

Commonwealth TODAY

Devoted to the Commonwealth to the Commonwealth

NUMBER SEVENTY-NINE

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ACKNOWLEDGMENTS
PHOTOGRAPHS—Page 4: India official (1), Pakistan official (1); 8: Tanganyika official (4); 10, 11: The Federation of Malaya (1); Nyasaland official (1); 12-17: including colour photographs, Canada official (2); Ghana official (6); 27: Nigeria official (3); 28, 29: Australia official (5). Back Cover: Colour photographs, Crown copyright.

PREPARED BY
THE CENTRAL OFFICE OF INFORMATION
LONDON

PRINTED IN ENGLAND FOR
HER MAJESTY'S STATIONERY OFFICE
BY SAMUEL STEPHEN LTD., LONDON

Speaking of the

Commonwealth...



OPENING the travelling Commonwealth Exhibition in Edinburgh, Scotland, Mr. Duncan Sandys, Secretary of State for Commonwealth Relations, in a speech stressed the "historic mission" of the Commonwealth in "a period in history when distrust and deep tensions and unhappiness exist between races". He said that "our multi-racial Commonwealth may be able to play a vitally important part in creating harmony and mutual respect... not only between member countries but also among the people of the world as a whole".

Mr. Sandys warmly welcomed Nigeria as the eleventh member of the Commonwealth. "Sierra Leone will probably follow", and, he added, the West Indian Federation will soon be joining the Commonwealth also.

"We can justifiably be proud", he said, "of the smooth and amicable way in which territories, some with vast populations, have been brought step by step to assume the responsibilities of sovereignty."

Mr. Sandys likened Commonwealth relationship to the British Constitution, which is totally undefined. "It is based", he said, "upon the well-established habit of mutual consultation. In an informal and unspectacular way the Governments of the Commonwealth are constantly exchanging views with one another on the great issues of the day. The Commonwealth is a family, and like all families it has its own internal divergencies and disputes. Nevertheless this process of continuous contact—and that is the secret of Commonwealth relations—between its members leads to better understanding of the viewpoints and problems of the different races and continents to which they belong."

WITH the publication of a booklet, *Training Today for Tomorrow*, plans for a Commonwealth Technical Training Week, to be held in 1961, have begun to take shape. At least seven independent Commonwealth countries and eighteen overseas territories have indicated their support for the idea, which was first put forward by H.R.H. the Duke of Edinburgh after he saw a State Apprenticeship Week in operation in Australia.

MR. E. O. ASAFU-ADJAYE, Ghana's High Commissioner in the United Kingdom, in a speech at Leicester, said that the Commonwealth, with its ideals and friendly associations, "has a very great attraction for the new nations as a tower of

friendship". He added: "The individual should know that the Commonwealth, of which he is a member and for which he carries as much responsibility as any other individual, may well prove to be the world's strongest hope for peace; for the ideas which it propagates are those of unselfishness, of personal liberty, of friendly discussion and of help for one's neighbour".

VISCOUNT DUNROSSIL, the Governor-General of Australia, at a meeting of the Royal Commonwealth Society in Melbourne, said that the Commonwealth was "an oasis of peace in an arid world. It is a great family of nations among whom aggression is unthinkable".

He said that all living things had to adapt themselves or perish. The Commonwealth was adaptable, which made it vital and tough. In the world today the Commonwealth was like a united family in a turbulent town; by its mere example it was raising the tone and directing the minds of its neighbours. One nation after another had elected to remain within the Commonwealth as it attained independence, because fair play and justice appealed to men all over the world. This was why the Commonwealth persisted as a multi-racial family.

SCHOOLCHILDREN from Canada, New Zealand, South, West, and East Africa, The West Indies, and Fiji, were prominent among the prize-winners in the Royal Commonwealth Society's Annual Essay Competition. The Society's chief examiner reported that the average standard of the essays was much higher than those of previous years. He said:

"That each year so large a number of valuable young people should be enabled to take stock of their heritage within the Commonwealth, what it is and what it may be, what are its problems and what glories it possesses, is surely an enterprise that is eminently worth while for all who are fortunate to be concerned in it."

"THE Commonwealth provides a wonderful opportunity to bridge the differences between mankind, and to make itself a network for peace, stability and neighbourliness in the world."—Lord Home, the former Secretary of State for Commonwealth Relations, at a meeting of Commonwealth students in London.

BERMUDA

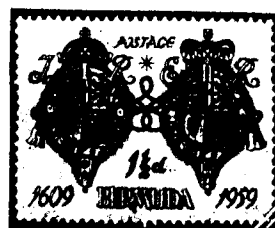
Stamp Corner



THREE and a half centuries of Commonwealth history are illustrated on the stamps of Bermuda, for it was in 1609 that the wreck of a British ship on the uninhabited islands led to the first permanent settlement there three years later. Representative government began in 1620, so Bermuda's Legislative Council is older than any other law-making body in the Commonwealth save only the Parliament of the United Kingdom at Westminster.

The shipwreck of the *Sea Venture*, flagship of a supply fleet sailing to relieve the starving colony of Virginia, was commemorated by the issue in 1959 of a series of six stamps. Their design showed, in full colour, the coats-of-arms of King James I, the reigning monarch in 1609, and of Queen Elizabeth II. The first stamps of Bermuda were home-made. William Perot, the postmaster of Hamilton from 1818 to 1862, received a salary of £70 per annum, plus one penny for each inland letter posted at his office. Unfortunately Perot found that customers putting mail into the letterbox, when the post office was closed, sometimes forgot to put in the pennies to pay for the postage. He therefore decided to manufacture his own postage stamps. The design of Perot's stamps was crude. He simply used the circular postmark of his office, removing the day and month-plugs and writing "One Penny" and his signature in the space. In 1948, to mark the centenary of William Perot's ingenious device, Bermuda issued a commemorative series featuring one of the original Perot stamps. A view of Perot's house, which has been restored, is also to be seen on the sixpenny stamp in the current series. The first official stamps of Bermuda appeared in 1865, and since then several pictorial series have shown views of the beautiful islands, their historic monuments, their flora and fauna.

C. W. HILL



A HAPPY ROYAL PORTRAIT

H.M. Queen Elizabeth the Queen Mother, celebrating her 60th birthday at Clarence House, London, is seen here with Prince Andrew—who was born on 19th February, 1960. The Queen Mother, a loved and admired figure throughout the Commonwealth, is always well known for her remarkable capacity to make her visits overseas memorable occasions. During her most recent tour, to the Federation of Rhodesia and Nyasaland, she opened the great Kariba Dam, a stirring example of multi-racial effort and a project which the Queen Mother described as "a marvel of modern engineering which may in future rank with the Seven Wonders of the ancient world". The Queen Mother, who is fond of travel, always makes the most of her opportunities to extend her knowledge of the Commonwealth.



WITH COMMONWEALTH sportsmen. The Queen usually finds time to see one of the Test Cricket matches, and here she is seen meeting a visiting Indian Test team.

The Royal Tours

NINETEEN SIXTY-ONE will be an important and exciting year for H.M. the Queen and for people in the Commonwealth; for early in the year the Queen, with H.R.H. the Duke of Edinburgh, is to tour India and Pakistan for the first time and, later in the year, will tour West Africa.

