishes to be included.

In the Summer issue of last year we published a profile of a girl who "reclined amidst a jungle of tea-stained files and creeping ivy". Its title was "I hate my Secretary" and we soon had requests to re-print it from editors who were unaware that, far from being written by an infuriated executive, it was written by a secretary. She has since left Harwell, and we are able to say that she was as far removed from her fictional secretary as perfection is from imperfection. We publish a sequel to it in this issue, "I hate my Boss", but not the sex or grade of the second author. Sufficient is it to say that to see our mistakes and misfortunes through the eyes of another is to put them in perspective. A sense of humour is a valuable asset, and one which anyone can acquire if he is able to take himself and his affairs no more seriously than they deserve.

An objective view rests on the outward look and on the self-confidence that comes from the knowledge of our true abilities.

# THE RUTHERFORD LABORATORY

A.E.R.E. has "mothered" several scientific establishments over the past years, such as Amersham, Wantage Research Laboratory, Culham and Winfrith. Some of these have now grown to independent, adult stature, but all remain part of the Research Group or at least part of the A.E.A. family. One laboratory, which in many ways acknowledges A.E.R.E. as its parent, now not only stands on its own feet but has left the family to become the first laboratory of a new organisation — The National Institute for Research in Nuclear Science. This laboratory, the Rutherford High Energy Laboratory, stands at Chilton, next door to the Harwell site.

The Rutherford Laboratory was officially opened by the Rt. Hon. Mr. Quintin Hogg, Secretary of State for Education and Science, on 24th April this year, and it seems an appropriate time to look over the fence at A.E.R.E.'s

neighbour.

The Birth of the Institute

By about 1950 research into the nature of matter revealed some surprising things. Earlier we had become used to the idea of electrons whirling round nuclei like planets round the sun, and protons and neutrons were almost household words as the particles which sit in the nucleus. By that time scientists were sending equipment in balloons to the top of our atmosphere, where very fast-moving particles called "cosmic rays" shower in from outer space. All sorts of odd particles were found up there, and equally odd names were found to identify them pion, kaon . . . The fast-moving cosmic rays had enough energy to "create" these odd particles in accordance with Einstein's famous E = mc<sup>2</sup> relationship, which tells us that matter and energy are interchangeable.

Sending equipment floating off in balloons imposes severe limitations on what can be done, however, and when techniques for producing fast-moving particles in the laboratory were developed nuclear science took a big step forward. These techniques were incorporated in accelerators known popularly as "atom smashers". Accelerators had been used in

nuclear research since the pioneering work of Sir John Cockcroft and Mr. T. S. Walton at Cambridge in 1932, but the technological developments of World War II opened the way to high energy physics, to the study of what used to be called "the New Particles".

Unfortunately, accelerators are big machines, very expensive to build and to operate. They are generally beyond the means of, for example, a single University, and to enable this research to proceed in Britain the Government set up, in 1957, the National Institute for Research in Nuclear Science. The Institute exists to carry out nuclear research and to provide facilities on a national scale for the use of Universities and other organisations, such as the A.E.A., concerned with nuclear science.

"Out of A.E.R.E."

A group of accelerator builders already existed at A.E.R.E.; also, A.E.R.E. had under construction a proton linear accelerator, and this was the embryo from which the Rutherford Laboratory grew. The Laboratory site, covering some 75 acres, was handed over by the A.E.A., and the bulk of the Accelerator Division became Institute staff at the beginning of 1961. Many members of the Engineering Division joined the Institute at the same time. The linear accelerator became Institute property and is now one of its most successful pieces of equipment.

By now the Laboratory is independent of A.E.R.E., though it still relies on its "parent" for a number of services. The relationship between the two neighbours remain very close. For example, NIRNS staff are eligible for membership of the A.E.R.E. Recreational

Association.

At the Laboratory

The main equipment of the Laboratory consists of two proton accelerators — a seven thousand million electron volt proton synchrotron, Nimrod, and a fifty million electron volt linear accelerator, the P.L.A.

The P.L.A. produced its first full energy beam in July 1959, and at the present time



The Rt. Hon. Mr. Quintin Hogg pressing the button of a control unit to inaugurate Nimrod. Lord Bridges, Chairman of the Governing Body of the National Institute is seen at the far right with Dr. Pickavance, Mrs. Pickavance and E. C. Eglinton.

some fifty nuclear physicists (mainly from the Universities, with some from A.E.R.E. and the Laboratory's own staff) are taking part in experiments with the machine. The P.L.A. is mainly a nucleus investigator. At 50 MeV the proton beam is not sufficiently energetic to create elementary particles, but it can already overcome the repulsion from the positive charge on the nucleus and cause havoc within it. With the aid of two special devices — a "polarised proton source", which gives a bombarding proton beam with protons spinning in a known direction, and a "time of flight device" enabling very precise measurements of particle velocity to be made — the P.L.A. can tackle experiments which any other machine operating in its energy range would find very difficult to do.

Nimrod achieved design energy in August 1963, and already close on a hundred scientists, again mainly from the Universities, are involved in its experimental programme. No longer do

they have to disappear down the "brain drain" to find a machine capable of producing the newly discovered particles: with an energy of 7 GeV, the protons from Nimrod can provide almost all the "elementary" particles now known

the protons from Nimrod can provide almost all the "elementary" particles now known.

Nimrod's "forte", however, does not lie in its maximum energy but in another quality which contributes to the efficiency of the high energy physics experiments — the beam intensity, or the number of protons in each beam pulse. When Nimrod's design was being chosen it was decided to concentrate on achieving high intensity beams, and to leave very high energy work to a machine at Geneva to which British scientists have access. (This is a 28 GeV proton synchrotron built by the European Organisation for Nuclear Research, of which Britain is a member contributing a quarter of the funds). Nimrod is designed to give a billion protons at every pulse, and it is now close to achieving that figure.

#### RUTHERFORD

#### MR. L. B. MULLETT

Mr. Leslie Baden Mullett was born in 1920. He graduated in Physics at Birmingham University in 1941 and was engaged in Radar Research at the Radar Research Establishment until 1945.

In 1946 he joined the staff of the A.E.R.E. as a founder-member of the Electron Linear Accelerator Group. The group moved from Malvern to Harwell in 1953 at the beginning of the project to build a large proton linear accelerator. He was appointed Head of the Accelerator Division of A.E.R.E. during the early design period of Nimrod, and in 1961, Assistant Director of the Rutherford Laboratory.

Mr. Mullett is married and lives at Rurent Oxon.

Mr. Mullett is married and lives at Burcot, Oxon.



#### DR. J. M. VALENTINE

Dr. James Moncur Valentine was born in 1925. He studied physics at St. Andrew's University and did post-graduate work on nuclear physics at Glasgow University. He then became interested in medical physics and from 1953 to 1962 worked for the Western Regional Hospital Board, Glasgow, latterly as Deputy Regional Physicist.

He joined the National Institute for Research in Nuclear Science as Assistant Secretary (Scientific) in

Nuclear Science as Assistant Secretary (Scientific) in 1962 and, after a period of dutv as Deputy Secretary, was appointed Secretary of the Rutherford High Energy Laboratory in 1963.

Dr. Valentine lives in Abingdon; he is married and has three children, two daughters born in 1953 and 1959 and a son born in 1955. He was a member of the Harwell Golf Society team which recently won the Sir William Penney Trophy at Ascot against the eight golf societies of the Authority.

