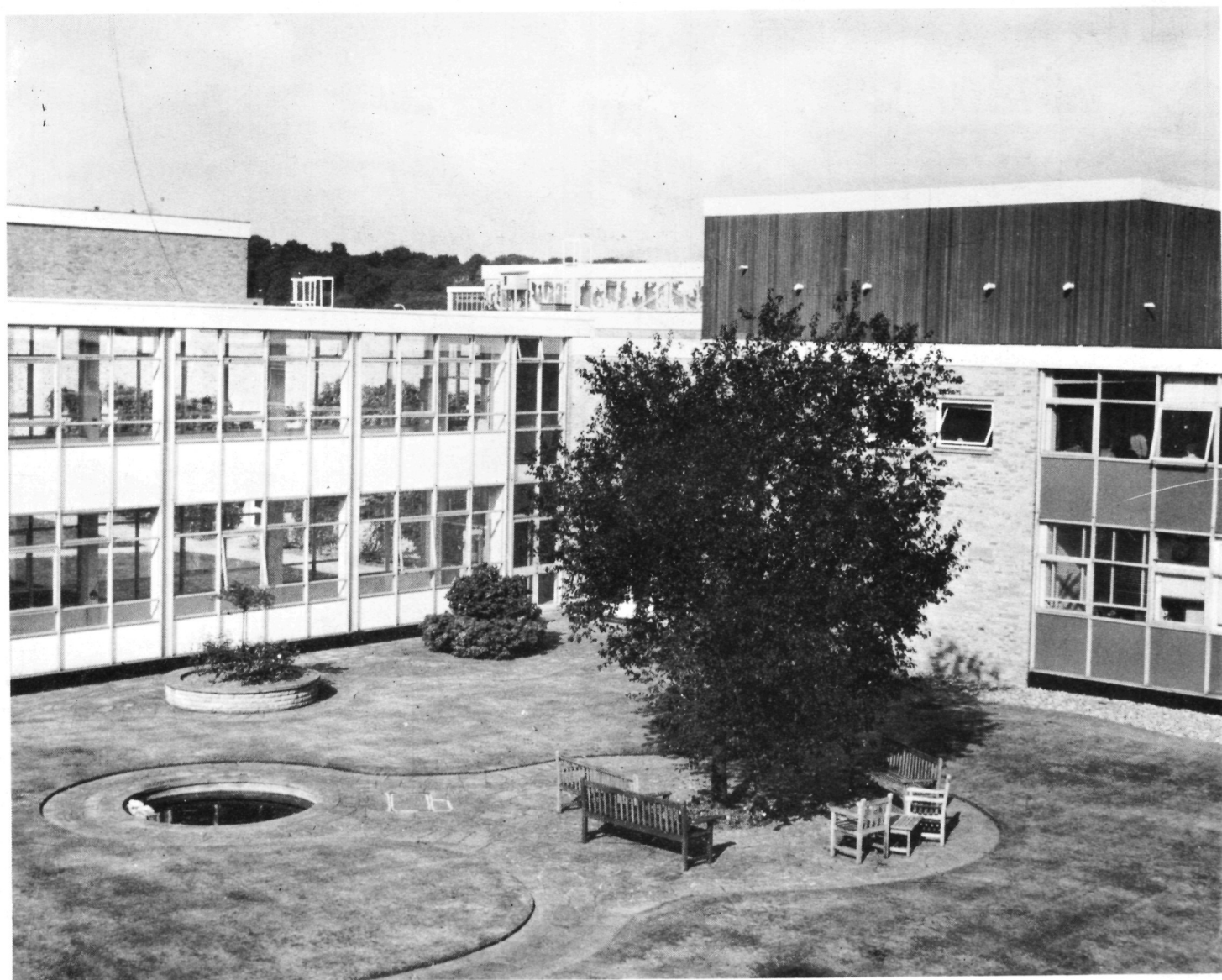


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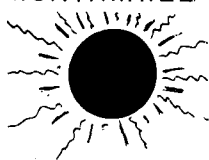
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THE IMPOSSIBLE DREAM

MAY 1977

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Vol. XXI

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RESEARCH GROUP SUGGESTIONS SCHEME COMPETITION: BONUS AWARDS FOR ENERGY CONSERVATION SUGGESTIONS.

A Joint Official Staff and Trade Union Side Panel has chosen the best suggestions for the saving of energy for bonus awards under this competition.

The prizes originally announced for the competition were of £50, £25 and £10. Ninety-four suggestions were considered. None was judged to merit the top bonus award of £50, but the Panel instead made two awards of £25, two of £15 and one of £5.

The winners, who ALSO received awards under the normal suggestions scheme arrangements, were:-

£25 Mr. A.C. Challis,
Environmental & Medical Sciences Division

£25 (Messrs W. Temple and D.J. Chivers,
Chemistry Division.

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(Photograph: Avon Rubber Company.)



THIS PRODUCT

COULD KILL

Is every development of modern science a threat to life? Watchfulness and the taking of maximum precautions are always called for, but should every new product be fought against in the same way that new machines were attacked by the Luddites of a past age? One industrialist has had enough of being the butt of fierce condemnation and wild innuendo. Last month, Norman Mischler joined in with this account of the insidious innovation of a rival industry:

'ICI has announced the discovery of a new fire-fighting agent to add to their existing range. Known as WATER (Wonderful And Total Extinguishing Resource), it augments, rather than replaces, existing agents such as dry powder and BCF (bromine-chlorine-fluorine) which have been in use from time immemorial. It is particularly suitable for dealing with fires in buildings, timber yards and warehouses. Though required in large quantities, it is fairly cheap to produce and it is intended that quantities of about a million gallons should be stored in urban areas and near other installations of high risk ready for immediate use. BCF and dry powder are usually stored under pressure, but WATER will be stored in open ponds or reservoirs and conveyed to the scene of the fire by hoses and portable pumps.

ICI's new proposals are already encountering strong opposition from safety and environmental groups. Professor Connie Barrinner has pointed out that, if anyone immersed their head in a bucket of WATER, it would prove fatal in as little as three minutes. Each of ICI's proposed reservoirs will contain enough water to fill 500,000 two-gallon buckets. Each bucket-full could be used 100 times so there is enough WATER in one reservoir to kill the entire population of the U.K. Risks of this size, said Professor Barrinner, should not be allowed, whatever the gain. If the WATER were to get out of control, the results of Flixborough or Seveso would pale into insignificance by comparison. What use was a fire-fighting agent that could kill men as well as fire?

