

The Staff Magazine
of the
Merseyside and North Wales
Electricity Board

Competition Page

The growing interest in our "Points Quiz" has shown itself for in last month's competition, 96 entries were received with 61 of these all-correct. The results rather surprised us for we had thought that the questions were pretty difficult. However, as promised, we give below the latest 'score-card' in the battle of wits.

	No. of entries	No. of points	Average No. points per entry
Head Office ...	22	1080	49.0
*Area 1 ...	10	461	46.1
*Area 2 ...	21	992	47.2
Area 3 ...	33	1616	48.9
Area 4 ...	10	474	47.4

*Includes one entry from a pensioner in each Area.

A very good effort by staff at Head Office put them into the lead, having 18 all-correct entries out of 22 submitted. They just headed Area 3 who had 27 all-correct in their 33 entries.

One or two competitors pointed out the typographical error in the spelling of Ben Jonson's name — you were quite correct, there is no 'h'.

To help you check your answers, here they are:

- (a) How many teeth should an adult have? **Thirty-two.**
 (b) What was "Excalibur"? **King Arthur's sword.**
 (c) What is a Red Admiral? **A butterfly.** (d) The title of the American National Anthem. **The Star Spangled Banner.** (e) Where in Great Britain can you travel by train to an island surrounded by water? **Across the Menai Straits to Anglesey.** (f) The cricketer's almanac? **Wisden.** (g) Which country is also known as Hellas? **Greece.** (h) Which book is the world's best seller? **The Bible.** (i) The one who was not a Poet Laureate? **William Shakespeare.** (j) Who wrote "War and Peace"? **Leo Tolstoy.** (k) Who was the "Warrior Queen"? **Boadicea.** (l) Who would use a line-block? **A printer.**

An amusing entry sent in by the Construction Department at Area 1 consisted of the following answers: (a) At least one. (b) A worn-out shotgun. (c) One caught with his pants down. (d) Colonel Bogey. (e) Old Trafford. (f) "I'm Stumped". (g) Chile. (h) Lady Chat. (i) Sunny Jim. (j) Marriage Guidance Council. (k) Queen Bee. (l) Dr. Beeching.

Prizewinners

The five winners of the half-guinea prizes are:
 Mr. N. Garland, Registry, Head Office.
 Mr. B. Carman, Telephone Office, Area 1.
 Mr. H. C. Barr, District Engineer, St. Helens, Area 2.
 Mr. W. H. Smith, chargehand meter reader/collector, North Wirral, Area 3.
 Mrs. J. Walsh (wife of Mr. N. Walsh, District Commercial Engineer, Crewe, Area 4).

This Month's Competition

For the third and last time, for the time being anyway, we challenge you to solve this "Points Quiz". The twelve questions have the same points scoring system, and this time we are determined to stump you. So out with your paper and pen and on with your thinking cap.

Send your entries to *The Editor, Contact, MANWEB, Head Office, Love Lane, Liverpool 3*, to arrive not later than **April 1st, 1963**. The competition is restricted to MANWEB employees, pensioners and their families. Don't forget to add your name and address (office or home) and please give your Area number.

Once again five prizes of half-a-guinea each will be awarded to senders of the first all-correct solutions opened on April 2nd. One prize will go to Head Office and one to each of the four Areas. In the event of there being no all-correct solutions in any particular Area, the prize will go to the person submitting an entry gaining the highest number of points.

"POINTS QUIZ No. 3"

(Points awarded in brackets)

- (a) Where is the Wall game played? (2)
 (b) In what county are the Trossachs? (2)
 (c) One of the following towns is the odd one out, London, Berne, Montivideo, New York, Cairo. Which is it? (3)
 (d) Name an opera composed by Beethoven. (3)
 (e) Within five miles, give the approximate length of the Suez Canal. (4)
 (f) What is the Tynwald? (4)
 (g) Which English Royal House was of Welsh origin? (5)
 (h) How many wheels had a Victoria? (5)
 (i) Who was the first British Prime Minister? (5)
 (j) Who was called "the wisest fool in Christendom"? (5)
 (k) Which planet has eleven moons? (6)
 (l) What is a young penguin called? (6)

FIRST-AIDERS IN ACTION (See Page 48)



WEDDINGS

MEACOCK—TAYLOR

Congratulations to Mr. R. A. Meacock (storekeeper/clerk at Birkenhead Service Centre) who married Miss A. F. Taylor at



Mr. and Mrs. Meacock

Barnston Parish Church on January 12th. On behalf of his colleagues Mr. Meacock was presented with a painting.

PAYNE—JONES

Best wishes for the future to Miss Rosemary Jones, shorthand typist at Colwyn Bay, who was married to Mr. Jimmy Payne, of Llandudno, on February 16th. On behalf of her



Mr. and Mrs. Payne

many friends in Conway Valley District she was presented with a set of floral table mats by Mr. A. W. Hawley (District Manager).

CHAPMAN—GRIFFITHS

Congratulations to Miss S. Griffiths (Accounts' Typing Pool, Area 3) who was married to Mr.



Mr. and Mrs. Chapman

R. F. Chapman on December 15th. On behalf of her friends and colleagues she was presented with a dinner service and a tea service.

BREVITIES

1963 POWER CONVENTION

Research and Design in the Electrical Industry will be the theme of the fifteenth British Electrical Power Convention at Torquay from June 17th-20th, 1963. Sir Christopher Hinton, Chairman of the Central Electricity Generating Board, is this year's Convention President.

A thousand delegates are expected to attend what is now regarded as the annual 'Parliament' of the electrical industry, and 42 organisations will be represented.

STAFF OUTING

The staff at St. Helens District, along with wives, husbands and friends, spent a very enjoyable evening when they visited Manchester Palace to see the pantomime *King Cole*. An excellent buffet meal was arranged and served by the typing staff, prior to boarding the coach to Manchester.

SUGGESTION SCHEME AWARDS

Awards under the Employees' Suggestion Scheme have been made to Messrs. P. C. Lowry (graduate trainee, Area 3), G. Thompson, (sales representative, Area 1), L. J. Murphy (assistant, consumer records, Area 1), H. R. Oldfield (clerk, Area 3), R. Preston, (charge-hand installation inspector, Area 4).

ON THE MOVE

Colleagues at St. Helens gathered round recently to wish "good luck" to Mr. Arthur Gilbert, Drawing Office assistant, who left to take up work as a records draughtsman at Whitchurch.

On their behalf he was presented with a travelling alarm clock by Mr. H. C. Barr (District Engineer).

Mrs. K. Y. Evans (Accountant's typing pool, Area 3) left on December 31st to take up an appointment as a shorthand typist at Shotton.