MEMBERS OF THE RUTHERFORD LABORATORY DIRECTORATE—



#### WHO'S WHO

MR. P. BOWLES

Mr. P. BOWLES

Mr. Percy Bowles was born in 1914. He was apprenticed in electrical engineering and won the Stocks Massey Scholarship to Owens College, Manchester University (1935-38), where he obtained an honours degree in engineering. He became a Mechnical Engineering Pupil to Rolls Royce Ltd., and during his post-graduate research and development engineering he was awarded M.Sc. for his thesis on the measurement of impulsive loads in flight. He joined the Atomic Energy Establishment at Harwell in 1947 and was appointed Division Head in Engineering in 1954. He became Project Engineer for NIMROD in 1958 and joined the National Institute for Research in Nuclear Science as Chief Engineer in 1962.

Mr. Bowles lives at Harwell, Berkshire; he is

Mr. Bowles lives at Harwell, Berkshire; he is married and has a son and daughter aged 11 and 13

#### DR. G. H. STAFFORD

Dr. Godfrey Harry Stafford was born at Sheffield in 1920. He was educated in South Africa and obtained an M.Sc. degree in Physics at the University of Cape Town in 1941. During the war years he served in the South African Navy and the Royal

After the war he worked for three years as a research student in the Cavendish Laboratory, Camresearch student in the Cavendish Laboratory, Cambridge, and then spent  $2\frac{1}{2}$  years at A.E.R.E., Harwell, before returning to South Africa as Head of the Biophysics Section in the South African Council for Scientific and Industrial Research. Two years later he returned to England to work on the A.E.R.E. synchrocyclotron. He transferred to the National Institute for Research in Nuclear Science on its formation formation.

Dr. Stafford is a member of the Rutherford Laboratory Directorate, Head of the High Energy Physics Division and Acting Head of the Proton Linear Accelerator Division.

He is married and has three children, twin girls aged 10 and a boy aged 12.

-ASSISTING DR. T. G. PICKAVANCE

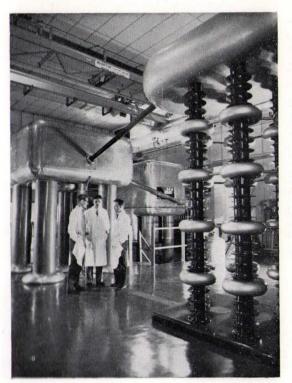


#### The Rutherford Laboratory

Associated Equipment

There are several methods of investigating the elementary particle interactions which take place at the accelerators. Bubble chambers, where the tracks of particles are left as a trail of tiny bubbles, are perhaps the best known, and the Laboratory will eventually have three large chambers. The main one, with the pon-derous title of "The British National Hydrogen Bubble Chamber", is the biggest in Europe and is at present being used for experiments at the machine in Switzerland. The other two heavy liquid bubble chamber and a helium bubble chamber — are under construction at the Laboratory. To enable bubble chamber experiments to proceed while the hydrogen chamber is in Switzerland and those at the Laboratory are being built, a hydrogen bubble chamber from France is to be used with Nimrod in collaboration with a group from the Saclay laboratory near Paris.

Nuclear emulsions, spark chambers and electronic counters are other ways of tracking



the particles, and each technique is catered for at the Laboratory. The photographs of particle tracks come in their thousands from the detecting equipment: they have to be scanned to pick out the interesting-looking events, and these events must then be precisely measured. Finally, the vast quantity of information is fed to a computer. The Laboratory provides facilities for each of these steps en route to the experimental results. An ORION computer is in use, and there will soon be access to the new ATLAS computer being built by A.E.R.E. on an adjoining site.

Other Projects

Two other projects are occupying Rutherford Laboratory staff. One is the construction, installation and commissioning of a 70 inch Variable Energy Cyclotron being built opposite Building 220 for A.E.R.E. This machine will be very versatile in both energy and the type of particle it can accelerate. It will be used mainly in the study of radiation damage, where it will provide information complementary to that gained using the neutron flux in reactors. The other project involves an electrostatic generator being built for Oxford University. The team working on this project is actually working on the A.E.R.E. site, in Hangar 10, where a deep pit has been an ideal home for a test machine.

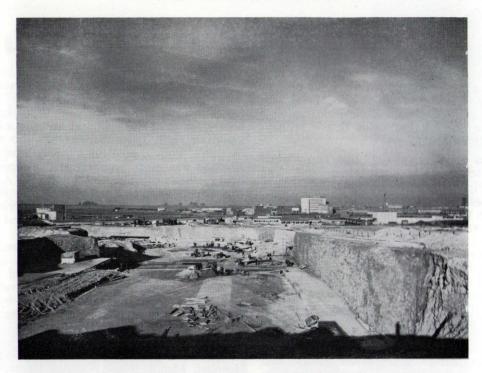
To complete this brief review, mention should be made of an attempt to extend the National Institute facilities to chemists also, by setting up a nuclear and radiochemical laboratory. Equipment is provided to enable chemists using the accelerators as irradiation sources to carry out chemical and physical tests on radioactive materials.

These are the main areas of activity at the Rutherford Laboratory. With the big machine-building projects completed, the Laboratory is settling down to its rôle as a nuclear research centre, and University teams using the accelerators are becoming established features of the daily life. The Laboratory looks forward to many years of interesting, fruitful work in nuclear science.

BRIAN SOUTHWORTH.

Two views of the high voltage area at the input end of the Proton Linear Accelerator where a Cockcroft-Walton Generator provides a voltage of 500,000 volts to accelerate the protons from the source. Construction of the P.L.A. was begun by A.E.R.E. and then handed over to the National Institute.

Early days: Excavation work for Nimrod.





### THE PEARLIES

THE PEARLIES were first portrayed in the heyday of the music hall at the turn of the century by Albert Chevalier — not to be confused with the Chevalier of film and television fame — and are a product of London that is synonymous with London.

Pearlies as such "growed" like Topsy when clothing was made of much sterner stuff. The first pearly outfit was of simple design with just a few buttons around the edge of the cuffs and along the lapels of the jacket. The purpose of this was to make an eye-catching figure behind his stall in the market place. Later it was discovered that pieces of mirror with the corners chipped off and the sharp edges smoothed could be sewn to clothing. This and the addition of further buttons made for striking figures in the London market places, at first in the Old Kent Road and "Elephant and Castle" area. Soon the originals of these costermongers were calling themselves Pearly "Kings", and it wasn't long before their "better halves" had taken part in this by sewing pearly buttons on the cuffs and collars of their dresses. From the music hall of that day and in the person of Kate Karney was gained the idea of wearing large hats adorned with enormous coloured ostrich feathers and, of course, as their hus-bands were Pearly "Kings", they were Pearly "Queens".

These Pearly "Kings" and "Queens" in their full regalia and accompanied by their "courts" of friends and neighbours were to be seen at August Bank Holiday time making their way to Hampstead Fair. Visits were made to the "Jack Straw's Castle" and the "Bull and Bush", and more than one Pearly "King" has found himself in the duck pond opposite the "Bull and Bush". (The writer was present on one of the occasions when this happened and hastens to add that it was entirely due to horseplay and not intended).