A local authority spokesman said that he would strongly oppose planning permission for construction of a WATER reservoir in this area unless the most stringent precautions were followed. Open ponds were certainly not acceptable. What would prevent people falling in them? What would prevent the contents from leaking out? At the very least the WATER would need to be contained in a steel pressure vessel surrounded by a leak-proof concrete wall.

A spokesman from the fire brigades said he did not see the need for the new agent. Dry powder and BCF could cope with most fires. The new agent would bring with it risks, particularly to firemen, greater than any possible gain. Did we know what would happen to this new medium when it was exposed to intense heat? It had been reported that WATER was a constituent of beer. Did this mean that firemen would be intoxicated by the fumes?

The Friends of the World said that they had obtained a sample of WATER and found it caused clothes to shrink. If it did this to cotton, what would it do to men?

In the House of Commons yesterday, the Home Secretary was asked if he would prohibit the manufacture and storage of this lethal new material. The Home Secretary replied that, as it was clearly a major hazard, local authorities would have to take advice from the Health & Safety Executive before giving planning permission. A full investigation was needed and the Major Hazards Group would be asked to report.'

EARLY DAYS with Atomic Energy

by Wally Archer

The first Fuel Element Laboratory was set up in a South Cheshire Royal Ordnance Factory to serve the Atomic Energy Research Establishment at Harwell. Within the factory the new laboratory was known simply as 'Hush-Hush'. There, early in 1947, Dr. John Cockcroft (later Sir John) gathered around him a small group of ex-servicemen plus a toolmaker, foreman and manager, and explained in simple terms what the team had been set up to do. The essence of what he had to say was that a nuclear reactor cannot be stoked with chunks of uranium in odd sizes and shapes, in the way rough lumps of coal are shovelled into an ordinary furnace. The uranium must be accurately machined to size, and enclosed in a protective metal sheath or can. The uranium rod in its can, known as the fuel element, is the key component in a nuclear reactor, and we were warned that it would not be easy to design. In the first place, uranium was a metal about which comparatively little was known so that the preparation of sufficiently pure metal, and its fabrication into rods which could be accurately machined, called for a great deal of chemical and metallurgical research. Then there was the problem of fitting rods within a can of aluminium and sealing its ends in such a way that no leakage of radioactive fission products could occur. There was also a requirement for good contact between the can and every part of the surface of the rod. Dr. Cockcroft's deputies were Mr. Tongue, Chief Engineer and Dr. Monty Finniston, Chief Metallurgist, and, of course, now 'Sir Monty', former chairman, British Steel Corporation.

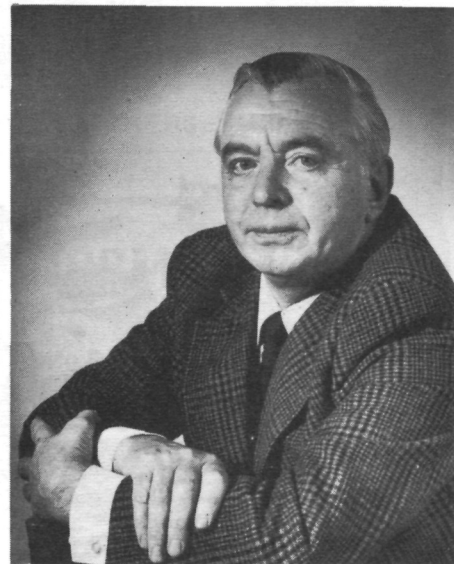
We began by rough machining, or generally tidying up some hundreds of rough-cast uranium rods produced nearby at ICI Rocksavage, Runcorn. The rods were later sprayed with aluminium paint of 0.003" thickness to prevent the escape of recoil fission products. These became part of the first charge for the graphite low energy experimental pile commonly known as Gleep, in fact the first reactor built at Harwell. The design power was limited to 100 kilowatts so no elaborate cooling arrangements were necessary. The first charge was 12 tons of uranium metal and 21 tons of uranium dioxide pressed into pellets, wrapped in paper containers and inserted in aluminium cans, the uranium metal being the core centre. The pile operated for the first time early in August 1947.

On completion of the Gleep charge, the better cast rod started to come through and we really got down to producing the first charge for the second Harwell pile generally called Bepo (British Experimental Pile O). The design was engineered during 1946 by Sir Christopher Hinton and his staff at Risley, and the pile was built under their supervision and completed by mid-1948.

Everything had been carefully planned, the uranium rods were to be machined to a length of 12" and a diameter of 0.9" with a tolerance of ± 0.001 ", and how those old shell-making Smallpiece lathes coped will always be a mystery. The first golden rule of canning was that the uranium rod must not be oxidised before placing in its smooth-walled aluminium can. If there was any hold up following final machining, the uranium rod had to be electrolytically cleaned. The rods were placed in an annealed aluminium can and passed through a draw die using a hydraulic press, capped and finally braze-sealed. Just as easy as canning peas!

Bepo was designed to operate at 6000 kilowatts, ie 60 times the power of Gleep and air cooled. The fuel elements, our pride and joy, commenced being charged into the pile in July 1948 and we produced over the critical mass of 28 tons before Xmas 1948. We were elated, but we had not heeded Dr. Cockcroft's warning that fuel elements were not easy to design, and our beloved fuel elements began to blister.

Dr. Finniston came dashing up from Harwell, booked into the Apprentices' Hostel, and shared our tea and buns for approximately six weeks until a new fuel element technique was perfected. It turned out to be an about-face operation. Our bright silver rods of uranium were plunged into a furnace until they bore a black oxidised coating. They were then sprayed with graphite, enclosed in a similar graphite-coated can, annealed and degassed under vacuum, passed through the draw die, capped and brazed. The final seal became the biggest problem, and 'yours truly' chased after Dr. Finniston with a fire bucket in one hand and a coal-gas torch in the other to be on the spot to effect the final seal when he gave the word. The fire bucket was not to extinguish a potential fire. It was just a convenient container for water and to hold the fuel element whilst it was sealed. Dr.



Finniston thanked us politely at the conclusion of this manoeuvre and returned to Harwell leaving us to complete another charge of fuel elements for Bepo by hook or by crook.

Our workshop dress consisted of brown trousers, short brown jackets, brown skull caps, white or green neckerchief, felt-soled shoes or half wellington boots. We looked like convicts, but I am pleased to say we were not treated as such, except perhaps at the official breaks when the foreman led the way out of the workshop and we all followed in single file, and again in reverse at the end of the break. The foreman wore the same dress as the process workers, but we did manage to provide white laboratory coats for Dr. Cockcroft and Dr. Finniston.

The inspection in the early days was carried out by CIEME inspectors, a branch of the Ministry of Supply, before being replaced later by Harwell inspectors.