Mr. A. C. MacDonald, assistant in the wages department Area 3, resigned on December 31st to take up an appointment at the Llandudno Service Centre.

Mr. J. H. Jones, clerk in the Revenue Section, Area 3, resigned on January 5th to take up a career in the police force.

Obituary

MR. F. N. WILLACY

We deeply regret to report the death of Mr. Frank Norman Willacy, storekeeper at Cleveland Street Depot, Birkenhead. We extend our sincere sympathy to his widow.

MISS ANNE JONES

Colleagues at Holyhead extend deep sympathy to Mr. W. L. Jones, linesman in the Anglesey District Construction Department, and his wife, at the tragic death of their nine year old daughter, Anne, who sustained fatal injuries after falling downstairs at her home.

MR. W. B. WOODS

We deeply regret to report the death of Mr. W. B. Woods, a retired meter reader/collector at Holyhead.

Mr. Woods, who was 74, retired in 1952.



Contact

THE STAFF MAGAZINE OF THE
MERSEYSIDE AND NORTH WALES
ELECTRICITY BOARD

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EDITORIAL

Vital Knowledge

BETWEEN every accident or sudden illness and the moment when the doctor or ambulance arrives on the scene there is a time-lag. During that period the casualty's life-blood may pump from a torn artery, more extensive damage may be caused by well-meaning but unskilled hands, or the victim may succumb completely to shock.

During those vital minutes the presence on the spot of someone with even the most modest degree of skill and training in the art of rendering First Aid may be all-important. A tourniquet applied at a vital point, authoritative advice to bystanders, measures to cushion the victim against shock, may all be instrumental in saving his life.

Training Courses

Recognising the value of having trained First-Aiders on the staff, most large industrial concerns run courses for interested individuals, and encourage their employees to take an interest and to become competent. The electricity supply industry has always been in the forefront in this respect, and classes and competitions have been organised on a nation-wide basis since Vesting Day. (The latest District competition is reported on pages 48-49 of this number of *Contact*).

At present some 315 members of the MANWEB staff are fully-trained First-Aiders, while others are undergoing courses of instruction which are held in most of the Board's Districts. First-Aid rooms are maintained at several points, while boxes of medical supplies and equipment are available on motor-vehicles and at depots.

The value of having large numbers of trained First-Aiders available is incalculable, and many occasions when this training has proved its practical worth have been reported in *Contact*. Why not make arrangements to join their ranks by making inquiries about classes held in your locality?

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Mrs. R. A. Peddie, wife of the Assistant Regional Director, C.E.G.B., presents the shield to the winning Chester-Northwich team. *Left to right:* Messrs. J. Chesworth (reserve), B. Livesley, A. Bentley, L. Smith (captain), and L. C. Hampson.

First-Aid Competition

"THERE'S been an accident—can you help?"
Well! could you? Imagine you are driving along a quiet country road when suddenly you are confronted by an overturned motor-cycle with the rider and passenger lying injured on the road. What could you do? Then again, you may be walking along the street when a woman runs out of a house crying that her husband had attempted suicide. What would your reaction be?

A step in the right direction on the road to being of some use in situations like this is to make enquiries now about joining your local First-Aid class. In time you may become a member of a team and eventually take part in one of the competitions

OUR COVER PICTURE shows members of the winning team going into action.

organised by the Electricity Supply Ambulance Centre of the St. John Ambulance Association.

Over the past fourteen years national competitions have been held and teams from all over the Country have participated. To get to the National Finals, a team must first win their District Competition, and this year the Merseyside and North Wales Branch held their annual competition at the Chester Town Hall on February 16th.

An appreciative audience watched six teams go through the various tests. The Area 3 Chester (Ladies) team were the only representatives of the fair sex competing against teams from Ince, Bromborough and Clarence Dock power stations, Area 1 Liverpool and Areas 3 and 2 Chester/Northwich.

With the completion of the tests came the prize giving ceremony and Mr. D. G. Dodds (Chairman), who presided, commented on the wonderful team

spirit shown by the First-Aiders who were providing a vital service to the community and to the industry. He went on to thank Mr. J. Kellett (Manager, Area 3) and his staff, and all concerned with the staging of the competition for the excellent arrangements.

Then came the announcement of the results of the competition which were as follows:

Final Position	TEAM Marks possible:	Marks awarded			
		Pairs		Team	
		1 & 2	3 & 4	Test	Total
		100	100	200	400
1st	Chester/Northwich	71	77	128	276
2nd	Chester Ladies	79	59	124	262
3rd	Ince Power Station	73	45	129	247
4th	Bromborough Power Stn	56	64	117	237
5th	Clarence Dock Power Stn	46	90	99	235
6th	Area 1 Liverpool	77	70	64	211

In the Reserves Competition Miss A. Williams of the Chester Ladies team came first with 95 marks out of a possible 100. Mr. J. E. Tierney of Area 1 Liverpool came a close second with 90 marks.

In the National Finals to be held in London on March 27th, the Branch will be represented in their respective sections by the Chester/Northwich team and by the Chester Ladies team. We wish both teams every success.

The Chester Ladies' team. *Left to right:* Mrs. M. Lamb, Mrs. B. Bellis, Miss A. Williams (reserve), Mrs. S. Cooper (captain), Miss S. Timmins, and Mrs. Peddie.



The Area 1 team. *Left to right (standing):* Messrs. R. Whitworth and W. Wrigley. *(Seated):* Messrs. J. Brown and G. Cleugh.



Final thoughts: Noting that the winning team was made up of two members from Chester and two from Northwich, the opportunity for them to work as a team should the need arise would be very remote. The same set-up probably applies to the other teams whose members work in different sections. This leads to the suggestion that possibly the organisers of the competition might look into the possibility of discontinuing the team test and simply confront individual members of a four or five man team with 'casualties' and maybe a couple of 'by-standers'.

Talking Notes

TOUGH GUYS

BASKING in brilliant sunshine is how most people hope to spend their annual week or two 'away from it all'. Not many would choose arctic conditions and the bleak Yorkshire moors for the ideal holiday, but this is exactly what four stalwarts from Southport did recently when they braved the elements and set off for a camping holiday in the snow.

Turning their backs on the comforts of home, the four loaded their cars with camping and climbing equipment and headed for the village of Hardrow, near Hawes. Following a snowplough for most of the way they eventually arrived at their destination, and struck camp.

The nearby villagers soon came to know them as "the campers" and were quite amused by the notice fastened to one of the vehicles which read, "North Yorkshire Survival Unit".

Messrs. Siddeley and Baines.