These Pearlies had one outstanding feature that redeemed their sometimes bitter rivalry and their pranks when out to enjoy themselves, and this was their capacity to help those they considered less fortunate than themselves. The Pearlies came out from behind their stalls and set off with their donkeys and carts to collect for local charities and had lots of fun doing it.

The donkey, or "moke" as it is known in their parlance, was both a friend and an essential part of their stock in trade; there was no more moving sight than the Pearly whose moke was poorly, warming the bran and bringing a blanket from his bed, for nothing was too much for his "Polly" or "Bill". This love and affection was made apparent at the horse and donkey shows organised by the R.S.P.C.A. and Our Dumb Friends League where the Pearly Kings and Queens, with, of course, "princes" and "princesses", drove their donkeys and carts or barrows around the arena.

Another ritual between the wars was the gathering together of all the Pearlies at St. Mary Magdalene's church in the Old Kent Road, Southwark, for the harvest festival service. This service was also attended by the Licensed Victuallers' Association, but the leading Pearly "King" read the lesson.

A further ritual was the meeting of the Pearlies at the Industrial Orthopaedic Society's Hospital, Manor House, Golders Green, with the "Bull and Bush" and its duck pond perilously close.

With the growth of the number of motor vehicles and their need of garages the availability of stables decreased, so the donkey gradually disappeared from the London streets, but the Pearlies carried on.

The "choker" and "monkey jacket" pearlies gave way to the collar and tie pearlies, who have more recently appeared in New York. Their appearance caused a small riot even in that home of the unusual. When one considers that the Pearly "Queen" has no less than thirty thousand pearl buttons on her dress and some more on her handbag, the whole topped by a large-brimmed hat with no less than twelve full-length coloured ostrich feathers on it, one can appreciate the reaction of the New Yorkers.

The Pearlies are now sadly decreased in numbers, but the spirit of friendliness and the desire to help others remain with the "princes" and "princesses" — although they haven't now the time to sew on thirty thousand pearl buttons to a design chalked out and argued over by the costermonger and his "donah", wife.

The advent of plastic buttons is primarily the cause of the disappearance of the Pearly from the London scene.  $\star$ 

#### summertime

Seen at the Toc H Fete held at Caldecott House, Abingdon. Helping the A.E.R.E. Toc H Group were archers from Culham Laboratory and members of A.E.R.E. Model Club who gave a demonstration of control-line aerobatics. £60 was made during the afternoon to equip the Toc H caravan (seen at bottomright) which is now in position near the river at Henley. The A.E.R.E. Welfare Dept. is among bodies which have been asked to make recommendations concerning its use by families who were otherwise not able to have a holiday.











# THE MUSEUM OF THE HISTORY OF SCIENCE—OXFORD

#### D. A. Boyce (NUCLEAR PHYSICS)

A BUILDING in Oxford which attracts relatively little attention is the museum situated in Broad Street and opposite to Blackwell's Bookshop. This is probably because the average visitor to Oxford concentrates on the newly re-decorated Sheldonian Theatre next door. However, it is well worth a visit in order to see the wide range of instruments used by members of the scientific and medical professions in the past.

The museum is housed in the old Ashmolean Building which was erected in 1683 and the first building in Oxford designed specifically for the teaching of science. The main exhibits include the Lewis Evans collection of scientific instruments and the collection presented by Mr. J. A. Billmeir in 1957. The Radcliffe Observatory and the Royal Astronomical Society have also made presentations, and these have been supplemented by loans and purchases by individuals and colleges. The museum is housed on two floors and a basement.

On the ground floor is displayed a fine collection of telescopes and microscopes constituting a complete series from *ca.* 1670 to the mid 19th century. Theodolites, sextants and distance measuring devices called way wisers are shown. These were used in land surveying and road making and are calibrated in yards, poles, chains, furlongs and miles up to about 12 miles. One particular example was made in 1740 and consists effectively of a large wheel pushed with a long pole. Photographic development is not neglected and is illustrated by early wet plate cameras and by pictures taken by H. Fox Talbot in 1842.

On the first floor and gallery is exhibited what is probably the finest collection of astrolabes in existence. Astrolabes have been used for solving problems of practical astronomy and for taking altitudes from which time and latitude are deducible, this use now being super-

seded by the sextant. We could in fact look on the astrolabe as the first type of analogue computer and certainly as the first scientific instrument. The astrolabes are divided into four groups ranging from the earliest Islamic specimen dated 1068 A.D., through Persian and Egyptian examples, to the European ones of the 18th century. Of particular interest is the only known Eastern Islamic spherical astrolabe. The variety of mathematical instruments including armillary spheres, orreries, globes, sun-dials and perpetual calendars is quite bewildering.

Armillary spheres comprise a number of rings designed to represent the position of important circles of the celestial sphere, the whole turning on its polar axis with a meridian and horizon.

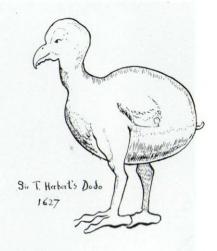
Several orreries are on view, the name being derived from Charles Boyle the 4th Earl of Orrery, and these illustrate the motion of the earth and moon relative to each other and to the sun, by means of clockwork-driven balls. A case showing many universal sun-dials and equinoctial ring dials should not be missed. These have correction for both latitude and the time of the year, using months or the signs of the Zodiac.

For the mathematician one of the earliest circular scale slide rules is on view; and also on this floor is the magnificent lodestone, presented to the University by the Countess of Westmorland. In the basement gallery is housed a large collection of chemical glassware of the early 19th century, and the physical equipment includes air pumps, frictional electrical machines, X-ray apparatus and spectrometers used in the Ashmolean Laboratory.

Interested readers may like to know that the museum is open to the public, free of charge, on weekdays from 10.30 a.m. to 1.0 p.m. and from 2.30 p.m. to 4.0 p.m.

Self-conscious in the Broad, Near the famed Sheldonian, Her ancient crumbling stones festooned With scaffolding, and stunned By motor scooter noises of an alien age, This relic quietly cherishes the past.

Machines for measuring the stars
In friendly brass, and telescopes
Of yellowing, floral vellum shaped,
And careful carved mahogany
Adjoin arrays of bravely complex microscopes
And pocket calculators for the tides.



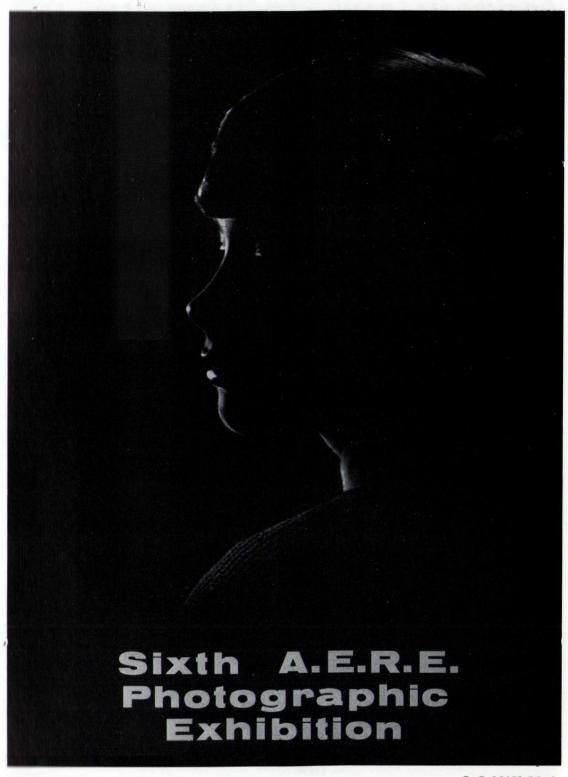
A crayon drawing of the moon,
Three feet across, lovingly made
Through clumsy uncorrected lenses, hangs
Upon the walls, and frantic clockwork tricks
Two centuries out of date, bewitch the eye.
They count the time long after their creators'
death.