The whole building was bolted and barred and entry was via a single door. On blowing a deafeningly loud Klaxon hooter a doorkeeper-come-handyman opened the door and admitted only those he recognised. Thus it was in 1947/48 and remained so in 'Hush-Hush' for a few years after.

Harwell at that time had a young labour manager who on his first visit to the Laboratory drew up outside in what must have been one of the first Bond Mini Cars. He blew the Klaxon, but our Crewe-born doorkeeper failed to recognise him, or to be impressed by the car, and had to be persuaded to allow him inside.

My Son, the Carpenter

By RICHARD BODE

Reprinted with permission from
British "Reader's Digest"

It was intended that the uranium turnings should be chemically treated, annealed and pressed into pellets, then canned for use in Gleep or for ease of transport, but alas our 50 ton press or our technology was not equal to the task, and we just had to store them under water until Springfields could take them.

We experimented with many types of fuel element cans based on finned designs in order to prevent ratchetting. Firth and Brown of Sheffield produced some excellent sintered thorium rods, and these were made into fuel elements. Identity was a problem, so we anodised and dyed them, but true to our old-fashioned ways and conservatism we dyed them dark blue; not for us the gay colours of today.

New charges for Bepo made use of short-finned cans, the fins in helix form. Helium was also introduced in order to improve heat transfer. With this improved fuel element Bepo exceeded its design power output.

Finally we began to experiment with making cans from pure magnesium and canning uranium in them. Early experiments with magnesium had produced figures of a high absorption cross-section, and now recent measurements had shown that earlier information greatly exaggerated its neutron absorption which was very much less than aluminium. Using magnesium eliminated graphite coatings, weld sealing proved difficult, and one had to be very careful not to contaminate either the magnesium or uranium with any other element. For good contact of the can with the uranium a pressurised technique was used under oil. The work contributed to the first Calder Hall charge done at Springfields in 1955/56.

It was inevitable that the 'Hush-Hush' doors would close, because we could not match the sophistication of Springfields' canning lines, or the research capabilities of their R & D Branch. Early in 1954 the place was cleaned up, the Klaxon horn disconnected and the building handed over to the ROF Toolroom. When I now see the PFR fuel elements I marvel at the design and the fabrication techniques, and memories come flowing back of that little workshop where the first fuel element was produced.

In such a short space of time we have come a long way. We should be ever grateful for that prodigious scientist and administrator the late Sir John Cockcroft, who, with Lord Hinton, made such brilliant contributions to our Industry. They set goals of endeavour with a Commercial Fast Reactor as the ultimate peak, and I trust we will see it come to full fruition.

□

FIVE years ago, a friend asked me where my eldest son was going to college. "Jeff's not going to college," I replied. "He wants to be a carpenter."

I knew that my friend's son had been accepted as a medical student by a prestigious university. The proud father had often jokingly referred to his boy as "my son, the doctor." Clearly embarrassed now, my friend mumbled, "How nice!" and changed the subject. It was obvious he thought my son should put aside his silly notion and go to college. Indeed, I had often vigorously expressed the same opinion.

I had always assumed that all my children would go to college. So my wife and I did everything possible to prepare our offspring for higher education, reading to them as children and exposing them to art. I tried to get Jeff interested in economics. I urged him to apply himself to maths, certain he had the makings of a first-rate civil engineer.

I was wrong. The quality of Jeff's intelligence was quite different from mine. He wasn't interested in abstractions but had his own practical turn of mind, which I chose to ignore. While I thought with my head, he seemed to think with his hands. In my bias, I believed his way of thinking was inferior.

Yet he often showed me how inadequate I was. On camping trips, his innate handiness saved me from disaster many a time. My wife said that if she were stranded on a desert island, she would rather have Jeff there than me. He would build a shelter and a roaring fire while I fumed about my bad luck.

Jeff's mechanical aptitudes surfaced early in many ways. When he was nine, I purchased a picnic table and brought the pieces home in a big box. While I pored over the instructions, he assembled the table. We still use it.

At ten, he began to tie and sell intricate freshwater fishing flies. He made regular trips to the local furrier for scraps of discarded rabbit or mink fur. I still see those flies in his

tackle box, and I realize how essential they were to the educational process that suited him.

But, at the time, I told my wife there was no place in industrial society for a latter-day Robinson Crusoe. I said a youngster had to go to college to be educated to take his place in a specialized world.

But Jeff was determined to become a carpenter, and when he left school he started to contact building firms. One local contractor kept telling him to "come back next week." Jeff persisted. Then, one August day, he burst into the house at noon to grab a sandwich. "They took me on!" he shouted. "I'm building a house! I'm an apprentice carpenter."

With that sudden sense of identity, Jeff matured. The boy who couldn't get out of bed in the morning was out of the house by 7.15 a.m. He learned his trade and earned his keep. He found out how to handle money and how to work with others. Eventually, he became a journeyman carpenter.

He also learned about ups and downs. No sooner did he become a journeyman than the recession put him out of work. He collected unemployment pay only as long as it took him to pack off to where he *could* find work. Now he's home again, working. He eventually hopes to run his own business as a builder.

Jeff's course is hardly for everyone. I still hope he will broaden his education, take a deeper interest in those academic subjects we call the "humanities." If he does, they may mean more to him because of his own direct encounter with life.

A few years ago, he built a huge sun porch behind our house. On summer evenings, the family gathers there, and I look around and admire the lap-jointed frames and door, the snug moulding and sturdy rails.

The whole design came out of Jeff's mind. I say to myself with pride: "Yes, this was built by my son, the carpenter."

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Following last year's successful production of "My Fair Lady", Abingdon Operatic Society is preparing to face up to a new challenge - a one-night show at the New Theatre, Oxford.

The reason for this venture is the Oxford Arts Council St. Paul's Theatre Project. For more than ten years, St. Paul's church in Walton Street, Oxford, has stood empty and unused, but recently the Arts Council has been drawing up plans to purchase the building and convert it into a theatre complex. Through a series of six stages, their final goal is a flexible theatre-cum-concert-hall seating 250 people. To complete the project is estimated to cost £100,000, but discussions with the Church Commissioners are under way and fund-raising has begun.

As their contribution to this cause, A.O.S. is hiring the New Theatre to put on a special performance of their next production, "Man of La Mancha", currently being rehearsed for a week's run at the Unicorn Theatre, Abingdon.