In their 200-mile tour they encountered many dangerously deep snowdrifts and on one occasion they came across two men stranded with their car. The travellers were obviously not prepared for the severe conditions and after six-and-a-half hours in the snow they were in a worried state, and very hungry. Miraculously the rescuers produced some hot soup and then proceeded to dig out the trapped vehicle.

Forced March

One of the highlights of the trip was a self-imposed fitness test during which they force-marched over the Great Shunner Fell, sometimes climbing to a height of 2,300 feet—not a particularly great height they agree, but the going was very difficult because of the snowdrifts.

Two of the party of tough ex-servicemen who made the trip were 30-year-old **John Brian Siddeley**, a former member of the Royal Military Police, and 27-year-old **Raymond F. Baines**, an ex-Marine Commando. Both are now employed as sales representatives with the Board's Southport District.

When asked about the trip they said "We know it is probably an unheard-of thing to take a holiday at this time of the year and in such conditions in the wilds of Yorkshire, but we felt that we wanted a change, and it turned out to be a most wonderful experience. Surprisingly enough we were never really cold, probably because we kept on the move

all the time and wore the correct clothing".

They spent a lot of time tobogganing and climbing in the vicinity of Hardrow Skaw, the highest single drop waterfall in Britain—over one hundred feet. Some of the icicles formed by the frozen water were nearly eighty feet long, and must have weighed several tons.

All four arrived back in Southport feeling much better for their adventure. They enjoyed it so much that they are already making plans for another 'holiday' next winter, and secretly hoping for tougher conditions.

Brian, who saw military service in Korea, is now a married man. His main hobbies are weight-training and wild-fowling although he has recently taken up a new interest as an apiarist. Raymond, whose Service life took him to Malta and Cyprus is also married. He is a very keen sportsman having played almost every game in the book. Last year he was captain of the football team which won the NALGO tournament, and is a regular member of the Hesketh Casuals team in the Lancashire Amateur League.

Pensioners' Ideas Wanted!

There is a wealth of ability and experience among our retired colleagues, and in an endeavour to continue to use this for the good of the electricity supply industry, the No. 9 District Joint Advisory Council have altered their Employees' Suggestions Scheme Regulations. Suggestions are now accepted from retired employees of MANWEB, or the C.E.G.B., North Western Region, who formerly worked in the Merseyside and North Wales area.

Suggestions should aid the work of the electricity industry by, for example, reducing costs, providing better service, saving time, material, increasing efficiency, safety, etc.

If any retired person has a suggestion, either now or in the future, he or she is invited to submit it. A form for the purpose, and a prepaid envelope, can be obtained through your former place of work or from the Secretary of the No. 9 District Joint Advisory Council, **Mr. J. W. Anderson**, The Electricity Council, 19 James Street, Liverpool 2, to whom completed forms must be returned.

Suggestions will be discussed by the Suggestions Committee of the D.J.A.C., and those considered suitable will be recommended for adoption and awards.

Scholarship Winners

As briefly mentioned in last month's *Contact*, **Mr. Thomas Heston Williams** of Pwllheli, linesman with the Portmadoc Operations Gang, has been awarded a scholarship to study at the College of Advanced Technology, Salford. He began his period there on February 18th.

Mr. Williams, who is 39, gained his Ordinary National Certificate after studying at Bangor Technical College last year.

He began his career with the Midland Bank, served during the war in the Royal Air Force and joined the MANWEB staff in 1949 as a labourer, later being promoted to linesman's mate and linesman. His friends at Portmadoc and Pwllheli wish him well in his new venture.

Situation Saved

In response to an urgent request by a harassed housewife in the outlying district of Dolgellau, **Mr. Norman Williams** (electrician) and **Mr. R. T. Williams** (apprentice), set out to deliver an electric fire to provide warmth for the distressed family, who could not light their coal fire because of frozen water pipes.

Our picture below shows the blocked road which was successfully negotiated, ensuring timely relief and one more satisfied consumer for MANWEB.

Lucky Girl

Having a brother in the insurance business may have its advantages, but having a brother in the insurance business in Nairobi is highly recom-



Miss Sonia Mason

mended, especially when the opportunity arises for you to spend a holiday with him. This chance of a lifetime was offered to **Miss Sonia Mason**, a secretary at Board Head Office, and naturally she started packing immediately.

On March 1st, Sonia set off on the fourteen-hour flight to Kenya where she will spend three weeks sightseeing and basking in the glorious sunshine with her brother Andrew. We wish her a safe journey, a very happy holiday and a safe return.

Elected

Mr. Emlyn Jones, senior Service Centre assistant at Bethesda, has been elected to the Board of Governors to the University College of North Wales, Bangor.



"I'm All Right Jack . . ." HOW TRUE?

In January this year all the Board's non-manual employees received a pamphlet, issued by the Electrical Industries Benevolent Association, appealing for new members.

The membership figures at that time were as follows:

Total Non-Manual Employees ...	2,810
Members of EIBA ...	169
Percentage ...	6
Average Annual Subscription per head of:	
Members ...	14/1
Total Employees ...	10d.

Since the pamphlet was issued 112 new members have joined and the present comparable figures are:—

2,810; 281; 10%; 17/2; 1/8½.

While we have doubled our average annual subscription per head of total employees, we still lag far behind the average for the industry as a whole—3/6 per head.

It is difficult to believe that more than 2,500 employees of the Board are not interested in providing the means for the E.I.B.A. to help our less fortunate colleagues. Surely the minimum deduction from salary of 5d. per month would hardly be noticed by any employee, and this would raise our annual average per head to 5/10! **E.I.B.A. enrolment forms are available at Area and District Offices.**

Another method of increasing the E.I.B.A. income is for the member to enter into a Deed of Covenant for a minimum period of seven years, which entitles the Association to claim from the Inland Revenue an additional 12/8 for each £1 subscribed by the member. Existing members can elect to covenant their subscription this way.



Repairing Winter's Damage

THE full effect of the past severe winter on our gardens will probably not be known for some months, but it is certain that there will be many casualties. Severe and prolonged frosts are bad enough, but biting winds, heavy snowfalls and drifts have also contributed to the adversities suffered by the amateur gardener. The fact that nurseries too have been badly hit is of no consolation to the amateur, for stock replenishments, even if available, will undoubtedly cost much more.

While it is inevitable that there will be many irrecoverable losses, particularly among the half-hardy shrubs and trees, it will pay not to be too anxious to "dig up and discard". Broken or obviously dead wood should be removed as soon as possible to avoid infections, but it may well be that the frost has not affected the roots and base of the stems, so that new growth may well appear at soil level. Quite frequently, when plants have been damaged by frost, it is late summer before the new breaks show themselves. More than likely the frost will have loosened the plants in the soil, so they should be made quite firm again by treading in. It is best not to be in a hurry to do this, as the soil should have a chance of drying out first.