Nostalgic in the shade, not clearly seen, Are pale Daguerrotypes And wistful, yellowing prints From slow laborious wet collodion plates. Ancestors, stiff from long exposure times, Stare apprehensively from quaint vignettes.

Dainty lancets, ivory-handled, lie In velvet cases with forceps and bleeding sets. Probes, amulets and charms and pill-machines Tell of the search for painless surgery. Culture pans and distillation flasks Developed (for the War) the Penicillin tale.

But, dwarfing all these earnest things, there hangs
A little square of blackboard, framed,
Which dates from 1931. It shows
A few detached and careful thoughts:
Some dread equations in the childish rounded script
Of Albert Einstein.

— Thos.



THE 6th Annual Exhibition of the Harwell Camera Club was competently presented this year in the lounge of Grimsdyke House, which proved to be ideal for the purpose: lighting was good, there was adequate space, and the facilities enabled colour transparencies to be projected in a very suitable (and novel) manner.

Although in new and unfamiliar surroundings, the Exhibition followed the usual and familiar pattern of former exhibitions; entries covered a similar variety of subjects, competency was of usual standard, and the number of entries was much the same as last year. (A decrease in the number of submitted prints was off-set by an increased number of colour transparencies). It was perhaps this similarity with former exhibitions that made it no exception to the rule and in consequence it cannot be regarded as outstanding.

When a photographer sets out to create a photograph he has at his disposal a number of factors by means of which he is able to translate the aspiration into reality. As an example, when using his camera, lamps, or enlarger, he will employ basic techniques and skills; he will use these with reference to the 'body of knowledge' and 'standards' which have been compiled and grown up since photography first began. Even in the choice and arrangement of subject matter the photographer will be influenced by these criteria in a similar way. It is this 'body of knowledge', together with informed opinion, which gives us some basic criteria for the evaluation of photographs but, as in the case of fine art, much is left to personal taste, and appraisal becomes very subjective. It is therefore difficult for an individual to evaluate a particular photograph without being subjective even though he may be acknowledging recognised values.

V. P. Narracott, A.I.B.P., enhanced the exhibition with a number of good photographs covering a variety of subjects with a freshness of approach; his entries covered landscape, seascape, portraiture and still life. *Harlequin* has printed his "Evening at Mudeford" which offers almost universal appeal.

Many of the portrait exhibits were mundane—exceptions to this came in H. Cullen's 'first' entitled "J. S. Waring, Esq., FRPS, FRSA" and in J. A. Beale's 'first' entitled "The Gardener". It is interesting to note that both these portraits are more than a representation of physical likeness; they also express personality and give an insight into the subjects' interests. The portrait of C. G. May, entitled "Portrait V", was a

little different in presentation although the approach is by no means unusual.

G. G. Webb exhibited some photographs under the theme of "The Young Ones". What a treasure-trove there is to be plundered by any photographer seeking material to convey the essence of such a theme! What an appropriate topic to have at this year's Exhibition with so much emphasis being placed on the younger generation! But somehow the aspiration seemed greater than the means and the results were partially disappointing. A print not commended by the judge, but printed in this magazine, is that of D. W. Atkinson's, "Refraction and Reflection". Surely this deserved more praise than it received? imaginative and bold presentation of three different shaped glasses served as an excellent vehicle for the theme. The result — a print full of vigour abounding in a variety of shapes and tones.

The presentation of colour slides creates difficulties which were well overcome at this year's Exhibition, and the use of a tape-recorder for conveying the judge's remarks was helpful.

Earlier references to subjectivity apply equally as much to colour as to black and white and it should be mentioned that the judge had a bias towards entries with subdued colouring, even towards those which were almost monochrome. This is all very dependent upon personal choice and it seems to substantiate the common idea that, when selecting slides for an exhibition, the entrant must consider not only his own views but also those of the judge (if he happens to know what they are!).

It is interesting to note, however, that certain entrants had several slides amongst those which were commended; this indicates, as the judge pointed out, that the selection of the winning entries is not perhaps quite so subjective as one may be led to imagine. It suggests that there are several colour photographers who have a special aptitude in this field and that their work in particular has a hall-mark of quality.

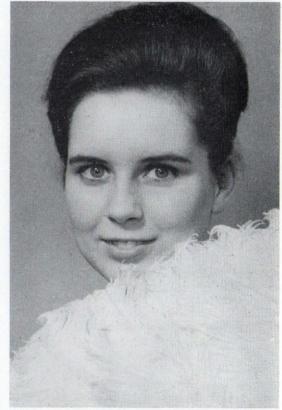
As was to be expected, in the Advanced Colour Section, G. T. Sneddon obtained a 'third' with his "Fishers" and A. C. Thomson a 'second' with his "Joan II" — Harlequin has printed one of the latter's black and white entries of the same subject. Miss C. A. Fisher obtained the first place with her "Ancient Mariners" and thus deservedly repeated her success of last year. What will happen next year? — perhaps a hat-trick for Miss Fisher!

THE YOUNG ONES G. G. WEBB (Eng.)





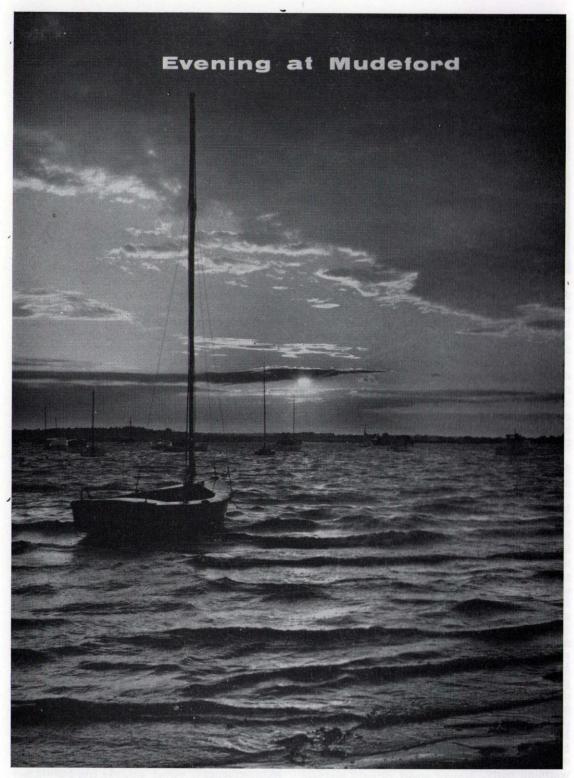
A. C. THOMSON (Eng.)