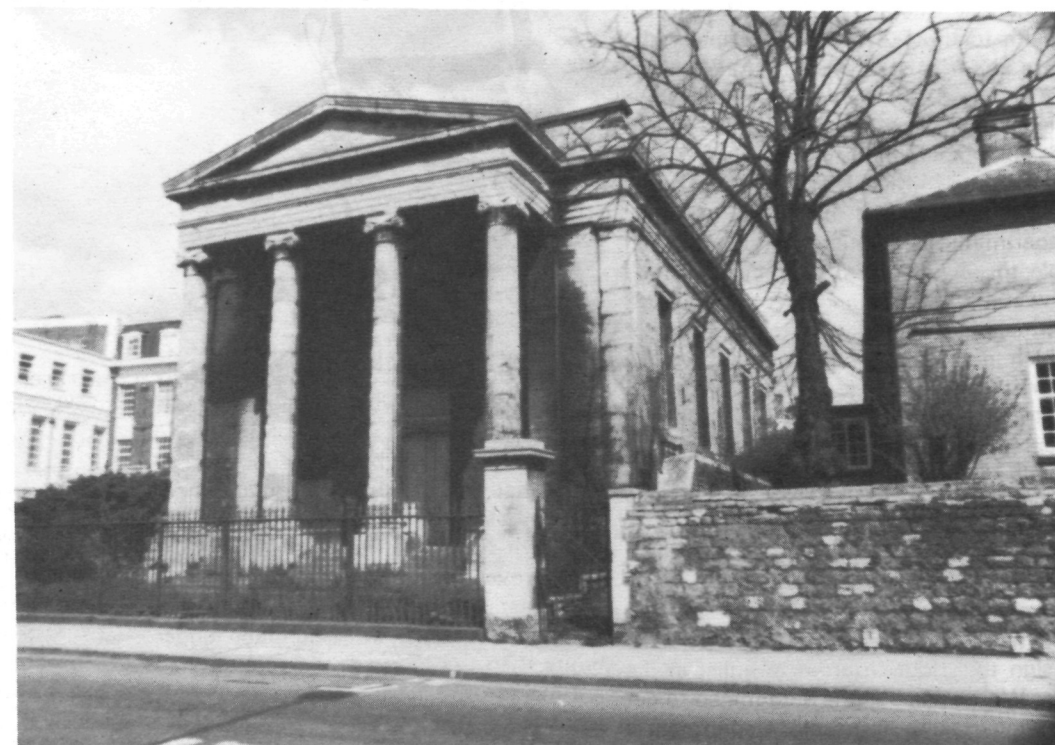
The Unicorn and New Theatre could not be more different. The Unicorn, housed in one of the buildings of the former Abingdon Abbey, is a reconstruction of an Elizabethan theatre, with a seating capacity of 97 and a small apron stage measuring 20 ft by 15 ft. By contrast the New Theatre is a classic of its type. Its stage measures 60 ft by 40 ft and it seats almost 1,700 people. A performance there by an amateur company is a most unusual event.



THE IMPOSSIBLE DREAM

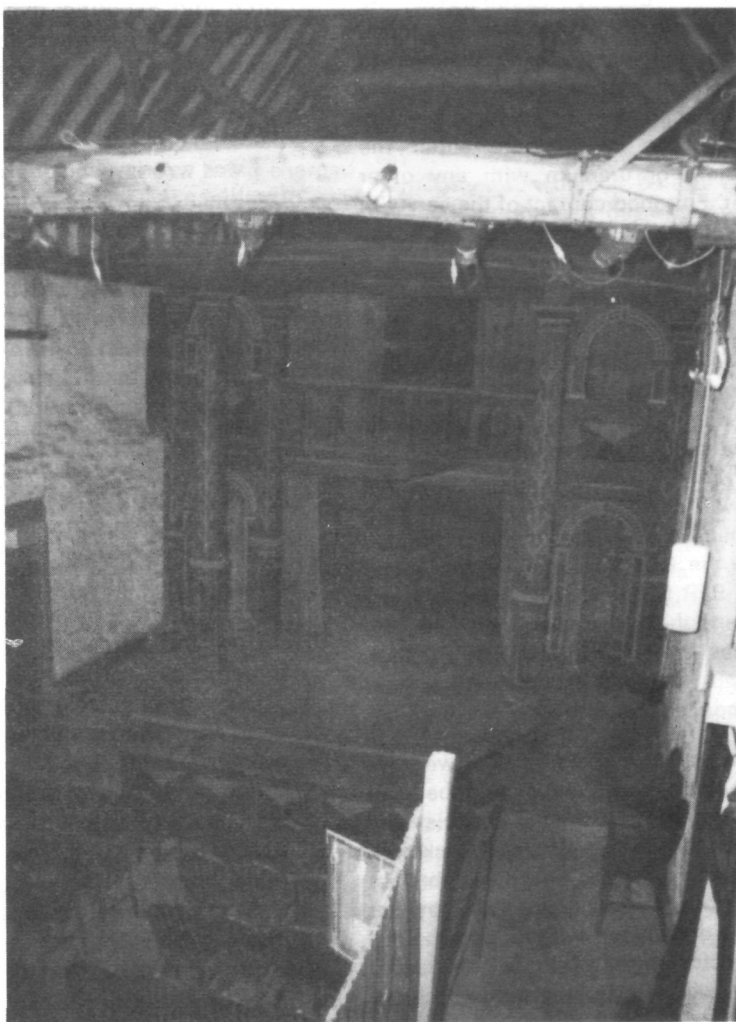
St. Paul's Church Oxford, which the Oxford Art Council hopes to convert into a Theatre and Concert Hall

Photos: David Gully



As their contribution to the project, Ron Pratt, Chairman of Abingdon Operatic Society, signs the New Theatre contract, watched by fellow Harwell men Phil Cook, Tom Tompsett and Jim Mein

Contrasting venues for the production - below, Abingdon's Unicorn Theatre, and, above, Oxford's New Theatre



"Man of La Mancha" is a musical based on the adventure of Don Quixote and Sancho Panza. It is a play within a play in which Cervantes (the author of Don Quixote), imprisoned during the Spanish Inquisition, acts out the adventures of the "mad" knight and his squire with the assistance of his fellow prisoners. The dual role of Don Quixote and Cervantes is played by Tom Tompsett of R.R.D. and some of the other authority staff in the cast are Phil Cook, Eng. Div., Tom Nixon, R.R.D., and Brian Burrows of Culham Lab. The production is directed by Laura Howkins, with musical direction by Ron Tandy. Choreography is by Liz. Boon, wife of John Boon of S.R.C.

The best-known song from the show, "The Impossible Dream", could well be considered the theme tune for the whole venture. Abingdon Operatic Society has built up a well-earned reputation in the area for its productions in Abingdon, but it has never before set its sights on performing in a full-size professional theatre. If it is successful, the St. Paul's Theatre project will have moved a small step nearer fruition.