The Queen, who at an early age began to travel on public occasions in the United Kingdom, journeyed overseas for the first time in 1947, celebrating her 21st birthday during the South African tour which she made with her parents and her sister. It was during that tour that she made a broadcast address to the Commonwealth and in her "solemn act of dedication" said, "I declare before you all that my whole life, whether long or short, shall be devoted to your service".

As Princess Elizabeth, the Queen with her husband toured Canada in 1951, and she was in Kenya when news of the King's death reached her. In making her Accession Declaration she again dedicated herself to the service of the Commonwealth.

Her Majesty made her first long Commonwealth tour in 1953-54 when, with the Duke, she visited Australia, New Zealand, Ceylon, Bermuda, Jamaica, Fiji, Tonga, Uganda, Malta and Gibraltar. In 1956 she made a three-week tour of the Federation of Nigeria, and in the following year toured Canada, which she toured again in the summer of 1959 to open the St. Lawrence Seaway.

In India and Pakistan the Queen will see with her own eyes a great deal of the exciting life and development which impressed the Duke of Edinburgh during his tour of these countries in 1959.



IN PAKISTAN. The Duke of Edinburgh with (right) the President of Pakistan, Field-Marshal Mohammad Ayub Khan, and (centre) General Mohammad Musa, Commander-in-Chief, Pakistan Army, at a National Horse and Cattle Show in Lahore.



THE QUEEN takes a keen interest in the many London exhibitions in which the Commonwealth is represented. Above: With a Pakistan helper at one of these exhibitions.



IN INDIA. The Duke with Mr. Nehru, the Prime Minister of India. The Duke spent a fortnight in the country, seeing something of the old and the new India.

THE ROYAL BALLET

THE ROYAL BALLET is among the most honoured of the ballet companies of the world. The great Opera House in Covent Garden, London, which is now its home, has become a mecca for ballet-lovers everywhere. Many Commonwealth dancers have studied with the company, and continue to give their talents to it. Yet—and this is often hard to believe, because of the great prestige of the Royal Ballet—it is only thirty years ago that modern British ballet was born, thanks very largely to the genius and dedicated work of one woman: Dame Ninette de Valois.

Born in Ireland in 1898, Dame Ninette made her name as a dancer and then, in 1926, founded in London the Academy of Choreographic Art. A choreographer, incidentally, is the composer, or author, of the dances and steps of a ballet; but Ninette de Valois' main purpose at her Academy was to train dancers—to lay the foundations of what she saw as a golden future for ballet in the Commonwealth.

In 1931 she founded the Vic-Wells Ballet, soon to be re-named the Sadler's Wells Ballet, and on the 31st May, 1931, the first full ballet programme was put on by the new company at London's Old Vic theatre, now the home of regular productions of Shakespeare's plays.

The ballet moved to the Sadler's Wells Theatre and later to the Royal Opera House; and its fame grew. Renowned artists, such as Massine, Danilova, Dolin, and the Australian-born Robert Helpmann, danced with the company. The enchanting Alicia Markova was for many years prima ballerina, and was succeeded by another British star, Dame Margot Fonteyn, who is considered to be one of the world's greatest ballerinas.

Princess Margaret—President

In 1946 the Sadler's Wells Theatre Ballet was formed, a junior company which started a series of tours in the United Kingdom and in Europe. Then, in 1956, the two Sadler's Wells ballet companies and the all-important Sadler's Wells School of Ballet were granted a Charter of Incorporation and together became the Royal Ballet, with H.R.H. Princess Margaret as the first President, and Dame Ninette as Director.

A thorough training is essential to the mastery of ballet dancing, and young dancers from the Commonwealth are fortunate in having not only the Royal Ballet School but also the school of the Ballet Rambert, which was founded by another remarkable woman, Marie Rambert, in 1930. These two eminent British schools, and their respective founders, have produced countless dancers and provided encouragement to choreographers, designers and musicians.

The Royal Ballet runs two teaching establishments. One is a boarding school in Richmond Park, called White Lodge, where children from the age of ten receive a sound general education, and also learn dancing; the other is a senior school, in London, where the accent is more upon dancing, the development of earlier lessons, the striving for perfection.

Children at these schools are told from the start that they may not in fact become dancers. Although the girls under training are very carefully selected, and all are young dancers of promise, many things can go wrong. Their feet may not stand up to the strain, or they may develop the wrong physique—become fat or grow like a beanstalk. The ideal height for a dancer is considered to be between five feet two inches and five feet five. Also they may prove not to have the temperament for ballet dancing, or not to be devoted enough to go through with the disciplined life of study, exercise and careful diet that ballet demands.

Margot Fonteyn herself attended the Sadler's Wells school; so did Michael Somes, her present partner and the Royal Ballet's chief male dancer. In 1934 he became the first boy to win a scholarship to the school.

Outstanding Commonwealth dancers come to London to study with the Royal Ballet. Nadia Nerina, from Cape Town, South Africa, who has been a Royal Ballet ballerina since 1952, and who was recently invited to dance as a guest artist at the Bolshoi theatre, in Moscow, was awarded a scholarship to London by the Royal



A SCENE from "Coppelia", one of the great ballets, as seen from the wings of the stage of the Royal Opera House, Covent Garden, London. The Sadler's Wells Ballet, founded in 1931, became the Royal Ballet in 1956.



PRIMA ballerina Dame Margot Fonteyn (right) presents the Queen Elizabeth the Second Coronation Award—an annual award to those who give the most help to British Ballet—to Dame Ninette de Valois, who received it on behalf of Robert Helpmann, the Australian-born dancer.

THE ROYAL BALLET

Academy of Dancing. So was Alexander Grant, from Wellington, New Zealand. Another New Zealander, Christopher Lyall, became a leading dancer with the Ballet Rambert after studying at the school. Lois Smith, from Canada, studied with the Royal Ballet and became prima ballerina with the National Ballet of Canada, founded in 1950 and based in Montreal.

In 1959 four dancers from the Royal Ballet, sponsored by the Kenya Ballet Society, performed in the National Theatre, Nairobi, and at Makerere College, Kampala. Mr. Gary Burne and Miss Merle Park, Rhodesian dancers with the Royal Ballet, danced in "Coppelia", with students from ballet schools, at Salisbury, and they also danced at Bulawayo for an African audience.

The Royal Academy of Dancing exists solely to improve the standard of ballet dancing. It conducts examinations in many countries, awards scholarships, and organises lectures, classes and conferences. Ballet teachers from Britain travel thousands of miles a year to countries that include Canada, Africa, Hong Kong, and The West Indies.

In addition the Royal Ballet has gone on tour. Australia and New Zealand have seen Margot Fonteyn and other leading dancers, and in 1959 the ballet visited South Africa.

As Dame Ninette de Valois herself has said: "If we are asked to go anywhere in the Commonwealth we always try to go. More and more, in fact, a Commonwealth outlook and Commonwealth travel enter the pattern of our dancers' lives."



A SCENE (left) from the ballet "The Prince of the Pagodas". Above: Anton Dolin, former Sadler's Wells dancer, at rehearsal. A ballet dancer's life can be very rewarding but highly disciplined.



NADIA NERINA, a leading ballerina with the Royal Ballet, is from South Africa.