Those gardeners with greenhouses have not escaped losses either. A number of my friends and myself have lost valuable stock. Unfortunately there comes a time, even with a heated greenhouse, when one has to consider whether it is cheaper to re-stock than to heat a greenhouse through a long period of freezing temperatures. Steps to economise in heat, if planned well in advance, can be effective, and the past winter should serve as a lesson to those who failed to anticipate so prolonged and severe a winter.

Replacing the Dahlias

I have always been very interested in Dahlias for a variety of reasons, not the least of which is that I have had some considerable success in propagating and

growing them. At least such was the case until this past winter when, I regret to say, I lost all my tubers through frost damage and damp troubles. Fortunately, there is still time to order new green plants, although some of the newer varieties may be difficult to obtain through late ordering.

The brilliance of colour, the variety of shape and form and their suitability as cut flowers for the house all go to make Dahlias one of the most popular of garden plants. While they are very easy to cultivate because of their prolific growth, they do require

A Tarpen edge trimmer—a useful mains voltage labour-saving appliance—in action.



constant attention if really fine specimens are desired. During this month Dahlia tubers are normally started into growth. To do this, the tubers are placed in boxes and a mixture of loam, leaf mould and sand is shaken around them, taking care not to completely cover them. The boxes are then placed in the cold frame where new growth will soon appear. Beginners would do well to divide the tubers when the new shoots are established. In doing this, care should be taken to ensure that every shoot is attached to a tuber.

A better method of producing a good stock and particularly to increase the quantity, is to take cuttings from the new shoots. The amateur will normally take cuttings from the old tubers with a "heel" attached to them. This means that a small portion of the old tuber will be attached to the shoot which, incidentally, should be 3-4 inches long before being cut away. The cuttings can now be placed in 3½-inch pots containing any light loamy potting compost. I have made no mention of rooting hormones, as quite frankly I have not found any real advantage in using them. As an alternative the cuttings could instead be put into a similar compost in a seed box, and each cutting covered with a jam jar. This will help to provide the necessary temperature and humid condition necessary to rooting. For cuttings, a temperature of 60° to 70°F. is essential, and humidity should be maintained by sprinkling water on the cuttings, but not more frequently than necessary.

The cuttings should root in about three weeks and, evidence of rooting will be apparent when they start to grow at the tip. Once rooted, the hardening-off process should begin. The temperature environment should be gradually reduced during a period of about ten days to 45°-50°F. (night temperature). By the time they have reached this stage, day temperatures under glass will be much higher. If the rate of growth is fairly rapid, it may be necessary to "pot on" but normally this is unnecessary and, in fact, undesirable.

Staking and Manuring

Some attention should also be given to the permanent quarters in which they are ultimately to grow. The bed should be well manured and deeply dug, and about 4 ozs. bone meal to the square yard worked into the soil. Stakes should be obtained in good time as

strong winds play havoc with Dahlias. Remember not to plant out until all danger of night frosts is gone.

This month is normally about the busiest of the year and following the past winter's damage to our gardens, it will be busier than ever. With every mechanical and, of course, electrical aid available pressed into service, this year's gardens should look as well as ever.

For encouragement, the poem by Rudyard Kipling called the "Glory of the Garden" cannot be surpassed, and the following extracts from it will, I hope, help you.

* * *

*"Our England is a garden, and such gardens are not made
By singing: "Oh, how beautiful", and sitting in the shade.
While better men than we go out and start their working
lives,
At grubbing weeds from gravel paths with broken dinner
knives.*

*And some can pot begonias and some can bud a rose,
And some are hardly fit to trust with anything that grows;
But they can roll and trim the lawns and sift the sand and
loam,
For the Glory of the Garden occupieth all who come.*

*There's not a pair of legs so thin, there's not a head so
thick,
There's not a hand so weak and white, nor yet a heart so
sick,
But it can find some needful job that's crying to be done,
For the Glory of the Garden glorifieth everyone.*

*Then seek your job with thankfulness and work till further
orders,
If it's only netting strawberries or killing slugs on borders;
And when your back stops aching and your hands begin to
harden,
You will find yourself a partner in the Glory of the
Garden.*

*Oh, Adam was a gardener, and God who made him sees
That half a proper gardener's work is done upon his knees
So when your work is finished, you can wash your hands
and pray
For the Glory of the Garden that it may not pass away.*

REMINDERS

Complete the planting of shrubs and trees.
Lift and divide herbaceous plants.
Make first sowings of onions, lettuce, carrots,
peas, etc.
Sow hardy annuals.

Dress flower borders with a good organic
fertilizer.
Prune Buddleias and other late flowering shrubs.
Use a combined weedkiller and fertilizer on
lawns later in the month.

IMPERIAL CHEMICAL INDUSTRIES

IMPERIAL CHEMICAL INDUSTRIES LIMITED, better known to the man-in-the-street as I.C.I., is Britain's leading chemical manufacturer, and one of the largest industrial organisations in the British Commonwealth. In the United Kingdom I.C.I. operates more than 100 factories, employs 112,000 people, and makes more than 12,000 chemical and allied products, ranging from heavy chemicals, fertilisers, explosives, paints and non-ferrous metals to fibres, drugs, dyestuffs, plastics and zip fasteners.

On this wide range, washing soda, table salt, paint, zip fasteners, sporting cartridges and a few pharmaceutical preparations are practically the only I.C.I. products that can be bought over the shop counter.

Having no daily contact with the ordinary citizen, I.C.I. can never enjoy a popular identity as do the makers of well-known proprietary brands of beer, cigarettes or whisky. Yet its products are essential to the life of the nation. They are the vital raw materials on which the great manufacturing industries of Britain depend.

A panoramic view of the Castner-Kellner works at Runcorn.



I.C.I.'s production capacity in the British Isles rests on eleven manufacturing Divisions each large enough to rank as a major industrial concern. Not only are most of these Divisions linked by a common dependence on the same fundamental raw materials, but the finished products or by-products of one Division frequently form the raw materials of another.

General Chemicals Division with its headquarters on Merseyside is the "universal provider" of chemical raw materials for industry. Among its 150 or more individual products, the heavy chemi-

icals—particularly caustic soda, chlorine and acids—are important staple lines used widely in Britain and overseas by hundreds of industries.

The Birth of an Industry

The manufacture of so-called heavy chemicals, which constitutes the Division's chief activity, began in the early nineteenth century with the production of soda from salt by the Leblanc process.