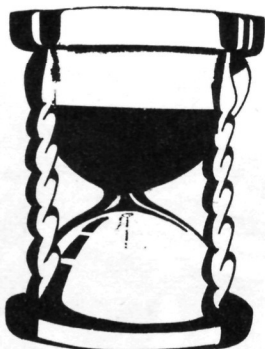
For your diary: Man of La Mancha - Unicorn Theatre, Abingdon 30th May - 4th June; New Theatre, Oxford Sunday 12th June.

"I do not really like gentlemen who arrive after eleven or leave before four" said the Permanent Secretary of the Ministry of Health to three Assistant Principals who were about to start work in that Ministry in October 1936. It had been a delicious week. Those at the top of the list of successful candidates in the examination for the Administrative class of the Home Office Service had a choice of every department in Whitehall and had been able to go around interviewing Directors of Establishments and, in some cases, Permanent Secretaries to decide for which department they would deign to work. Recruitment had been very restricted in the years of the Great Depression and departments were avid for young blood and particularly eager to get those high enough in the list to have a choice rather than those who were sent to the less favoured offices.

My own choice was somewhat restricted as - having heard of men who had had to resign their jobs in order to enlist in the first World War - I was determined to get an undertaking from the Department I joined that I should be allowed a return ticket from the Territorial Army so that I could fight Hitler when the rest of the nation came round to my way of thinking, and return to my job afterwards if self and job both still existed. The Ministry of Health gave such an undertaking and so there was I - who had often wondered in the Depression whether finals would ever earn me a job - sipping the Permanent Secretary's madeira and imbibing his counsel.

After a ritual two days in the bowels of the Registry, I found myself in the Public Relations Department. This was a novel thing in those days and ours was only the second one in Whitehall. I was set to work mainly to extol the charms of Miss (as she then was) Prunella Stack, who was the focus of the Health and Beauty campaign. This campaign seemed to many people at that time a way of preaching physical fitness to distract thoughts from dole queues and hungry bellies and to be some reflection of Hitler's "Kraft durch Freude" movement. So I was glad to be soon found lacking in publicity consciousness and sent to Town Planning.

Town planning was just four years old then, having been transferred in 1932 from the odd garden suburb to a nation wide legislative code. My Principal was Miss Evelyn Sharp, later to be the first woman Permanent Secretary and Richard Crossman's accursed Dame. Under her firm tutelage I learned to turn the rambling reports of Town Planning Inspectors after local enquiries into crisp 300-400 word judgements, dismissing or allowing appeals on succinct grounds of



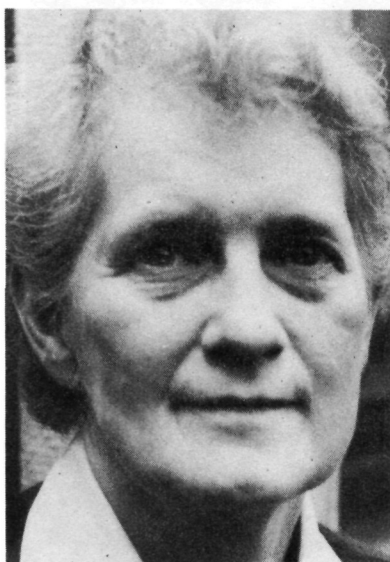
LOOKING BACK

John Clarke

Departmental policy. Those who fondly imagined that their vital property interests had been weighed by the Minister in person would have been disconcerted to know that much of the decision and most of its phrasing came from a six-month old Assistant Principal. Our planning powers soon proved very popular in suburbia and the coastal towns of Southern England, and we were shortly working much longer hours than the Permanent Secretary had led me to expect.

Late one evening in the middle of 1937, the Establishments Officer of the Department came in to sit on Miss Sharp's desk and tell her in quiet tones that she was being switched into a job to create a chain of emergency hospitals across England to provide for air raid casualties. The room seemed very quiet as he told her that the Air Staff were predicting 50,000 dead a day in and around London once the war broke out.

► Extracts from the Ministry of Health Report, which numbered over 100 pages and which was produced in response to one of the first environmentalist lobbies



LADY SHARP G.B.E.
First woman Permanent Secretary

COMMITTEE ON THE RESTORATION OF LAND AFFECTED BY IRON ORE WORKING

MINUTE OF APPOINTMENT

I hereby appoint:—

The Right Honourable The Lord Kennet of the Dene, P.C.,
G.B.E., D.S.O., D.S.C.,
Sir Edgar Bonham-Carter, K.C.M.G., C.I.E.,
Tristram W. Haward, Esq., F.L.A.S.,
Sir Kenneth Lee,
Alderman E. G. Rowlinson, J.P.,
G. C. Scrimgeour, Esq., D.S.O., M.C.,

to be a Committee to consider and report on the problems raised by the destruction of agricultural land as a result of the excavation of iron ore in Northamptonshire and neighbouring counties and to advise what measures should be taken for the future utilization of this land to the best advantage whether by restoration or otherwise and how the necessary expenditure should be met.

And I further appoint:—

The Right Honourable The Lord Kennet to be Chairman, and

E. J. S. Clarke, Esq., of the Ministry of Health to be Secretary to the said Committee.

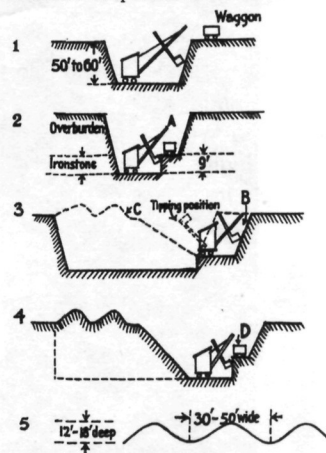
KINGSLEY WOOD.

29th January, 1938.

The estimated gross cost of the preparation of this Report is £397 8s. 4d. of which £105 os. od. represents the estimated costs of printing and publishing this report.

end at D and tips over. The function of the conveyor is therefore to move the dumped overburden away as far as possible so that there is no danger of the navy which is removing the ironstone becoming buried. The overburden is dumped by the conveyor in a ridge and furrow formation similar to that which results from the use of a long jib excavator but in a rather more wavy line.