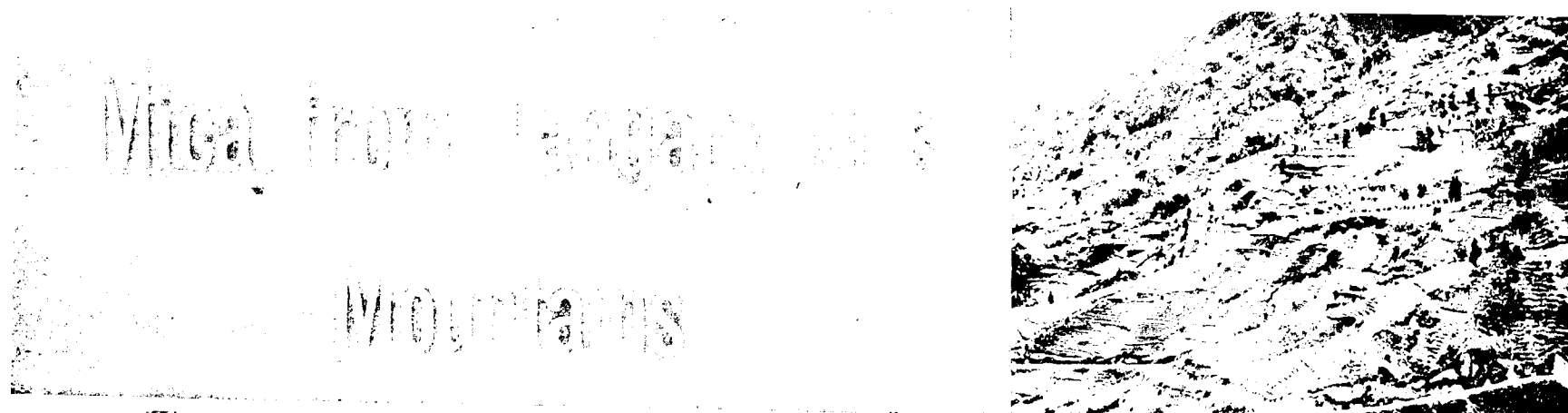
ROWENA JACKSON of New Zealand, another dancer to grace British Ballet, is now married and retired.



DAME MARGOT FONTEYN and her partner, Michael Somes, in Sydney. They have also toured New Zealand.



CELIA FRANCA in action. She developed her art with the Sadler's Wells company in London, and returned to Canada to help to found the Canadian National Ballet, based in Montreal.



HIGH GRADE mica is mined in small workings in the Uluguru Mountains. Above: Two Africans on a mineral prospecting course compare a sheet of mica with a "book" of the mineral, which has still to be won from the rock.

FEW countries, apart from India and Tanganyika, produce high grade mica. This important group of rock-forming minerals is estimated to form about thirteen per cent of the earth's crust. The Uluguru Mountains of Tanganyika, 130 miles from the capital city of Dar es Salaam, continue to yield, as they have done for the last thirty years, the white or muscovite mica which is used in many industries, particularly in the world's electrical goods industries.

Fewer than 1,500 Africans are engaged in mica mining, which earns Tanganyika thousands of pounds a year; some of the miners are only part-time workers.

Mica can be profitably mined in small workings. No elaborate plant for the mining or processing is required. The mineral falls

into two groups, white and dark, and is found in separate flakes or in irregular distorted book-like crystals ("books"). They can be opened up with a knife and split into leaves.

The crystals range from the tiniest of pieces up to ten feet in diameter; in commercial deposits the normal size is just under a foot across. The larger the leaves and the freer they are from faults, the higher is their price. A sound, large piece usually sells for up to 450 shillings a pound.

All micas are soft and possess a pearly or silky lustre. In olden days the shining pieces found lying around were thought to have fallen from the stars. The term mica (from the Latin, *micare*, to gleam) refers to their strong power to shine.

Because of its transparency and its resis-

tance to heat—it can withstand a temperature of 560 degrees centigrade—mica was found most useful in stoves, fireplaces and for chimneys. In sheets or ground into powder it is commonly used as an insulating material in the electrical industries. At one time it was used for glazing windows under the name of Muscovy glass. Large plates of mica are still used in situations where glass is unsuitable.

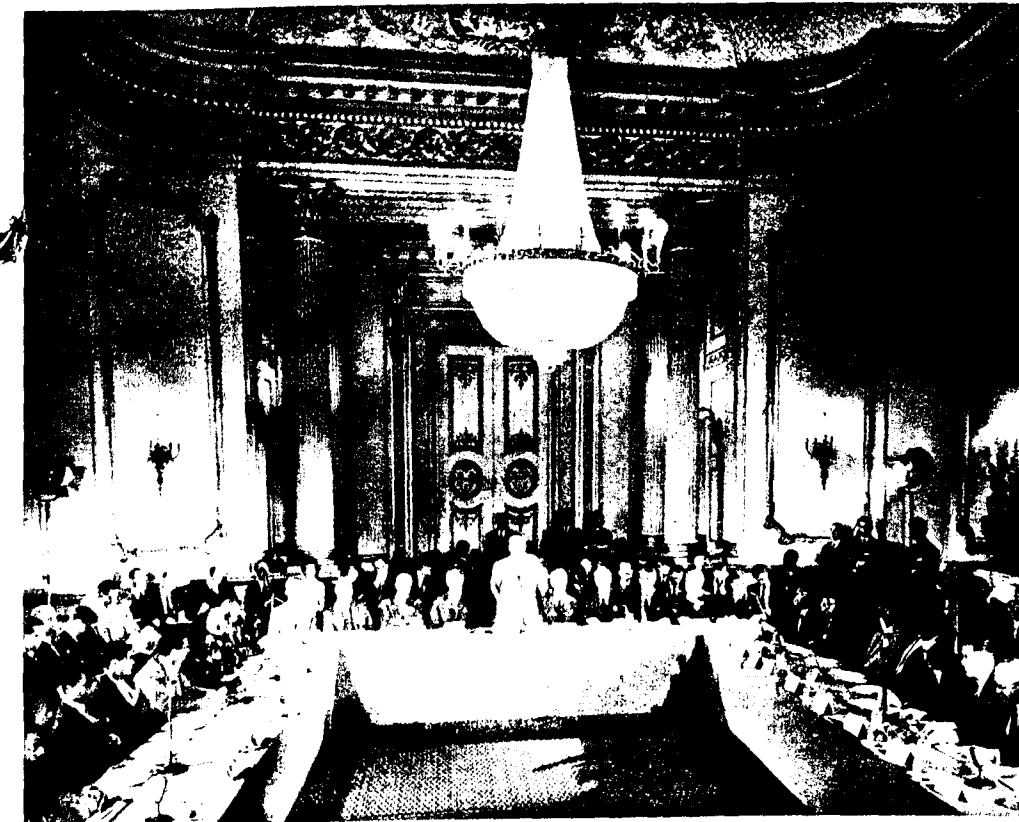
The Tanganyika Government's Department of Mines has started a series of courses to help spread a knowledge of the best methods of mica prospecting, particularly as a full-time occupation. A prospect, right in Tanganyika costs £2, and it enables any number of claims to be pegged shillings a time.



MICA is sorted into sizes for export. Some of the African miners are part-time workers.



READY for shipment. Mica withstands high temperatures, and is in great demand by the electrical industries.