REFRACTION AND REFLECTION

D. W. ATKINSON (Cul. Lab.)



V. P. NARRACOTT 27



STORIES BEHIND THE HEADLINES (No. 1)

## "I REGRET ANY INCONVENIENCE"



o. 28 July, 1964

Price 3d.

## Harwell man's home wrecked

A HARWELL man, Mr. George Serrels (Research Reactors Division), his wife and five children wern made homeless recently when a ten-ton articulated lorry crashed into their house at East Ilsley and partly

demolished it.

Straddling the A 34
Oxford - Newbury Road,
East Ilaley has been named
locally as "hell fire corner".
In one week alone, accidents resulted in two buildings being wrecked. In the
past, others have been

TO BE turned out of your house at a week's notice presents its problems, but to have your house demolished whilst you are still living in it is an even greater problem and is an experience I do not want to repeat.

When disaster strikes a whole community much is said about the large organisations coming to the aid of families in distress, providing food and shelter and caring for the children. But in a small incident like mine it is one's friends and neighbours who come to the rescue; and to mine I am greatly indebted.

Inconvenience is a relative thing. When a Ministry of Transport official was told of the accident to my house he is reported as saying "I regret any inconvenience caused". Whether he meant to myself or to the flow of traffic through East Ilsley I do not know. But to my family it meant something different: it meant lack of privacy, for the inside of our house and all our private possessions were exposed to the public gaze; as a family we were split up, the children staying with friends, and whether we liked it or not we had suddenly become the centre of attention.

Finding somewhere to live where we could all be together was top priority on my list of requirements. It was in this respect that the Housing Department at A.E.R.E. Harwell came promptly to my assistance by placing at my disposal a fully furnished prefabricated bungalow. It was with a sense of relief when five days after the accident we all moved into the bungalow, taking with us the few personal belongings salvaged from the old house. That evening my wife and I gave a small housewarming party.

Next on my list was to set in motion the slow process of claiming for damages from my insurance company. Advice was forthcoming from all directions, but the game of insurance has to be played by professionals, the contestants being my insurance company, represented by a company of insurance adjusters; the vehicle insurance company, who had appointed a firm of surveyors to act on their behalf; and a firm of insurance assessors engaged by myself (on a commission basis) to act for me in securing the maximum possible settlement. My own solicitor was instructed to hold a watching brief and to advise me on all matters not directly covered by the insurance policy.

In addition to the usual tradesmen to be informed upon change of address, the local schoolmaster was contacted and arrangements made for my three younger children to change schools. The two older children remained at their original schools, but arrangements had to be made with the school authorities for transport.

A local television company installed a television set and aerial array within one day at my request, but the G.P.O. has as yet failed to install a telephone.

It is just five weeks since the accident. No financial settlement has been offered by the insurance company, so I cannot state whether I will be repairing or rebuilding my old house. The one-way traffic system at East Ilsley, started as a result of the accident to my house, will have to remain in force for many months to come, and to those users of the A34 who fret at the delay I can only say: "I regret any inconvenience".

G. A. SERRELS.

#### DUMBO



DUMBO was a Bulldog and he came to us by a twist of fate. Having lost a puppy we were offered the father; at first I had my doubts, as he was then four years old and wondered if he would take kindly to a new master and

surroundings.

The first night I was convinced that I had made a mistake; having made up his bed and left him for the night I settled down for, as I thought, my eight hours; thinking all would be well. I was due for a rude awakening, apparently the pooch had not taken too kindly to being left alone and decided he needed company. I woke with a start feeling I was at sea in a storm, collecting my wits I hopped out of bed in a hurry and switched on the light, there was this great animal, all 84 lbs. of him, squatting on the bed looking as doleful as only a bulldog can, he then started to lick my wife's face, who said, "isn't he cute", that was that, from then on he was master of the house!

He was typical of his breed obstinate but loveable, his walks had to be organised so that he did not cover the same ground on the return journey, in other words a circular tour otherwise I would find myself stranded with a dog who would not budge; try pulling along a 84 lbs. dog, and see how soon you would be accused of cruelty by all and sundry, especially

with that look on his face!

One walk at a late hour took my wife and I to the Post Office where I had to post an important letter; I should have known better—the return journey had to be over the same ground. No end of coaxing would get him moving and, short of carrying him home, there was only one thing for it, transport of some sort was necessary, and a taxi it had to be, the fat lump liked nothing better than a car ride,

my wife went to collect the taxi — that walk cost me 5/-! any thoughts the taxi driver may have had he kept to himself, but no doubt he thought of Noel Coward's "mad dogs and Englishmen".

He liked nothing better, apart from food, than to be brushed, or as we called it, Electroluxed, every time the cleaner came out he had to be done first, and sat on the flex hose until his rights were acknowledged. Feeding was just a question of finding about 2 lbs. meat per day plus extras. Iced lollies were taken in his stride, except I or my wife had to hold the wretched ice, while his lordship took his time licking

away quite happily.

Dumbo suffered from heart trouble later in life, and tablets had to be taken from time to time, would he take them! in the centre of a chocolate cream or a piece of meat pie, ah! that was different; which brings me to one lunch time when I was having a quick snack, a test match was being televised, and I had cut a suitable portion of pie and inserted the tablet ready for Dumbo, something happened in the test match which sent me in a hurry into the lounge, on my way I picked up the wrong piece of pie, and promptly ate the lot. I spent an anxious hour trying to locate the Vet, with visions of spending a week or two in the kennels!

Many are the stories I could relate, and it was a sad day indeed when he had to be put down, for he gave us so much pleasure and many laughs. To this day we have not had another dog, for there can never be another Dumbo.

B.D.P.

Reprinted in its original form from Southern Electrity House Journal.

#### Some observations on

#### man's best friend

#### Homolka

IF YOU EVER try to sneak half a ton of lead out of the Establishment, there is a good chance that you will be apprehended not by a policeman, but by a dog. This is a sobering thought. Whether or not a thief would consider it 'infra dig' to be copped by a mere animal — albeit a large, hairy, apparently vicious animal — would depend on his attitude towards dogs. And our attitude towards dogs is something that every true Briton (whatever that means) must consider at some time or other.

One sometimes gets the impression that there are more dogs per square yard in A.E.R.E.



Leading the way into Abingdon's main street.

housing estates than in any other district. This, of course, is not true. Being Harwell dogs, they are more gregarious and one tends to see them 'en masse'. Nevertheless, they serve as an interesting cross-section for the observation of dogs in general and, even more interesting, for the observation of dog owners.

The dog in Britain is something of an institution — rather like cricket and gardening, only more so. To say quite openly that you do not like dogs leads you to be viewed with a certain amount of suspicion. It is even worse if dogs do not like you. Consider the utterly crushing effect of approaching a friend's dog and having it snarl at you. "I can't understand it. He is so friendly with most people" puts you in a class slightly above Crippen. That tweedy figure with the weather-beaten face, pipe in mouth and faithful hound at heel, has long been the ideal of our horsey-doggy class. Alas, in real life the faithful hound is usually the only thing that will come to heel, and hence the popularity of the dog. Try getting a cat to come to heel and, unless you are making for the Kit-E-Kat, it will spit at you. Let us admit it, the obedient, obsequious devotion of the average dog does wonders for our ego.