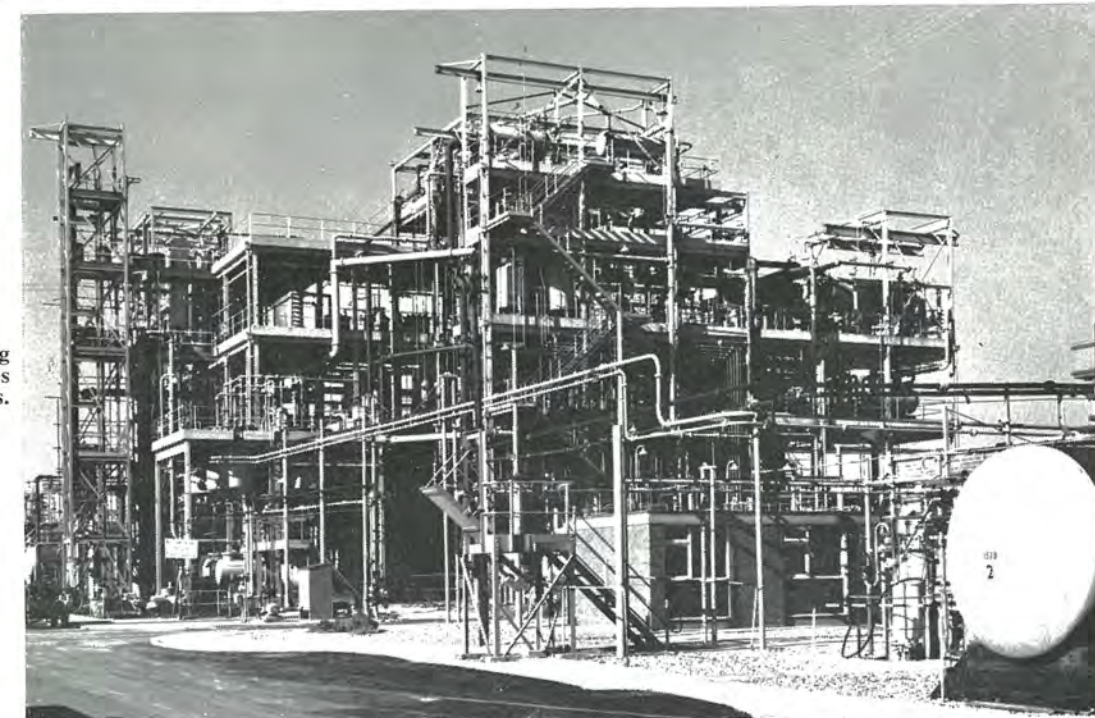
The Leblanc process required—in addition to salt—limestone, sulphuric acid and coal as its raw materials. In its original form the process was justly described as making one chemical (soda)

and wasting two (chlorine and sulphur). In the course of its development, however, the Leblanc system ultimately found means of recovering the sulphur it had formerly sent to waste heaps, and of utilising chlorine. Indeed, the great development in the uses of chlorine in industry was due in the first instance to the abundance of the element which resulted from its recovery by the Leblanc manufacturers.

In the 1870's the supremacy of the Leblanc system was attacked by the introduction of the Solway process for manufacturing soda, operated



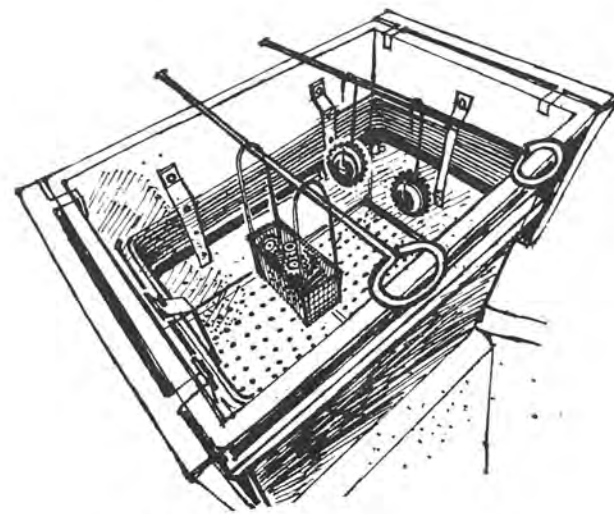
Tapping the calcium carbide furnace.



Plant manufacturing chlorinated methanes at Rocksavage works.



Aerosol propellants
In press-button sprays 'Arcton' gas, an inert and harmless combination of chlorine, fluorine, and carbon, is packed in liquid form under pressure in a container. When the pressure in the container is eased by pushing a button valve, the liquid instantly evaporates and shoots out as a stream of vapour, carrying with it the hair lacquer, de-icing solution, or toothpaste.

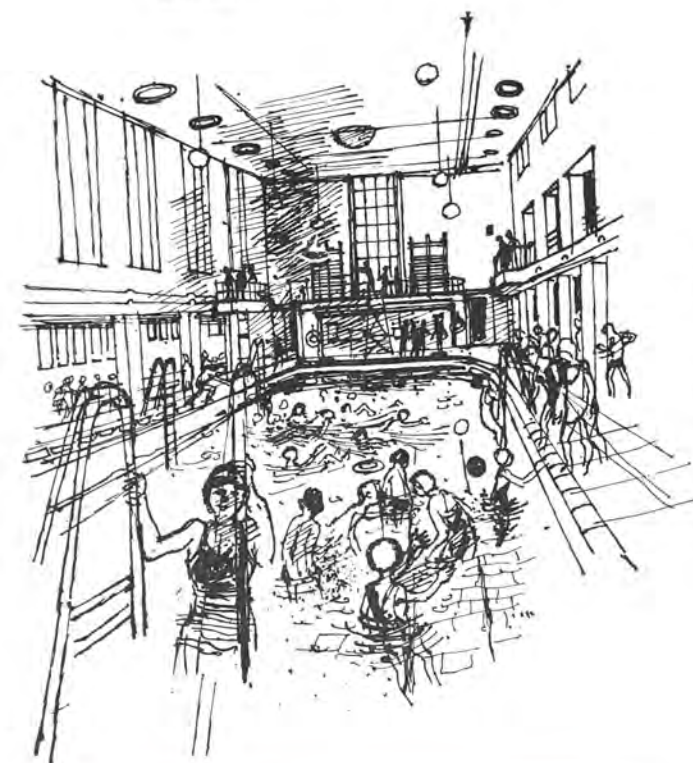


Metal degreasing
Many metal articles require degreasing in the course of manufacture. Trichloroethylene, a chlorine-containing product, one of the most powerful non-inflammable grease solvents known, is used for this purpose in specially-designed plants.