29.—(3) The overburden can be removed and dumped by a long jib excavator. The following are sketches of a 9 cubic yard excavator at work. These machines are the largest in Europe and they have an output of about 500 tons per hour each. The method of operation is:—



30. In fact the whole area assumes the aspect of having gigantic furrows, which are locally known as "hill and dale". The ridges consist predominantly of subsoil, and in them the topsoil is irretrievably lost. The size of these furrows depends on the size of the navy used for the excavation. Where the largest navies are in use the distance from crest to crest is about 40-50 feet, the depth varying from 10 feet to 16 feet, but



HILL AND DALE AT THE DEENE PIT, CORBY – FRONTISPIECE OF THE REPORT

About this time the Ministry of Health were drawn into two very different enquiries. The first was on the Abortion Law, on which a Departmental Committee was appointed. This went to my fellow Assistant Principal, Alan Marre, and attracted considerable public attention which was to lead after a lapse of some 30 years to the legalisation of abortion. This enquiry launched Marre on a career which steadily drew ahead until he became the first Ombudsman. I was allotted to a much less publicised Departmental Committee on the Restoration of Land destroyed by Iron Ore Working in Northamptonshire. This resulted from the working of low grade iron-stone, which lay some 30/40 ft. below the surface in Northamptonshire and Leicestershire by huge Ruston Bucyrus digging shovels which had become available for the first time in this country. These huge machines tore up the earth in such a way as to create huge trenches and ridges called "hill and dale", which gave hundreds of acres a completely devastated appearance. The agitation which had led to the appointment of this committee was one of the first environmentalist lobbies. The Committee, whose Chairman was Lord Kennet of the Dene, a naval hero who had lost an arm at Achnagel in 1920, was a very competent one; nevertheless it met rarely, and it was exhilarating to find that, subject to closely observing the differing views of members of the Committee and the particular angles that they wanted covered, a 2-year old Civil Servant could manage to write

most of the report himself. The solution depended upon compelling the companies by law to segregate the top soil and restore a level surface - then a revolutionary proposition - but subsidising them in part at the expense of the Local Authority and the royalty owner. My report was still far from written when the Munich crisis broke out and I spent a fortnight with my Battery, first in Hyde Park and then at the Royal Powder Factory at Enfield.

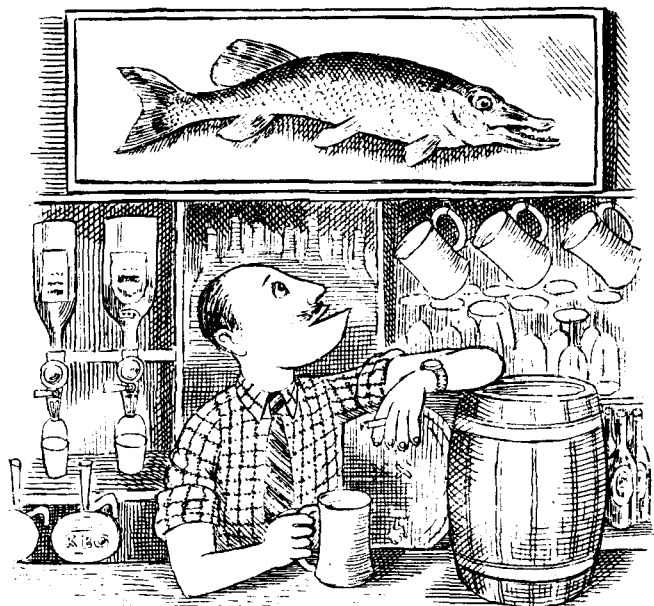
When I came back, I found that I was shifted into Sewers which was considered to be an essential part of the education of any young administrator. This department gave large loan sanctions, so that one was able to learn the techniques of controlling Local Authorities' capital expenditure open to Central Government.

This didn't last long because Hitler's invasion of Czechoslovakia in March led Whitehall to judge that Mr. Chamberlain's Peace with Honour of the previous Autumn would be shortlived. The Department, therefore, concluded that they were shortly to lose their young Assistant Principal and consequently I was tucked away in a branch controlling local legislation which was to be wound up the moment war started. I should have had a nice quiet idle time in the Spring and long fine Summer of 1939, which would have been just as well as most of my energies were devoted to training my Battery in the evenings. However, the Department was now swinging over to

war preparations and I was put on to finding out how to bury the 50,000 dead a day that we were supposed to have. A thoroughly ribald sense of humour flourished through the Summer as I ploughed through mass mortuary and cemetery schemes. In particular I enjoyed the development of a mass shroud which was to take the place of the overwhelmed coffin production. I worked with a portly Town Clerk, and it was with the utmost pleasure that I practised tipping him out of a prototype shroud into a hole in St. James' Park during the lunch hour.

This activity was interrupted for nearly a month in July and August by Battery service on the Isle of Grain and subsequently at camp in Cornwall. The few days holiday which followed was interrupted by the news of the Ribbentrop/Molotov pact. That decided me that it was not much good staying on leave and I had better get back close to my Battery. All was quiet for a few more days and I just had time to sign a contract for several million shrouds complete with rapid identification hood and side loops so that the entire shroud and contents could be precipitated into a large mass grave. Then, as I was pondering whether I had had financial authority for committing several hundred thousand pounds (a very large sum indeed in those days), I came back from lunch on August 24, 1939 to read a message on my desk 'Join your Battery at once'. I was not to see the Ministry again for a long time.

To be continued



EVEN if you never intend to go fishing in your entire natural born days you can scarcely have failed to feel the baleful fascination of the pike. You must certainly have been stared in the eye by many a pike in many a glass case for there are more stuffed pike on saloon bar walls than ever graced the interior of an angler's rod-room or (wife permitting) front hall or sitting room. And what wife is likely to permit?

My own, I admit, is fairly flexible in these matters, but then she herself has had long exposure to pike fever. When we were first married and lived in a very small London mews flat, I used to go pike fishing every other Saturday. In between, she had the Saturday off, for even fishermen can be fair. Her ordeal, however, occurred on the Fridays before my pike fishing Saturdays.

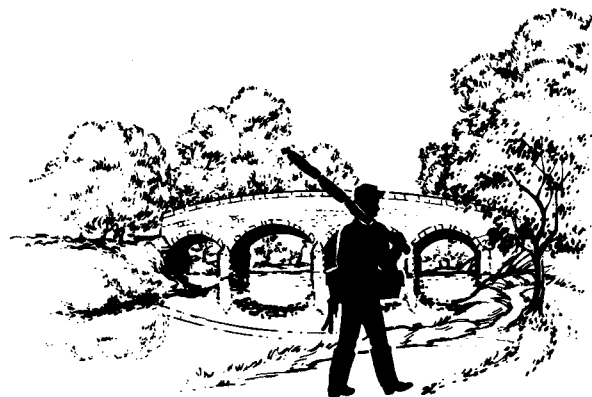
On those days, late in the evening, I would carry home twenty small roach, bought at a tackle shop in the Harrow Road, and tip them into our only bath so that they might be fresh and spry for pike-catching the next morning. This, of course, meant that no one could get in the bath with them, for roach are particularly susceptible to beauty soap and bath oil pollution. The prospect of a cold bath, without soap, but with roach, did not attract my wife, or I confess, myself.