THE Secretary of State for the Colonies, Mr. Iain Macleod, addresses the Conference. Below: Mr. Macleod with Mr. A. C. Dixon (left), leader, United Federal Party, and Dr. Hastings Banda, leader, Malawi Party.



MORE of the delegates to the Conference (below), which set the pattern for the next stage of constitutional advance in Nyasaland. The country from which the delegates came is the smallest of the three territories comprising the Federation of Rhodesia and Nyasaland. The population is a little over 2½ million, with a density—high in Africa—of sixty to the square mile. The non-African population, small by comparison, includes 7,000 Asians.



The Nyasaland Constitutional Conference

THE pattern for the next stage of constitutional advance in Nyasaland was successfully designed at the Conference which met in London between 25th July and 4th August.

At many meetings the Secretary of State for the Colonies discussed possible changes in the Protectorate's constitution with representatives of the territory's recognised political parties, and of the Chiefs, and of the Asian community; also with two African members of the Legislative Council, and the Governor and officials.

In the opening sessions the various representatives put forward differing views on the form constitutional advance should take. After studying these, Mr. Macleod proposed that deliberations should be based on the following principles:

1. The composition of the Legislature should have regard to the fact that there is an African majority in the country, whilst providing for the vital contribution which the non-African communities make to the country's progress and prosperity.
2. African representation in the Legislature should be obtained by direct elections, based on a reasonable and broad franchise suited to the present conditions of the country.
3. The Executive Council should not yet become responsible to the Legislature but should remain advisory to the Governor.
4. The Governor's unofficial advisers on Executive Council should be directly associated with the day-to-day administration of the Government, possibly on the basis of a Ministerial system.

Proposals for putting these principles into action were then discussed, and although differences of opinion still remained on some points the Conference agreed to certain changes in the constitution as a working basis for advance. All delegates declared that they meant to work the new constitution and recognised that a reasonable trial period for it would be necessary to ensure the stability upon which economic and social progress and further constitutional advance could be based.

Reporting agreement in his final address, the Secretary of State gave credit for success to the members of the Conference. He pointed out that when the Conference assembled practically no one thought there was any chance of agreement: "Yet we have shown that men of different races, African, European and Asian, can come together . . . and reach agreement, even though they started from differing points of view".

MALAYA'S VICTORY PARADE



The band of the 1st Battalion Sherwood Foresters in the Victory Parade in Kuala Lumpur, capital of the Federation of Malaya. The march-past was followed by a very impressive fly-past by seventy-four aircraft of Commonwealth air forces.

The Federation of Malaya's main celebrations to mark the end of the twelve-year struggle against militant Communism took the form of a Victory Parade in Kuala Lumpur, the capital. In the parade were detachments of troops from Britain, Australia, New Zealand, the Federation of Rhodesia and Nyasaland, Kenya, Singapore, Sarawak, Fiji, a Brigade of Gurkhas, and the Federation of Malaya's armed forces and police.

The Prime Minister of the Federation of Malaya, Tunku Abdul Rahman, described the occasion as "a great and noble moment in the story of our young nation". He referred to the triumphant end of the State of Emergency that had cost the country 11,000 lives and 1,300 million Malayan dollars; it had meant twelve years of trying regulations for the Malayan people; a period in which Malaya had found its true friends from the Commonwealth.

"If we are to maintain peace and freedom", Tunku Abdul Rahman said in a commemorative broadcast, "then we must be on guard, maintaining our unity and co-operation to ensure that there is no erosion of our security from within."

H.M. the late Yang di-Pertuan Agong, who took the salute at the parade, said: "The debt which the people of this country owe to our security forces, both Malayan and Commonwealth, for the sustained and courageous effort over the twelve years of the Emergency cannot be over-emphasised."

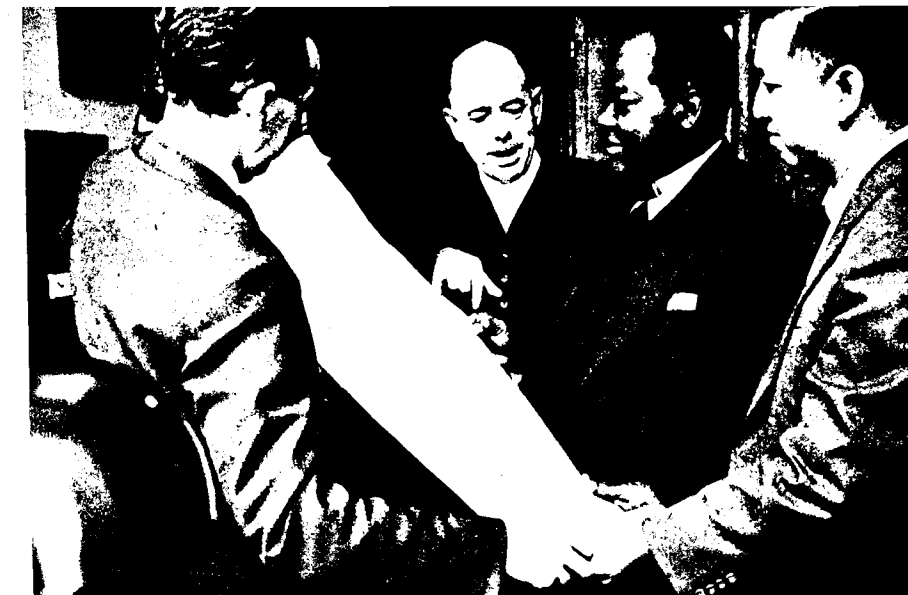
Britain's Prime Minister, Mr. Harold Macmillan, in his message on this occasion said: "The victory you have won is an inspiration for the whole of the free world, and we pay our tribute to the courage and statesmanship of your Government and the faith and endurance of the Malayan people which have made this great achievement possible."

PEOPLE AND EVENTS

John Rutherford, West Australia opening batsman and a Test player, coaches some of the boys at the new Withywood Secondary Modern School, Bristol, England, where he is a science teacher. Mr. Rutherford, 31, a graduate of the University of Western Australia, was a teacher in Perth before coming to England, where he plans to live for the next five years.

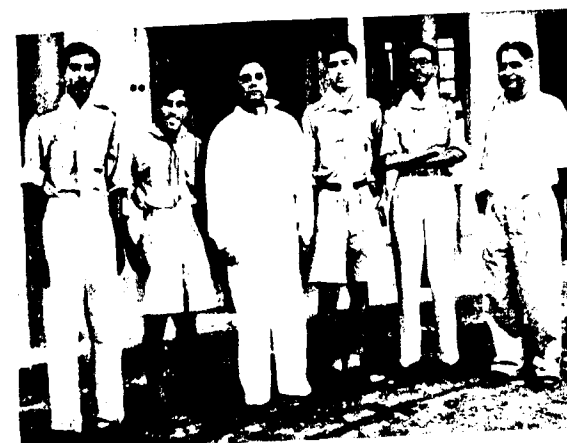


West Indian Cadet at Sandhurst. Senior Under-Officer R. K. Barnes of Belmont, Port of Spain, Trinidad, leads his company as they march past during the Sovereign's Parade at the Royal Military Academy, Sandhurst, England. The parade marks the end of a cadet's two-year course at the Academy when he "passes out" as a commissioned officer. In addition to being the first Senior Under-Officer from outside the U.K. to lead a company on the final parade at Sandhurst, Barnes won the Sir J. Moncrieff Language Prize.