THE HIDDEN HAND OF CHLORINE

Water purification

The easiest and cheapest way to disinfect swimming pools or drinking water is to treat it with just the right amount of chlorine.



Plastics

Chlorine is used in the manufacture of the vinyl chloride that ICI Plastics Division later converts into polyvinyl chloride, one of the most important and versatile plastics. PVC is used in hundreds of ways from waterproof clothing to cable insulation.



in this country by Brunner Mond & Co. This competition resulted in the formation, by the Leblanc alkali-makers, of the United Alkali Co.—the first important merger in the history of the world's chemical industry. A further threat to the Leblanc system followed in the 1890's with the introduction of the electrolytic manufacture of caustic soda and chlorine by the Castner rocking mercury cell.

Today, the Division manufactures chlorine on a vast scale by the electrolysis of sodium chloride brine. At Weston Point, Runcorn—site of the world's first commercial electrolytic chlorine plant—is the largest cell room in the world outside the U.S.A. Chlorine is also produced in Downs cells by the electrolysis of a molten mixture of salt and calcium chloride.

Castner-Kellner Works is the largest manufacturing site operated by the Division and houses plants producing, in addition to chlorine and caustic soda, chemicals as varied as hydrochloric acid, sodium and sodium peroxy compounds, non-inflammable chlorinated hydrocarbon solvents, and vinyl chloride.

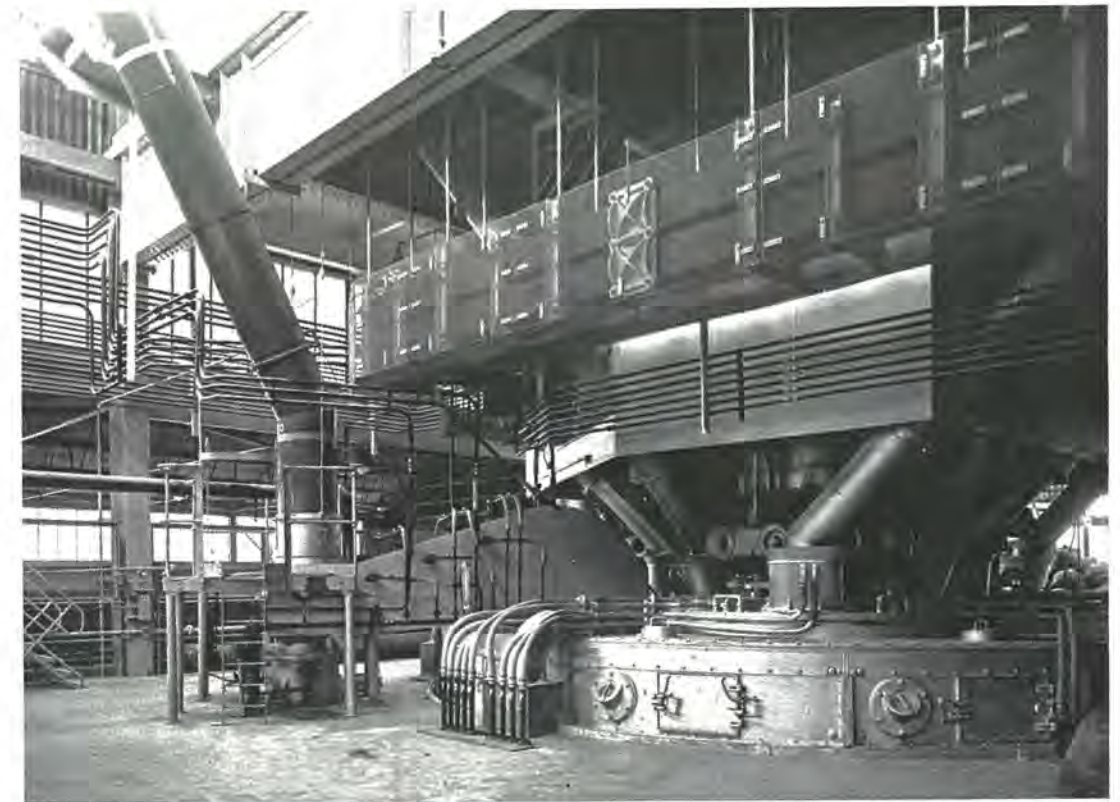
Calcium carbide, the source of the acetylene required for making chlorinated solvents and vinyl chloride, is produced in large electric arc furnaces.

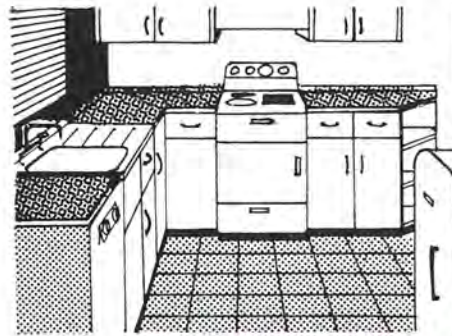
At Rocksavage Works, another of the Division's factories in Runcorn, electrolysis of brine is also a basic process. Allied to this is the manufacture of a range of fluorine chemicals, including the well-known non-toxic 'Arcton' refrigerants and aerosol propellents.

Large-scale electrolytic decomposition of brine involves the consumption of vast quantities of electrical energy. When the process was established at Weston Point, no local electrical undertaking could supply energy in the required amount. The Castner-Kellner Co. set up its own power station and up to the present time the factory continues to generate power for its processes. The first installation, driven by reciprocating steam engines, produced low voltage direct current. By 1905 the capacity reached four megawatts. Steam engines gave way to gas engines and these in turn were replaced by turbine-driven d.c. generators but during the last forty years a.c. has been generated in high pressure turbo-alternators, and converted to d.c. as required.

Electricity from MANWEB is taken at 33 kV., and part of this supply is converted to d.c. for electrolytic processes, using semi-conductor rectifiers. The present maximum demand of approximately 70 megawatts is likely to be doubled in the course of the next few years.

The new carbide plant furnace.





A Woman's WORLD

CARE OF THE HAIR

THERE are many things which can cause the hair to become dry, dull and lifeless, but providing that the basic cause is not poor health, much can be done to restore the natural spring and lustre to the hair.

If your hair is in a poor condition it is possible that it lacks the natural oils which normally keep the hair soft and shining. Since these are supplied from the tiny glands in the scalp at the root of each individual hair, daily brushing and massage to stimulate the scalp will be beneficial.