The situation put a small strain on our early married life which no doubt fitted us for more serious contests to come. At any rate, when much later I did bring home a monstrous pike in a glass case, there was no massive opposition. It was allowed to leer down on us all from the landing at the top of the stairs.

When we moved to a bigger house, I did, however, notice that it was relegated to the loft. Now, I am happy to say, it lies full-length across the work table in my study, serving as book-rack, dust-collector and unrelenting critic of everything that I write.

It looks at me monocularly with its yellow-shot, taxidermist's glass eye spurring me on to work. When stuck for inspiration I gaze with rapture at its smooth, lacquered, torpedo shape, its wicked shovel jaw, its elegant, primrose, porthole spots and feel, ever-fresh, the proper sense of awe that angler or layman experiences when brought face to face with *Esox lucius*.

There are many legends about pike, most of which are untrue. Discount for a start all those stories of great age, of how a giant pike was netted out of some country house lake bearing a ring with a Roman inscription. Most pike are lucky to live to fifteen years, for if you're a male you're very likely to get eaten by your far larger wife. If they make that great age, then they should weigh as many pounds and, in a really fertile water, could scale at least double that.



THE LEGEND OF THE PIKE

By Colin Willock

I have never heard an authenticated story of a pike attacking a human being, or even a part of one. There is said to be a pub somewhere in East Anglia in which hangs a pike whose jaws are clamped on a taxidermised human finger, but no one will give me the address.

Likewise, the tales of horses seized by the nose and held under when drinking can safely be attributed to Baron von Munchausen. Again, I have read a miraculous account, dated somewhere around the mid-eighteenth century, of a giant pike that became marooned in a pond and ate and ate every fish in the water until it alone was left. By this time it was somewhere around twelve feet long and had to be pulled out by horse and cart.

If such a pike had existed, I'm afraid the poor creature would have got thinner and thinner instead of longer and longer. And why a horse and cart. Surely, if the thing had been that strong, the horse would have done better on its own. No, this one, like so much pike legend, does not bear examination.

Then what is the truth about these horrendous fish? Pike are appallingly greedy, no doubt about that. Pike have been found choked to death with swans' heads and necks half way down their throats; with full-grown mallard and moorhens stuck in their gullets, even with other pike, nearly their own weight, partially engulfed. In one day, pike can swallow practically their own weight of fish, but this day comes comparatively seldom.

Pike are rather like other generous eaters in the animal kingdom, snakes for example, in that they tuck away a huge meal and then spend a long time getting rid of it. To help it digest its gargantuan helpings, a pike has a set of stomach acids that are quite capable of eating away the occasional hooks and spinners that it swallows. Open up a pike with a large fish in its belly, and you will find that the tail section is as good as new and the head, which always goes down first, is already turned into pulp.

If, as an angler, you ever do hit the day when the pike are really "on," you'll never forget it. The pike in any water seem to feed in a regular cycle, gradually building up to a fury when all are feeding. On these rare red-letter days they will attack any bait, alive or dead, hurl themselves at fish in keep-nets and even try to swallow floats.

Despite their apparent ferociousness, pike, I regret to say, are not the greatest scrappers in the world. Dennis Pye, the most successful pike fisherman England has ever known (he has over 260 20-pounders to his credit and a dozen fish over 30lb.) reckons to boat the biggest pike that swims in under ten minutes. He had his 33lb. pike out of Hickling Broad in Norfolk in eight minutes flat.

The explanation is that pike are built for acceleration rather than sustained action. It suits their way of life, most of which is spent lying doggo in the reeds waiting for a hunger pang to persuade them to dart out of ambush after an unwary roach or bream. For those few vital seconds they need getaway power. It's this spurt and dash you feel when you hook one. For my money, the gamest pike of all is a 10-pounder from a swift-flowing river like the Hampshire Avon. Hook one of these and you may have to revise your opinion of the pike's fighting power.

So what really is their fascination? I know many anglers who won't bother with pike. They say that catching a "specimen" is a matter of luck, that any fool who puts out a live-bait or flings a spinner is as likely to tangle with a 20-pounder as a tiddler. It's the luck of the draw.

I'm afraid that I can't entirely agree with that. The really successful pike anglers, the specialists, *consistently* catch the monsters because they know where to look for them and which baits and methods will attract the better-class fish.

Just the same, there's a good deal in the attraction of sheer size. It is true that a pike gives the novice his best chance of landing something worth putting in a glass case, simply because pike are so unselective about what they eat.

People, I have come to the conclusion, particularly non-anglers, like talking about monster pike. There is something deliciously shivery in the feeling that the dark old lake in the park may hold something terrifying to human sight.

Alas, it is seldom the case. All local lakes over 50 years old are said to harbour immense pike. Such whoppers are reputed to rise from the depths at rare intervals, rather like their Loch Ness equivalent and to shake a head variously reported as being as big as a coal bucket, as well armed with teeth as a wolf-hound, with a jaw that has the gape of a mechanical grab.

Eventually some persevering local expert catches this fish. Either that or the lake is netted and drained to provide proof positive. The truth is always the same: the monster weighs exactly 12lb.

Only one giant pike stands a chance of measuring up to everyone's expectations. Even with this one we shall never know its true weight and girth. It was caught as long ago as 1749 in Loch Ken, north of the Solway. It has always been said to have weighed 72lb.

Surprisingly, it fell to a fly, though the thing must have been big enough to represent either a mallard duckling or a water vole. The skull exists to this day. Suffice it to say that this mortal remain is big enough for the Loch Ken pike to have weighed 70lb., or even more. So there's hope for believers in the pike legend yet.

No matter how many stuffed pike you look at on saloon bar walls, you will never be able to share the experience of an angler who has just landed a malevolent 15-pounder. A stuffed pike can only turn one wicked eye on you. The other is directed inwards towards the back of its case.

For me, and I suspect for most pike anglers, the terrifying and fascinating thing about the pike is that it is the only freshwater fish that can look you squarely in the face with *both* cold, yellow eyes at once. It is a most unnerving experience.

Look at it, or them, anyway you like, pike do get a hold on people.