Visiting Commonwealth Parliamentarians in Britain went to the House of Lords and examined, among other items of interest, the 1689 Bill of Rights (above). Mr. Yao Ping Hua (right) Clerk of the Council Negri in Sarawak, and Mr. E. Akin Williams (second from right), Second Clerk of the Western Region House of Assembly, Ibadan, Nigeria. With them are Mr. M. Bond, Clerk of the Records (left), and Mr. R. Barlus, Fourth Clerk at the Table in the House of Commons.

H.M. Queen Elizabeth the Queen Mother, Chancellor of London University, conferring the honorary degree of Doctor of Science on Professor Homi Jehangir Bhabha, India's leading physicist and Director of Theoretical Physics at the Tata Institute of Fundamental Research, Bombay, India. The ceremony, at the Royal Festival Hall, London, marked 100 years of the granting of science degrees by London University, and the 300th anniversary of the Royal Society. Dr. Bhabha was one of six Royal Society members who were chosen to be honoured on this occasion.



Prize winners of an essay on Scouting in Dacca, East Pakistan, are on either side of Mr. Habibur Rahman, the Education Minister, Government of Pakistan. They are Mohd Rafique, from Jauharabad, and on the left of the Minister, Mubarak Gull, from Peshawar.

Nyasaland's first Queen's Scout. Sir Robert Armitage, the Governor of Nyasaland, is presenting the Queen's Certificate to Michael Mhango, of Karonga District. Mhango, who hopes to become a student-teacher at Domasi Teachers' Training Centre, returned from a course at Toro School, Uganda.

In Chittagong, East Pakistan, Mr. M. K. Mohiuddin, General Manager of the Eastern Bengal Railway, was invested as the Chief Scout for the Eastern Bengal Railway Boy Scouts Association. Mr. M. Mohsin, the International Scout Commissioner for Pakistan, is seen adjusting Mr. Mohiuddin's scarf.



Mr. D. H. White, research and statistical officer from the Social Security Department, Wellington, New Zealand, went to India under a Colombo Plan fellowship granted by the Indian Government. He lived for nine months with Asians from nine different countries and heard lectures by world-renowned experts during a nine-month course held at the Indian Statistical Institute, Calcutta. Mr. White went on a number of study tours, including a visit to the university centre of Santiniketan, with its strong associations with the poet-philosopher Rabindranath Tagore. At the end of his course Mr. White said: "Those nine months opened a wider world for me. Never think statistics are as dry as dust—they can be among the most exciting studies in the world."

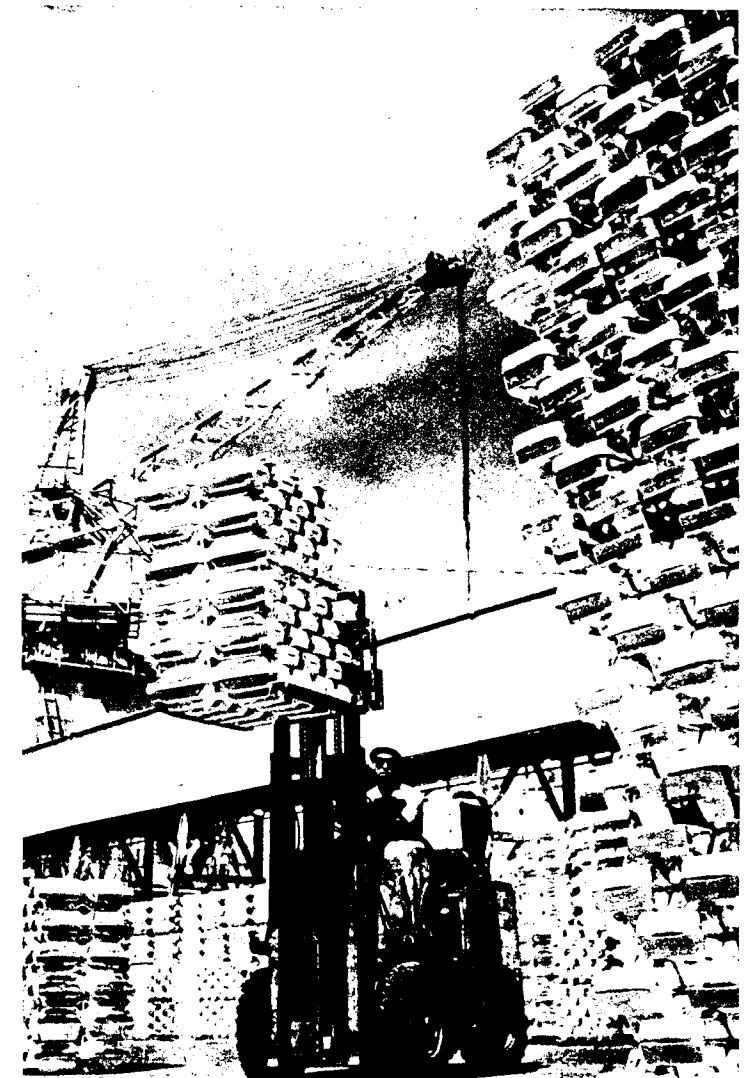


Dalglish Prize winners: Garry Horton, 19 (left), and Irving Carlston, 18, both of Saskatchewan, Canada, are seen here with their host, British shipowner, Mr. Peter Dalglish, when they visited the Commonwealth Touring Exhibition in Britain. Mr. Dalglish, Chairman of R. S. Dalglish Ltd., whose ships are traditionally the first of the season to dock at the port of Churchill in the Hudson Bay, sponsors each year a three-week visit to Britain for two Saskatchewan boys, winners of a competition for youth club members.



KITIMAT, which calls itself proudly "Tomorrow's City Today", was built on the undeveloped western coast of British Columbia, 400 miles to the north of Vancouver.

Canada's City of the Century



INGOTS from the smelter at Kitimat wait on a wharf to be shipped to the markets of the world. The project, which has cost over £160 million already, is run by the Aluminum Company of Canada Ltd. (ALCAN).

IN a search for a suitable site for their vast new smelting plant, the Aluminum Company of Canada (ALCAN) went to the western Canadian Province of British Columbia, which has one of the largest untapped hydro-electric power potentials in the world.

The site chosen was at the end of the north-east arm of the salt water Douglas Channel, 400 miles to the north of Vancouver. It was an undeveloped wilderness of mountains and forests with two great potential advantages: a modern port for unloading alumina (derived from bauxite ore) from Jamaica and for shipping aluminium ingots; and there would be a plentiful supply of much-needed cheap electric power. The power

needed to make a ton of aluminium would run a modern home for five years.

Kitimat did not exist in 1951. In 1958 more than 500 children were born there. During 1959 more than 2,000 men and women were active in the aluminium producing plant and in related activities.

A great deal has been said and written about the drama of the physical conquest of this section of British Columbia and, behind the imposing statistics of horse-power generated and tons of metal produced, behind the £7,000,000 worth of equipment used on the project, lies the human factor—the lives of the people working in the aluminium city.