To obtain the greatest benefit from a brushing routine, the head should be held low to allow a good flow of blood to the scalp. The hair should be brushed in long deliberate sweeps, first from the hair line through to the

tips of the hair strands and secondly from the crown to the tips.

The scalp should be massaged during any spare moment and, because it loosens the scalp and promotes good circulation, it will also ensure that the roots of the hair are properly nourished. The massage should be done by placing the fingers of both hands firmly on the scalp at the back of the hair line and with a firm rotating movement the fingertips should be worked systematically all over the scalp.

Oil treatment

If your hair is really lifeless, try an oil treatment using a good quality almond, coconut or olive oil. Warm about a tablespoonful of the oil and gently massage it into the roots of the hair. Then wring out a turkish

towel in hot water and wrap it round the head like a turban. Leave the towel on until it cools and then back into hot water with the towel and repeat the treatment a couple more times.

If possible, carry out this treatment at night and shampoo your hair in the morning. You may find it necessary to give three latherings of shampoo to remove the excess oils which have not been absorbed into the roots.

Shampoos

Usually it is necessary to shampoo your hair at least once every week, to keep your hair clean and in good condition. Choose a good shampoo—one with a gentle action which is not harsh on the hair. Apply the shampoo carefully, following the manufacturer's directions and be sure that rinsing after both the first and second lathering is very thorough so that every particle of grime and shampoo is washed away. This is very important when doing a 'home shampoo'.

The use of a good quality conditioning cream after shampooing will not only help to nourish the hair but will also give it a more shiny and lively appearance.

SPECIAL OFFER

The Toni Company are making a special offer of the Caress popular size aerosol self styling hair spray, and a one ounce sample of the new Tame creme rinse hair conditioner.

The offer will be on sale at all usual retailers. The price for the combined packs will be 7/11, the normal price of the Caress aerosol. The offer is expected to last only a few weeks.

Hairstyle for the Younger Woman

This new style designed by Evelyn Douglas is created on club cut hair which varies in length from four inches on the top and crown, down to two inches in the nape of the neck.

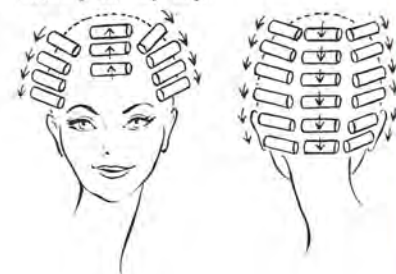


Setting

Setting is carried out on medium sized rollers and the short neckline is set in pin curls.

Brushing-Out

Brush the hair through thoroughly from front to back, lifting the hair lightly with the brush as you do so. Use a comb to flick the hair into petals all over the head. Then, comb soft curls forward, framing the face like a feathery cap.



Meet... Miss P. A. Cull

After leaving the Holt Hill Convent School in Birkenhead, Miss Patricia Ann Cull went to the Birkenhead Technical College for a year where she studied Domestic Science. Then in March 1960 she joined the MANWEB staff as a Service Centre assistant at Birkenhead, and eighteen months later she became a trainee demonstrator.

In March this year, Pat celebrated her 21st birthday, and took up her latest appointment as demonstrator, based at Wallasey. She still attends the Technical College for two nights each week to continue her studies in Advanced Domestic Cookery.

Pat's spare time activities are taken up with dancing, parties and visits to the theatre—with her boy friend. Her hobbies are dressmaking and collecting records, pops and classics. If and when she can afford it, she likes going abroad for her

holidays—this year she is off to Spain.

She enjoys giving buffet parties at home where she can try out her latest recipes on her many friends. Now Pat offers a recipe for you to try for yourself.

Ham and Pineapple Pom-Poms

Ingredients: 8 oz. minced ham; 2 oz. fresh white breadcrumbs; 2 eggs, beaten; 1 medium onion, finely chopped; seasoning.

Sauce: Small tin pineapple, strained and crushed; 1 tablespoon pineapple juice; 2 rounded tablespoons Demerara sugar.

Fat for deep frying.

Method: Place the ham, breadcrumbs, beaten eggs, chopped onion and seasoning in a bowl and mix well together. Form into about twenty small balls about the size of walnuts. Place the pineapple and juice in a frying pan and cook gently until the pineapple turns a light



caramel in colour. Add the sugar and keep warm while the Pom-Poms are frying. Heat a deep pan of fat to about 360°F. Fry the Pom-Poms for about three to four minutes, drain on crumpled kitchen paper and toss in the pineapple mixture. Serve hot.

This recipe will be enough for four portions or can be used at a buffet party.

E.W.A.

At a meeting of the Electrical Association for Women held in Liverpool recently, Mr. D. G. Gwyn, Deputy Chairman of the Board, spoke on the cold weather problems of production and distribution in the electricity supply industry.

He explained that deposits of soot and grime on the power-carrying cables had become frozen and acted as a semi-conductor. The exceptionally cold weather had caused unavoidable breakdowns in other forms of heating and had brought on an increased demand for electricity.

"In the MANWEB area alone," he said, "the demand had increased by 60 per cent within the last two years."

Commenting on the Government's £2,500,000,000 programme for the construction of generating stations over the next four years, Mr. Gwyn said, "There is a body of opinion, which I share, which thinks that if the rate of growth continues as it has done, this will not prove adequate to provide 100 per cent continuity of supply."

A GOOD BUY

The English Electric 'Slimline' Junior

This wonderful little refrigerator is so beautifully designed, so compact, that it can fit almost anywhere. Yet it actually has six square feet of shelf area and holds enough fresh and frozen food for a small family.

With this refrigerator you will be able to keep your meat, vegetables, eggs and milk fresh and wholesome and salads crisp and tasty. You can also make those ice lollies so popular with the children. There's almost no end to the things a Slimline Junior can do for the whole family.

The polythene-coated shelves in the refrigerator compartment are adjustable to suit all your storage requirements. The door has four shelves which unclip for easy cleaning. The full-width Freezer hold two large and two small packets of frozen food as well as ice-lolly moulds and its own ice cube tray.

The door seals all the way round with a continuous length of per-

manent magnet, so it doesn't need a latch. There are nine temperature control settings.

A stand to bring the 'Slimline' Junior up to standard table height (36 inches) and a working top are available as optional extras.

Special purchasing arrangements by the Board make it possible to offer this refrigerator at the amazingly low price of only 27 guineas.





Photography

BY GEORGE GOULD

Tracing Troubles

IN case those of you who followed my last two articles on film and processing are wondering just where you may have gone wrong, I will try and analyse some of the faults you may have encountered, and show you how to avoid them in the future.