Considering its importance in our social and psychological welfare, it is perhaps surprising that the dog is not allowed inside the Establishment. Attempts, apparently, have been made by enterprising hounds to slip in surreptitiously, but they were always caught. It would be interesting to see what would happen if a really determined Great Dane or Wolf Hound made up its mind to join its master inside—especially if there were only one policeman at the gate. Oddly enough, cats seem to be 'personae gratae' in the Establishment, and one frequently comes across sleek, well-fed looking "moggies". However, these cats have a certain proprietary air about them, and one gets the impression that the Establishment was built around them.

It is perhaps as a gesture against our dependence on dogs that we have associated our pet's name with some rather derogatory expressions. How typical of human ingratitude is our use of words like dirty dog, sly dog, gay dog, underdog, dog-eared, dog-house dog-collar, dog-inthe manger. We even have a hot-dog and, the very latest from B Mess, dogma, meaning a bitch. For a nation of reputed dog lovers this language smacks of hypocrisy. It is a good thing that — as far as we know — dogs do not understand English.

It is almost impossible to keep cats out of any talk about dogs. It would be rather like discussing chips without mentioning fish. Cats are the dogs' traditional rivals as household pets, and articles, papers and even books have been written proving that one or the other is the more intelligent — which all shows what an important question it is. Briefly, dogs will do the most extraordinary things to please human beings whilst human begins will do the most extraordinary things to please cats. A cat's "tricks" are functional. There is usually food, sleep, sex or self-preservation involved. We can get performing dogs, fleas, elephants, mice, tigers, seals, etc., but not, as far as I know,

performing pussies. In a word, cats are "chancers". They can get fed, fussed, pampered, petted, without doing anything except please themselves. Equating this to human behaviour, by modern standards cats must be highly intelligent.

Legally, dogs are grouped with several other animals including camels. Rather whimsically, the law assumes that dogs (and camels) are harmless. This has resulted in that popular maxim 'Every dog is allowed one bite' which in practice is quite true. British justice at its best has declared that every dog is innocent until proved guilty—by biting you for a second time. Another little legal point of interest is the one protecting dogs from irate gardeners. Digging up flower beds is not regarded as an indictable offence where dogs are concerned and the 'one bite' (or rather 'one dig') maxim does not apply here. Fido can do it as often as the whim takes him. The onus is on the gardener to make his garden dog-proof. We thus have the fascinating system whereby any dog, providing he has had no known previous convictions, can devastate a garden, bite the gardener (once) and—if the poor gardener kicks him—appeal to the R.S.P.C.A. This is what is known as leading a dog's life. (Apparently all this also applies to camels). Cats have scarcely any legal protection-perhaps because they are more capable of looking after themselves. You can run over as many cats as you like without having to report the matter. Only in one respect is any legal bias given to puss and that is in the vexed matter of chicken hunting. Chickens must be considered as fair game for cats, for if they want to risk their nine lives by raiding the hen coop no policeman will stand in their way-unless the policeman happens to own the hens. Dogs, however, are forbidden by a thing called the Dog Act 1906 from indulging in any foul play with fowl. Even the 'one bite' maxim does not apply here. One bite at a man O.K. One bite at a chicken—trouble. Strangely enough it works the other way round for human beings.

Many people prefer dogs to people. This is understandable when one considers the dividends most dogs give in the way of unquestioning loyalty and affection for a relatively small outlay. How many wives or husbands would worship the ground walked on by their spouses if all they got out of it was two meals a day, "walkies" at night, an occasional bath and a conditioning powder? At times even children seem to be a dead loss compared with a nice,

well-trained, sycophantic dog. Indeed, children have the very opposite effect on our ego: they deflate us. But there are snags to this apparent panacea for all our longing for affection and command. Consider these facts:

More money is spent on advertising dog foods than is spent on advertising baby foods.

The National Society for Prevention of Cruelty to Children is a relatively poor organisation compared with the *Royal* Society for Prevention of Cruelty to Animals.

7/6 per week will feed an African child, but it costs 5 pounds per week to "board out" your dog in the manner to which he is accustomed.

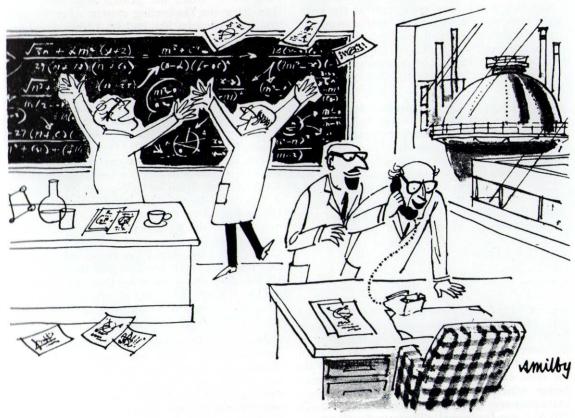
These are isolated facts but they suggest something a bit disquieting.

Some months ago a certain T.V. programme arranged to have a little girl chained to a railing in a busy London street. Within half an hour dozens of people had passed but nobody

stopped. A dog was then chained to the same railing and within five minutes a group of sympathetic people had gathered round it.

There are hairdressers for dogs, nursing homes for dogs, psychiatric clinics for dogs, training schools for dogs and even a sort of old dogs' home for retired and pensioned-off dogs. In spite of child psychology, freedom of expression, etc., an irate parent is still allowed to clip little Willie across the ear if the child is particularly fiendish. Indeed, he might be applauded for it if the little monster's crime was antisocial. But let anyone start beating a dog and somehow our gorges immediately rise. The helpless dumb creature (sometimes a great hulking creature with a howl like a wolf) appeals to some deep-rooted noble instinct. To strike an animal, particularly a dog, is just not British.

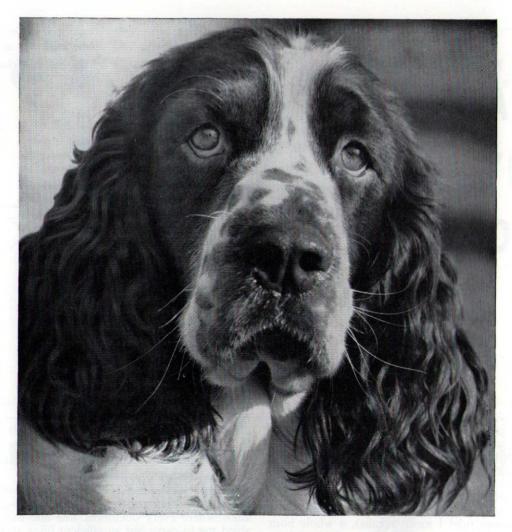
Perhaps, after all, people *are* less of a responsibility than the British dog.



By kind permission of 'Punch'

"Minister — we've made a breakthrough towards an acceptable neutron bomb.

It destroys people but not dogs."



#### How I learned to stop worrying and love Lloyds Bank

I'm happy to say that, unlike the master, I'm not a worrier. He was terrible. Particularly about money.

He would worry about carrying too much cash. Worry about not carrying enough. Worry at the end of the month. Worry about not saving at the beginning. And there was an extra special worry called a mortgage. I must admit I started to get a little concerned. For one thing, I was starting to look like him. Worried.

Then he went to see Lloyds Bank. The change was amazing. They fixed him up with a cheque book. Told him where the money was going. And even organised his mortgage repayments. All for just a few shillings a year.

There's just one thing. It all seems too good to last. I don't want to be pessimistic, but what happens if he goes back to his bad old ways?