(Continued overleaf)

A GENERAL view of the smelter, where aluminium is made. In the distance are the power lines crossing the tidal flats. Over 2,000 of the 10,000 inhabitants of Kitimat are employed on aluminium production. Eventually the city may accommodate 50,000 people.



KITIMAT was carefully planned to provide for pleasant, modern living. The houses are varied in design. There are large lawns and well-kept gardens and unspoiled woods separate the different neighbourhoods.





KITIMAT is a paradise for fishermen, hunters—all lovers of "the great outdoors". The tide-water location of the city not only assists the movement of raw materials, but also (above) provides a happy hunting ground for ship-borne anglers. Small craft of all kinds abound, and so do salmon and fat trout.

KITIMAT

Continued from page 14

a town dominated by the company. Since 1953, when the people moved in, Kitimat's citizens have elected their own reeve—equivalent to Mayor—and council. Although ALCAN has 440 million dollars invested in the West Coast of Canada, it has exactly the same number of votes in municipal affairs as any other property holder—one.

However, the reason for Kitimat's existence is aluminium, a metal in still-increasing use all over the world. In 1958, 164,000 of the 260,000 tons of aluminium used by the

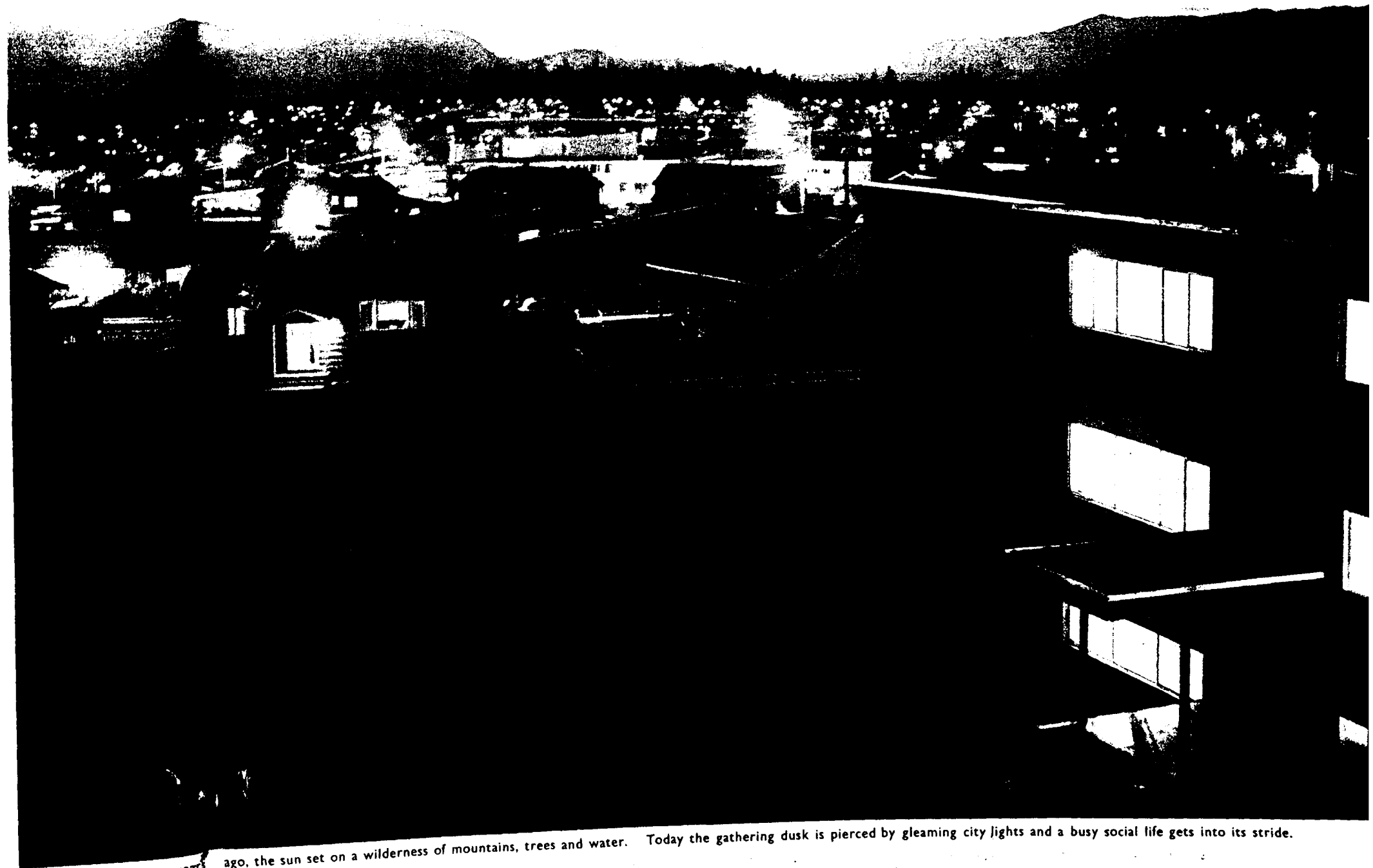
United Kingdom came from Canada, and Britain has helped to finance the Kitimat project, which already has cost over £160 million.

In August 1954, the giant smelter was producing aluminium at the rate of 91,500 tons a year; by the end of 1958, capacity had been expanded to 180,000 tons, and the plant is designed for expansion to produce about 550,000 tons of aluminium a year.

The power centre for Kitimat is at Kemano, 49 miles away. The power house is in a



ROSES bloom in Kitimat. This family scene is typical of many, in a community which contains 1,500 modern homes, with their front gardens, replete with flowers and well-kept lawns. The houses cost about 14,000 dollars (£5,000) each.



KITIMAT twilight. Ten years ago, the sun set on a wilderness of mountains, trees and water. Today the gathering dusk is pierced by gleaming city lights and a busy social life gets into its stride.

mountain cavern large enough to house the liner *Queen Elizabeth*. Water bottled up by the giant Kenney Dam rushes through a tunnel ten miles long, falling sixteen times the total height of Niagara Falls to work the seven generators with their capacity of over a million horse-power. Aluminium and steel transmission lines then carry the generated current to Kitimat, via the 5,300-foot high Kildala Pass.

Kitimat is both an engineering miracle and an interesting social and planning experiment, symbolising the way Canada has accepted the challenge of the times.

ANOTHER view of Kitimat, showing variations in the housing. Well planned paths enable the people to shop without crossing main roads.





M. L. NZEKWA, an engineering cadet, Apapa, Nigeria, learns rock climbing on Dartmoor.



ANOTHER Nigerian, Geoffrey Uzodike, descending a cliff—dangerous but far less exhausting than climbing it.



RESCUES and First Aid are part of the course. On the right in this team is M. H. Dickson, who came from Ghana.



JAMES ASANA, of Nigeria, takes part in an obstacle race in which perfect team work is a part of the training.



OMER MEGAG SAMATAR, from Somalia is a student at the King Alfred College, Winchester. In the background other Outward Bound students practise rock climbs.

tan, Ghana, the Federation of Malaya, Nigeria, Sierra Leone, The West Indies, Tanganyika and Uganda. The average age of the trainees, who were all sponsored by institutions or firms in the United Kingdom, was twenty-three.