Film development being first in the series of operations, I will discuss film faults first. We call each negative in the roll of film a "frame", and the edges of the film where it receives no light exposure the "rebate". On a 120 film you will have 8, 12, or 16 frames—and on miniature film you will have 20 or 36 frames. When your film is dry, cut it carefully into short strips for ease of subsequent handling. Now let us assume things have gone wrong and we are trying to identify them. The first fault may be that of "overall fogging". This will be shown by the film being completely black—even the rebates will be black. The cause—well, at some time during loading and removing from the camera, or during processing in the tank, it has been affected by "stray" light, perhaps from a chink of light entering your improvised darkroom. You may not have rolled the film tightly after removal from the camera. This is a common fault, and the film should be removed from the camera in the shade and rolled tightly.

If the rebates are quite clear and only the picture area is completely black, then either the camera shutter has stuck in the "open" position, or you have grossly over-exposed your picture. In the latter instance you will most certainly have some trace of image detail in the negative, and this will help you to decide what has happened.

If the film when processed is almost transparent in the "frames", this may be attributed to either under-exposure or insufficient development or both. If the film was under-exposed—that is if the lighting conditions were poor—you will see that the shadow or dark areas of your subject are clear film and devoid of detail. If your exposure was correct, but your negative image is thin but full of picture detail, then your processing is at fault. Your developer was too cold or your timing was not enough, as a result your image would not develop up. Correct temperature is vitally important in photographic processing, but the processing time is equally important—too little time and your image will not develop up.

At the other extreme we have "over development", and now our negatives will have extremely high contrast. The heavier densities will be quite black—this is due to the developing solution being too warm or the time being exceeded. Continued or gross over-development will result in an overall blackness very similar to over-exposure, but in this instance the rebates will show signs of slight fogging.

One other fault that the beginner often encounters is uneven development—very often only three-quarters of the film width being processed. The cause is simple—not enough solution in the processing tank. By the way, the remaining quarter of the film will be quite clear—your image will be removed by the hypo or fixing bath. There are many other faults such as "reticulation" scratches, dust spots, emulsion melting, etc., and I will write about these in a later article—for the time being I want to keep to simple faults.

You will find your "printing paper" faults very similar, and apart from overall fogging, again due to stray light affecting the paper, we should be concerned with the correct printing exposure. My last article outlined the need for "test strips" and my picture this month shows a typical test strip sequence. My first exposure of five seconds is not enough—no image developing up. The second strip of ten seconds is better, but still insufficient. The third portion is too dark, and was 15 seconds. The final strip of 20 seconds is much over-exposed. The best print was done on 12 seconds, and was just right.

If you have blue stains on the prints you have had hypo or fixer on your fingers while the print was in the developing bath. Remember to rinse your fingers or to use print forceps. If your prints develop in the centre but not near the edges—this is due to just placing the paper in the solution, and not immersing it fully. Should the prints be yellowish and stained you have been guilty of prolonging the processing, or the fixing bath has been "over used" and should be discarded.

Finally if your print shows incorrect subject contrast and is flat and grey, try using a higher contrast grade of printing paper—you will be amazed at the difference. Next month we will consider exposure for films, and the choice and use of exposure meters.

A typical 'test-strip' of 5, 10, 15 and 20 seconds. The print must have full development and I decided on a final exposure of 12 seconds, the 10 second section being too light and the 15 second too dark.



Prize Pictures

Entries for the competition for the best indoor flash picture taken during the festive season were very disappointing. However, two prizes have been awarded by Mr. G. Gould, who judged the pictures, and the first prize of a 35 mm. slide box has been won by Mr. K. Wigelsworth, from our Ivy Street depot, Colwyn Bay. Mr. Gould felt that some effort had been made here, especially with the cat, to make an interesting picture.

A consolation prize of a packet of slide mounts has been awarded to Mr. R. McDonald of Head Office, for his very gallant try.





Mr. Evans, with many of his friends and colleagues.

MR. E. L. EVANS

After 35 years' service to the industry, Mr. Edgar L. Evans, assistant (salaries and wages) at Area 4 Office, retired recently. At a social even-

ing held at a Wrexham hotel Mr. Evans was presented with a portable radio and, the company were entertained by the Rhostyllen Glee Club.

RETIREMENTS

MR. R. J. FROST

After 43 years' service with the industry, Mr. R. J. Frost, assistant (costs) at Area 1 Accounts Office, Liverpool, retired a few weeks ago.

On behalf of his colleagues, he was presented with various gifts by Mr. A. M. Riley (Accountant, Area 1).



Mr. Riley (left) wishes Mr. Frost a happy retirement.

OFF TO AFRICA

Mr. David Orrells, an electrician on the staff at Dolgellau, has left the service of the Board to take up an appointment as an electrical inspector to the Government of Tanganyika. Mr. Orrells joined the Board as an apprentice electrician in 1951 and later served for two years in the Royal Air Force. He left Britain by air on February 10th to take up his new post, and on the day before his departure he married Miss Lena Fitzgerald at Barmouth. On



Mr. Orrells looks "raring to go" on his long journey.

behalf of his friends and colleagues he was presented with a tea service and tray by Mr. D. Hughes (Consumers' Engineer).

MRS. M. BLAMIRE

After serving the electricity supply industry for the past 18 years Mrs. M. Blamire, a popular member of the Liverpool South District staff, retired recently.

Prior to joining the meter section of the Liverpool Corporation Electricity Supply Department she was a member of the Liverpool Fire Service where she had many exciting and dangerous moments during the 'blitz'.

Mrs. Blamire was an active member of the Sports Club Dramatic Group, known as the

Electron Players, and took part in many of their productions. In addition she has done a considerable amount of visiting her less fortunate colleagues who were indisposed through sickness.

During the last few years, Mrs. Blamire has worked in the engineering clerical section at Lister Drive, and her many colleagues and friends subscribed to her retirement presentation of an electric fire which was presented to her by Mr. E. Taylor, District Senior Clerk.

MR. W. SMITH

After 50 years' service with the industry, Mr. W. Smith, chargehand installation inspector at St. Helens, retired on February 15th.

Mr. Smith began his career as an office boy at Carlton Street, later becoming an apprentice electrician. After serving in the Royal Engineers during the first world war he emigrated to America, returning in 1925 and rejoining the staff at Carlton Street as an electrician. In 1933 he became an

installation inspector, being promoted to chargehand in 1955.

On behalf of his colleagues at St. Helens he was presented with a fan heater and lighting fitting by Mr. H. R. Johnson (District Commercial Engineer). In retirement he intends to spend more time at his hobbies—gardening, motoring, and watching the "Saints".



Colleagues at St. Helens gather round for the presentation to Mr. Smith. (right)