It's really rather worrying.

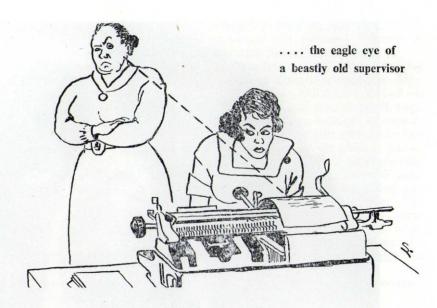
#### **LLOYDS BANK**



FOR GOOD AND HELPFUL SERVICE

LLOYDS BANK LIMITED, HARWELL BRANCH, SHOPPING CENTRE, A.E.R.E, HARWELL

## I HATE MY BOSS



GONE are my happy carefree days, gone are the days when I led a straight-forward working life, with no worries, no problems, no moody difficult man to deal with, just doing what I was trained to do at Commercial College. Gone also are the days when I started working at 8.30, had ten minutes tea break morning and afternoons (and I mean breaks), a whole hour for my lunch and went home at 5.20. I have risen to the dizzy heights of P.A. so my typing pool days are now behind me.

Great excitement occurred when I received the news of my promotion. No more slogging away at a beastly old typewriter under the eagle eye of a beastly old supervisor, I was in for a life of leisure, or so I thought. How disillusioned I was to become after a few days in my new post.

The Authority have a good game for potential P.A.s, which is to send them to Risley for a couple of days to be trained to become the Perfect Secretary. They are told how essential it is to always look calm, unruffled, smart, efficient and well groomed and also given a list of duties — to name a few: -

- 1. To keep the office running smoothly and efficiently.
- 2. To record all incoming and outgoing mail, so avoid losing documents.

3. To achieve an easy reference filing system. Duty 2 I thought I had well organised, I knew where every document was and this enabled me to carry out an efficient filing system, but this has all changed. The post arrives and when I am just about to enter all the correspondence HE comes out, lifts the lot and takes it back into his den with him, then losing interest in it hands it out to all his pals. A week later he will suddenly remember having received a rather important letter from Joe Bloggs and ask me to get it for him. Now is my chance to impress him with my efficiency. I think, and dash off to refer to my bible, the mail book. Unfortunately this letter happens to be one that didn't get entered in my little book so I have to go back in and tell him sheepishly that I can't find it. The remarks that follow I won't repeat, but you can imagine what an incompetent fool he thinks I am.

Another favourite trick of his is putting papers and reports in his desk drawer and

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forgetting he has done so. "Could you get me Smith's paper on Organisation, Miss Rhode?" Sure enough, there it is in my mail book as coming in on the 7th September, but he still has it according to my book. When I tell him this he hotly denies it and insists that I look through *every* file in the office for it. I am convinced that it is in his desk, but when I suggest this he goes red in the face at the thought that I dare suggest such a thing. The rest of the day is taken up with my looking for

Smith's silly paper and at 5 p.m. I pluck up courage to tell him that I can't find it and there he is sitting reading the very thing I am looking for. "Oh it is quite all right Miss Rhode; it was in my drawer", he remarks, and goes on reading without any apology.

Shorthand was a thing I loved at Commercial College. I was trained to take it down at 120 w.p.m. and have certificates to prove it and it is quite impossible to become a P.A. without at least 100 w.p.m. What good does it do? None at all. My boss's thinking periods are much longer than his dictating periods and many a dictating session has lulled me off to sleep. At 9 a.m. he calls me in with my book and pencil, at 12 p.m. he goes for his lunch having given me a bookful of shorthand and a bookful of insertion and deletions. They never told me at college it would be like this. Nevertheless at 2 p.m. I settle myself down to have the letters typed ready for signature in time for the last post. He won't even let me do this in peace. BUZZ BUZZ "Get me Brown on the 'phone quick".

I try every number in the book for Brown but still can't get him.

"Oh of course, you won't get him today — he's on leave, get me Smith".

This goes on until I finally manage to get someone, and he then comes barging out



demanding his letters which I haven't even

started to type. WHAT A LIFE.

It takes no effort to look smart, unruffled, efficient, etc., you think, but after battling against a gale-force wind and lashing rain from the bus stop, a good half mile away, I occasionally arrive looking windswept, cold and white (make-up washed off with rain). HE, of course, always looks immaculate; He has only had to walk from the car park. I have five minutes to spare before official starting time to get myself looking my usual efficient self, but what a hope, for as soon as he hears me come in:

Open my drawers. "Get my papers out."

"Get me so and so on the 'phone."

"Don't forget to do this." "Don't forget to do that."

Lunch time comes round and I am still looking windswept and make-up-less only by

this time a trifle RED.

He trots off to lunch half an hour before me so this gives me time to get myself looking presentable once more. I once thought what a good idea it would be to come back from the canteen early and do some knitting, so I tried. It was fatal. There I was snug in my nice little office just on the point of working out a complicated knitting pattern when in HE came. He assumed that because I was back in the office I had no business to be KNITTING of all things. So he managed to think up lots of little jobs that needed doing immediately and these kept me busy until 2 p.m. So much for the knitting idea.

Tea breaks in the typing pool used to be great - stop work for ten minutes and have a good old chin wag — but now if the boss happens to walk out when I'm sipping my tea and reading a good novel the look of shock on his face is too good to miss. Needless to say tea breaks in my office are now non existent. Of course, I'm expected to provide HIM with tea, but on opening his tea tin I find three halfpennies, two paper clips and a foreign coin

from last year's holiday.

After a wearing afternoon I am just about to lock up at 5.10 when out he rushes oblivious of the time demanding that I type a letter for him to go off that night. Try refusing! The excuse of catching a bus won't do. The letter completed, I have just time to fling everything into the cupboard, lock up and leave the office as I entered it — looking bedraggled — and it's raining again.

I must say he has his good points, although I can't think of any at the moment; but he

must have some, somewhere. \*

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### outward bound

COURSE D.26

#### MICHAEL HELPHER

Final Year Laboratory Trainee, Harwell

ON ARRIVING at the Outward Bound School I was put into a patrol named Clifford, with ten other 'Bounders'. Each of us made his bed, went down to dinner, and then went to bed,

lights out being at ten o'clock.

The next day we rose at six thirty in the morning and went down to the River Dart for what was to become our daily dip. We all ran back to the school and did our daily duties which consisted of cleaning our rooms and also, in the case of our patrol, cleaning out the showers which was our daily outside duty. Breakfast was taken at 7.45, and after this at 8.30 came the inspection of our duties carried out by the Warden. Marks were given for the inspection and they went towards the patrol competition. At nine o'clock prayers were held in front of the school. The rest of the morning was spent in being shown around the school grounds by our instructor, seeing the Doctor and one by one going to see the Warden and giving him an undertaking to keep four conditions which were: not to smoke, not to drink alcohol, to take the daily dip in the River Dart, and to co-operate with the instructors. Lunch was taken at 12.45.

After lunch Clifford Patrol commenced on the low ropes which were comparatively easy to the patrol. This course of ropes consisted of climbing over nets, up ropes, along ropes between trees, and also swinging on ropes. Dinner was at 6.15 and we had to wear a jacket, collar and tie for this. An hour of first aid was done after tea, beginning at 7.30 after the tuck shop had closed. Lights out were at ten o'clock.