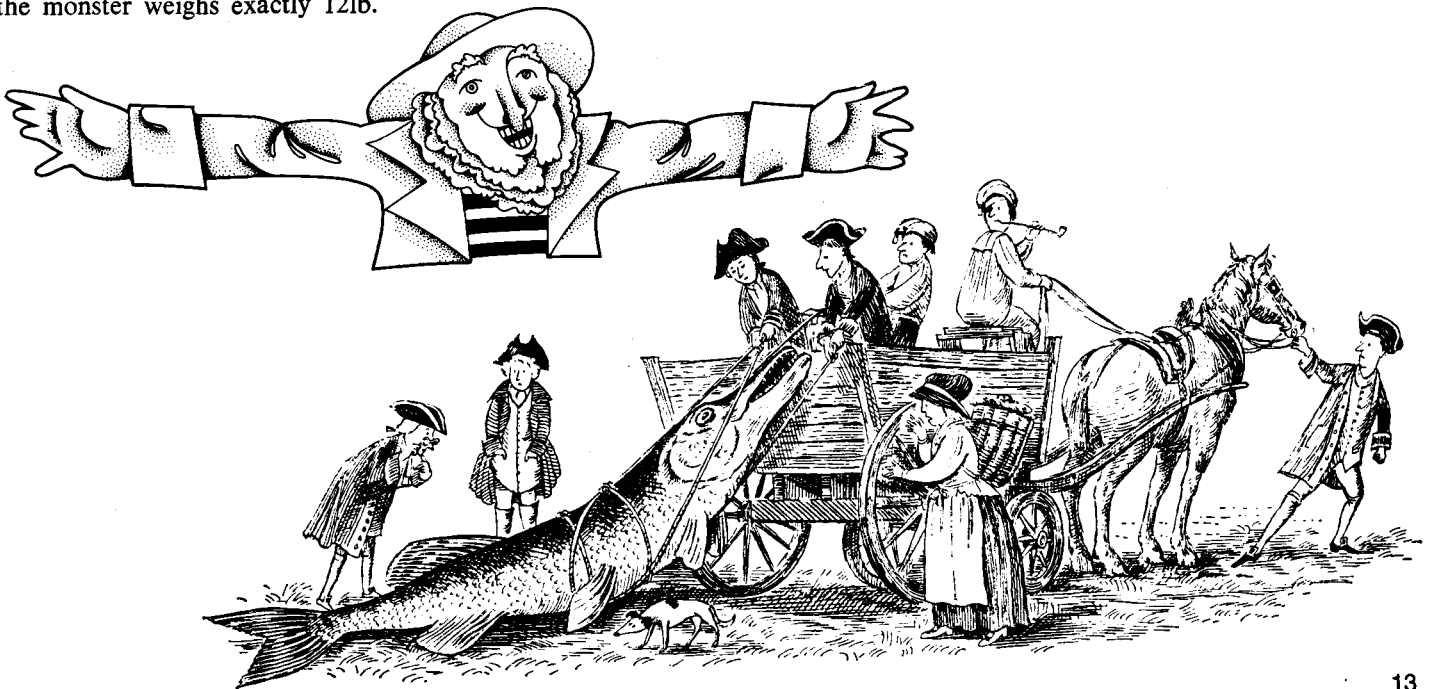
EDITORIAL NOTE

The biggest pike that used to be recognised in the record books was a 53lb. fish from Lough Conn in Eire. This fell to a small silver spoon as long ago as 1920. There are certainly many larger fish swimming in the limestone loughs of Ireland at this moment. Occasionally they get caught in nets, though a 60-pounder landed like this doesn't qualify for a record.

England lags far behind the rest of Britain. The English Pike Record is now open to claims at 40lbs or more.

Harwell's angling expert Jonathan Webb assures us that Oxfordshire waters hold massive pike. He personally caught a 29-pounder from the Thames - in 1970 - and has been called upon to witness and weigh more than fifteen pike over 25lbs during the last 10 years. The biggest of all weighed 33lbs. It came from a lake in Dorchester-on-Thames: length, 4 feet; girth, 26 inches!

These 30-pounders keep on turning up from private lakes and even gravel pits, all of which helps to keep the legend of the local monster alive.





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CODE- WORDS

SOLUTION TO
LAST PROBLEM

1 R; 2 E; 3 L; 4 O; 5 N;
6 S; 7 D; 8 A; 9 I; 10 B;
11 U; 12 C; 13 K; 14 T; 15 P;
16 M; 17 H; 18 G; 19 F; 20 Y;
21 V; 22 W

THIS crossword puzzle has only one clue—
the word that is already printed in it.

SOLUTION TIMES:-

Experts, 12 to 15 minutes; goodish, 20 minutes;

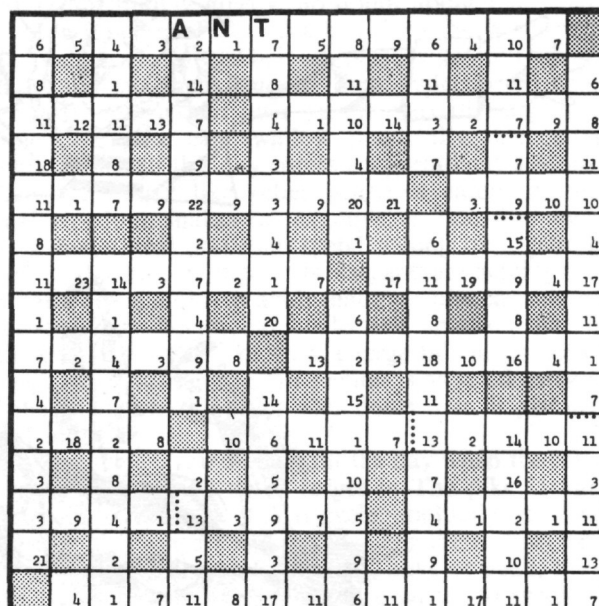
average, 30 minutes.

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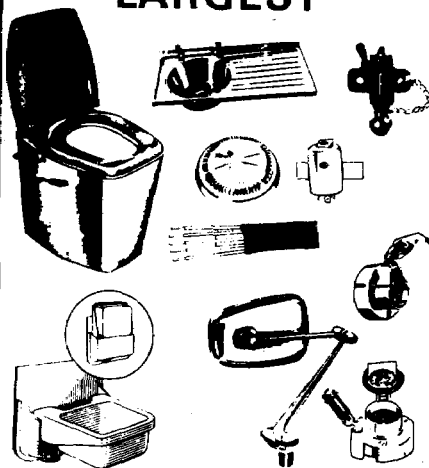
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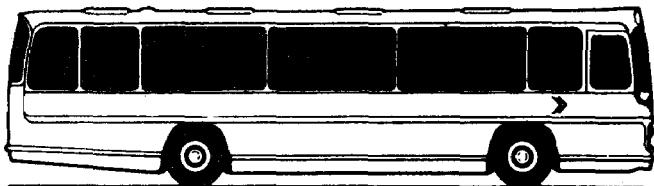


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