Before starting on the course, each trainee agreed not to smoke, not to drink alcohol, and to take a cold shower, or a dip in the river, each morning. Preliminary training included athletics; carrying out exercises on a ropes course; map reading and camping; rock climbing; rescue work, and canoeing. This was done in preparation for expeditions which consisted of journeys lasting two to four days across moors and down rivers. Opportunities were provided for re-

creation and social contacts, and the young men visited private homes to see something of everyday life in Devon.

In the words of Sir Spencer Summers, Chairman of the Management Committee of the Outward Bound Trust: "The training is designed to develop qualities that transcend physical effort. Indeed, it is so devised as to increase the vitality of mind and spirit, to arouse imagination and broaden outlook. . . . The young men are encouraged to exercise self-discipline, and consideration for others, in all aspects of the course".

All the trainees thrived upon the rigours of the course. A student said: "Some of the operations I was quite convinced I should never dare attempt, let alone carry out; yet,

so far, I have succeeded in everything. I shall never be the best man in my patrol, but my self-confidence has never been so high. Frankly, I am having the time of my life".

Shahar Hamid, the rock climber from the Federation of Malaya, remarked, "I thought that our early morning swims in the River Dart would give me a cold; but I have never felt fitter in my life". These young men lived up fully to the Outward Bound motto: "To serve, to strive and not to yield".

The Trust aims at showing what can be achieved by the application of Outward Bound principles, and hopes that many organisations, private and public, will profit from its pioneer work and develop activities inspired by the same principles.

MEALS are tackled with gusto after a strenuous day at Holne Park. The students promised not to smoke or drink alcohol during the course, and to take a dip in the river, or a cold shower, every morning. Right: Students from a school in Kenya, on Mount Kilimanjaro.



Outward Bound Overseas

The Prime Minister of India, Mr. Nehru, opening an exhibition about the Indian attempt to climb Mount Everest, praised mountain climbing as "not merely an adventure, but more a training ground for facing life's difficulties and problems".

Adventure as a training ground—a test of character. . . . This is the basis of the Outward Bound schools, which have spread far beyond the United Kingdom. Australia, the Federation of Malaya, and Kenya, have already established similar schools, and New Zealand, the Federation of Rhodesia and Nyasaland, Tanganyika and Uganda may soon have them.

The Kenya school has as its "playground" Mount Kilimanjaro, the highest mountain in Africa, where pupils learn rock climbing and finish off their course with an adventurous climb to the summit of the mountain.

Character Training Through Adventure

"TO SERVE, TO STRIVE AND NOT TO YIELD"

WITH infinite care the young man from Malaya stretched out an arm, felt for a hold on the rock and cautiously edged his body further out over a 50-foot drop.

He was clinging to the sheer rock face of Haytor, an outcrop of rock on Dartmoor, in the English county of Devonshire. As soon as he reached a suitable resting place he tied the climbing rope to a spur to enable the next man on the rope, a Nigerian, to start the difficult climb.

Afterwards the Malayan climber—Shahar Hamid, aged 24, a production engineer from Kuala Lumpur—explained why he had tackled

the climb although he dreaded heights. "It was partly for my own self-esteem, partly for the patrol. There is no obvious reason for climbing a cliff if you are afraid of it, but it's good for your inner self."

This was the spirit in which nearly eighty young men, half from the United Kingdom and half from other Commonwealth countries, took part in an experimental four-week International course of "Character Training Through Adventure" at an Outward Bound school in Devon. The experiment was so successful that the course is to be made an annual event.

Countries represented included the United Kingdom, India, Pakis-

CROSSING the River Dart, in Devonshire, is not easy on a single rope. The penalty for failure is a ducking.

Mainly for Women

ASSORTED TOPICS AND EVENTS

GIRL GUIDES GOLDEN JUBILEE Commonwealth Guides and Rangers at a London Festival

MORE than one-fifth of all the girls (over the age of seven) and young women in the United Kingdom are, or have been, members of the Guide Movement. They join what is now a great international club with a membership of over 5,000,000 throughout the free world. In 1960 the Golden Jubilee Year, they are still coming in their thousands to find in Guiding the joy of fellowship, the inspiration of the Guide promise, and the satisfaction of a wide training.

The Royal Family has always taken an active interest in the movement. H.M. Queen Elizabeth and H.M. Queen Elizabeth the Queen Mother are Patrons. The Queen was eleven when she enrolled as a Guide; she became a Patrol Leader and later a Ranger. H.R.H. Princess Margaret is the Chief Ranger of the Commonwealth, Princess Anne is a Brownie, and H.R.H. the Princess Royal has been the President of the Girl Guides Association since 1920.

Princess Margaret attended the first performance of a Festival Pageant, which was part of the Golden Jubilee celebrations held throughout the United Kingdom from mid-June to early September. This show at the Wembley Pool was a dance-drama entitled "The Journey of Soy", especially written for the occasion. Nearly 1,000 girls from the Commonwealth took part.

Set on a make-believe planet, Thera (letters of "earth" re-arranged), the play told of how the people there lived in terror of a "Thing of Noise and Darkness". When the Councillors of Thera called for volunteers to track down and unmask the Thing, a girl named Soy, was the only willing one.

In the great arena of Wembley Pool, Soy, played by Donna Chapman, a United Kingdom Guide, played out her great adventure, during which she met "The People Who Couldn't Care Less", the "Clock Watchers", the "Jolly-Good Timers", "The Miserics", and the "Money-Grabbers"—all dressed in colourful costumes.

Among the attractions of the show was a specially arranged Chinese dance given by Brown Owls Lillian Lowe, 20, and Anna Maria Tsot, 23, both from Hong Kong. There are over 2,000 Guides



H.M. the Queen, when Princess Elizabeth, practising First Aid with Princess Margaret. Both joined the Guides Association in 1937.



Princess Anne, a Brownie (second from left), makes a report to a "Brown Owl" at a meeting of the 1st Buckingham Palace Pack.

and Brownies in Hong Kong, and 1960 was their "Good Turn Year".

One of the smartest contingents was from Canada—a party of twelve Land and Sea Rangers, among whom was Myrna Lalonde, a Sea Ranger, from Cornwall, Ontario. In 1959 she represented Canada at a Young Adults Conference in Lahore, Pakistan. Another Canadian, Joan Woodland, from Toronto, gave up her job as an editorial assistant on a newspaper especially to come to Britain. She said that the Ranger Movement in Canada was growing rapidly.

Pat Woolger, of the Sea Ranger Squadron at Bentley, Melbourne, Australia, was in Britain on holiday when she heard about the Festival and she was only too glad to be able to take part.

In the words of Carl Huxon, the author of "The Journey of Soy": "The Guide Movement is not concerned merely with camping, acquiring proficiency badges, learning how to tie knots and how to cook; it is something far greater. It is a way of life, teaching young people to be of service to others, and to be honest and courageous".



Francis Glass (left), a Sea Ranger from Canada, talks with a gaily dressed United Kingdom Guide at the Festival.



Part of the audience (above) that watched the rehearsals for the Festival at Wembley Pool. Below: Girls from Trinidad, in The West Indies. They formed a "steel band" which gave a colourful and popular performance at the Festival. See back page.