Each day the times for the everyday routine



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were the same except on Sundays when everything except lights out began half an hour later. We were always allowed Sunday morning free but were expected to use part of it to go to church.

The first week was spent in "fittening us up" so that we would be able to stand up to the rest of the course. We did a small amount of climbing on Hay Tor for a day, a ten mile hike and camp, practice cliff rescue in an old quarry, some athletics and round an obstacle course five different times during the first week; all this was to help prepare and strengthen us for what was to come.

On Saturday 12th, the last day of our first week, Clifford was duty patrol which meant we had to do the washing up and extra duties as well as our normal duties; we were duty patrol in all four times. Being duty patrol did not stop us in any way from carrying on with the activities, it just meant we had no free time for that day.

During the second and third week of the course, besides carrying on with the first aid, map reading, athletics and ropes, we completed five major activities. We did two days' canoeing, one in double seaters on rough river water, and the other in single seaters over rapids. The day shooting the rapids was the best of the two days, although it was rather a wet day for many of us who capsized up to six or seven times.

The second major activity was the two days' cliff rescue at Berry Head during which time we used the Coast Guard Station as our head-



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The most adventurous thing we did at Berry Head was to jump from a forty foot cliff into the sea in our swimming trunks.

The three-day trek was the third major activity. We hiked from the school on the first day to the Duwar Stone Rocks, a distance of eighteen miles, with thirty-pound packs on our backs, and made camp. On the second day we did several climbs on the Duwar Stones which were in some cases sixty feet high. We hiked back to school on the third day, the patrol being split into two groups who were given different routes back. The ground we hiked across was typical Dartmoor country, hilly and rough with many bogs. The average hiking speed was about two miles an hour.

Caving was the fourth major activity. Altogether we did one and a half day's caving, the first day being spent in Bakers Pitt and another cave nearby. It was in this second cave that we were to try to go around a new route through it. Candles were used for light. On the new route we came to a pool which we and the instructor had been told about, and so far as we knew it was ninety feet deep. The pool was about thirty feet long and five feet wide, and when we came to it we were about twenty feet above it on a ledge. We could not go round the pool and we wanted to cross its length so we did it by bridging it with a rope.

When we arrived back at school thick with mud, we each had to jump off a twenty-nine foot bridge into the River Dart, being fished out like drowned rats.

The half day's caving was done in an old slate mine. Two absells, descending by rope, were made. We entered the mine through a tunnel which led us to the roof of a cave from which we had to absell down to the cave floor. Once on this first cave floor we moved along a ledge to another cave, again entering near the

Clifford Patrol at Berry Head, all getting in on the act of post climbing



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roof and again abseiling to its floor ninety feet below.

The solo hike and camp was the fifth activity, each of us being given a map reference to hike to on our own. We carried thirty-pound packs with a bivi and food so that we could camp for a night on our own. This part of the course was very enjoyable from the point of view that one was away from the normal hustle and bustle of the school and its connections.

On the final week at the school there were two outstanding activities, the final scheme and the six mile cross-country run. The final scheme was the test of tests to see what the course had achieved for us. Each patrol was divided into three groups comprising either three or four 'Bounders', depending on the number in the patrol. Each group had a captain appointed. The idea was to drop each group somewhere in Cornwall or Somerset with food and



Commando crawl over the river Dart

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bivouacs, and they had to follow a set of clues to find their way back to the school. Each clue indicated where the next would be and each had to be found before a group would know where to go next. The distance of the final scheme was on an average seventy five miles for each group, which had to be covered within three days. The group I was in went to Cornwall and we found the greatest test was to keep cheerful while hiking in soaking wet clothes and with blistered feet. Our group managed to get back to school within the three days, but many groups arrived back three or four hours late due to extremely bad weather.

The day after we had come from the final scheme we had to do the six-mile cross-country run, which included a long one-in-four hill and three parts of the River Dart to cross. It was on this, the last day, that we all had our badges presented to us and ended the day with a concert.

Reflecting back on the course, I think it was a great experience which no one should turn down if offered. There were many things the course helped in: leadership, self-assurance and the ability to get on with others. Everyone experiences fear to some extent at some time, but on the course one pushes it to the back of one's mind, mainly because no one wants to show anyone else that he is afraid.

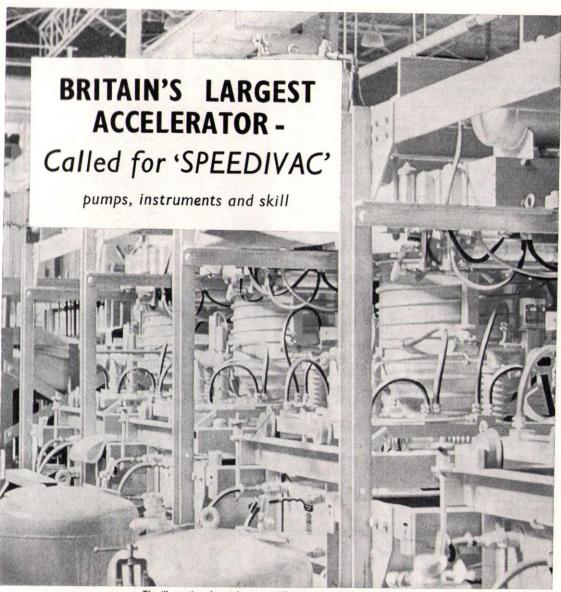
Personally I found myself getting a real sense of achievement from our patrol, canoeing down the rapids further than the other patrols and being the only patrol to explore the new route in the cave. The real benefit of the course will probably not show itself until three or four years' time.

The jump from the forty foot cliff at Berry Head. Here the writer tried his best to fly — but without success.









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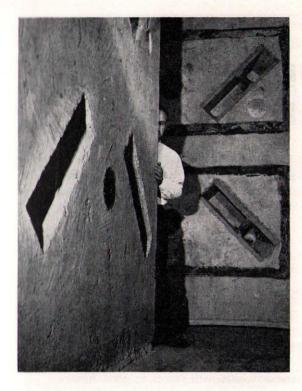
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#### EDITOR'S PERSONAL NOTE

As work on an issue of "Harlequin" reaches its climax, there is always the fear that the editor, in his reduced state, may be taken out of the running, that a complicated microbe, or simple nervous breakdown, will force him to bed before the magazine itself can be put to bed at the printers.

We had completed all the spare inches of this issue, excepting these last few, when the annual routine X-ray came round. To our surprise this has resulted in our being hospitalised within three days for what threatens to be an equal number of months. We write these last words of the issue at the Osler Hospital, Headington.



It had been our intention to fade a little into the background for the next issue — but not so abruptly. We are pleased, however, at our unusual foresight in having arranged a guest editor for it and for the fact that a number of contributions have been specially stock-piled.

Selected for the rôle is VIC HORGAN, whose art work and reviews have several times appeared, but who will be better known for his work under the pen-name of HOMOLKA.

We look forward to having as many visits and as much occupational therapy as he — or anyone else — would like to give us, and feel sure that Autumn "Harlequin" will show a new vitality.

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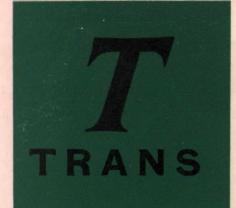
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