Some Highlights of Girl Guide History

1909—A small party of "Girl Scouts" gatecrashes the first Boy Scout rally, in London, and the Chief Scout—the future Lord Baden-Powell—is so impressed that he decides to produce a Scheme for Girls. The first Canadian Company meets in Ontario.
1910—The Girl Guides Association is formed under the Presidency of the Chief Scout's sister, Miss Agnes Baden-Powell. Guiding spreads to Australia and South Africa.
1911—Guiding reaches India.
1914—"Rosebuds" (later re-named Brownies) are started.
1918—Lady Baden-Powell becomes Chief Guide.
1920—The First International Conference is held at Oxford. Senior Guides are renamed Rangers.
1923—The Association is granted a Royal Charter.
1924—The first World Camp is held.
1930—Lady Baden-Powell is acclaimed World Chief Guide, and a World Flag is adopted.
1937—H.M. the Queen becomes Patron; Princess Elizabeth and Princess Margaret enrolled.
1950—In the United Kingdom "Scrolls of Friendship" are passed from hand to hand to be presented to delegates to the Thirtieth World Conference at Oxford.
1953—The "Coronation Tribute of Service" is undertaken throughout the Commonwealth.
1957—World Camps are held in the United Kingdom and Canada.
1959—Princess Anne is enrolled. Guides start raising money for World Refugee Year.
1960—Golden Jubilee. Commonwealth countries represented at the Jubilee Festival in London include the United Kingdom, Canada, Australia, Ghana, the Federation of Rhodesia and Nyasaland, Barbados, Bermuda, Cyprus, Gibraltar, Jamaica, Kenya, Sierra Leone, Singapore, and Tanganyika. There are 5,208,295 Guides in the world.



Mrs. Bandaranaike, the Prime Minister of Ceylon and widow of a former Prime Minister, Mr. S. W. R. D. Bandaranaike, with one of her secretaries. Right: A fluent and persuasive speaker, she gave a good deal of help to her late husband in his political work.

The World's First Woman Prime Minister

THERE are outstanding women who continue not only to achieve distinction in such unlikely fields of activity as exploration, the sciences and engineering, but who also make their triumphant way into positions that are considered the sole monopoly of men. For example, Ceylon now has the world's first woman Prime Minister in Mrs. Sirimavo Bandaranaike.

Charming and unpretentious, she is the 44-year-old widow of the Prime Minister who was assassinated in September 1959. Mrs. Bandaranaike comes from a rich land-owning Kandyan family in the hill country of Ceylon, and received her early education at the Ratnapura Convent and St. Bridget's Convent, Colombo. She married the Hon. S. W. R. D. Bandaranaike in 1940 when he was the Minister of Health.

Mrs. Bandaranaike has taken an active interest in politics for the past 20 years. She is also a very keen social worker. Soon after her marriage she joined the Lanka Mahila Samitiya, which is affiliated to the Associated Countrywomen of the World, assisted in its development throughout Ceylon, and became first the Treasurer, then the vice-President, and finally President. She has worked hard among the villagers in Ceylon and has done a great deal to raise the living standards of women in the Island.

She assisted her husband in his political work, nursing his electorate for him while he campaigned elsewhere. After his death she was unanimously elected Patron of the Freedom Party and, in May 1960, became its President. Her activities during the election played no small part in the party's success at the polls. Mrs. Bandaranaike is Prime Minister as well as Minister of External Affairs and Minister of Defence.



Carrying an offering to the shrine of a Buddhist temple. Below: relaxing with her children; as well as being Prime Minister she is Minister of External Affairs, and Minister of Defence.



SWEET SCENTED LAVENDER

"THREE sprigs a penny! Three sprigs a penny!" This cry used to be heard in London, especially in the evenings as crowds of theatre-goers filled the West End.

The sprigs were of lavender—sweet scented lavender harvested from the fields in south-east England and sold on street corners in the capital the same day.

Lavender is no longer sold in this way. One by one the lavender growers have given up, and the few who remain must tackle a disease called shrub, which so far has defeated all attempts at scientific control.

One of the growers still in the business is Mr. Arthur Wood, whose farm is at Cliffsend in the county of Kent. He is 86—retired fifteen years ago—but still goes to Cliffsend for the summer to supervise the harvesting and sale of his crop.

For the rest of the year his five lavender acres are managed by Mr. Henry Ashford, aged 76, who joined him 52 years ago; and these two experts have managed to keep shrub disease within bounds.

Lavender is planted out in November and ripens during the following August and September. It is cut with a special saw-edged sickle, and a good worker can slice down the stems of an entire plant at one go.

Housewives in Britain used to love to put a muslin bag of dried lavender in their linen cupboards, and some of them still do this. They would spread the cut stems on a table for a few days, then rub off the dried blossoms and put them in the bags, which would keep their scent for years. Many women in Britain send these little bags of lavender to relatives or friends in the Commonwealth overseas.

But, like the street cries of London, lavender bags have become rare. Nowadays Mr. Wood sells the whole of his crop, either as bunches of fresh lavender to visitors or for the manufacture of lavender water.



Henry Ashford, aged 76, working in his lavender fields, in Kent, England.

PICTURE PARADE



Mrs. M. E. Kellett, of Park Farm, Dereham, Norfolk, England, who won the title of "British Country Housewife Number One" in competition with 516 other members of Women's Institutes in Britain, received a grant for a 56-day tour of the U.S.A. She is the mother of four children, and has managed Park Farm since the death of her husband.



Miss Funke Femi-Pearse, aged 23, of Lagos, Nigeria, had her portrait painted by Nicholas Egon (above) while studying Law in London. Miss Funke, the daughter of a Nigerian surgeon, received offers of film tests and modelling jobs, but has now returned to Lagos, where she hopes to become a successful lawyer.



Five visitors from Hong Kong touring Britain saw something of the work of the Women's Voluntary Services in Nottingham. Above, they are watching a W.V.S. worker baling up clover for distribution to people in need overseas. Founded in 1939, the W.V.S. helped with the evacuation of 1 1/2 million children and mothers from the big cities of Britain at the start of the second world war. Since 1945 it has organised "Darby and Joan" clubs for old people in Britain, and carries out voluntary work in a variety of ways.

Ghana Remembers Mister Eddy

*Missionary Teacher from Manchester
Creates an Educational Record*

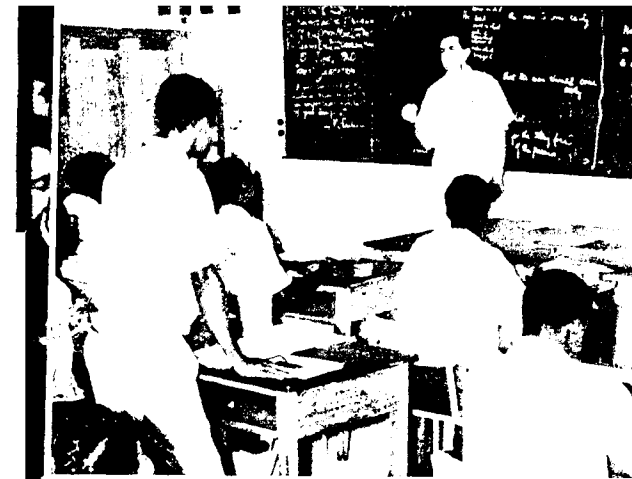


MR. CHRISTOPHER THACKRAY EDDY in his office in Winneba, Ghana. For thirty years, until his retirement, he served education in Ghana in several capacities leaving a record of great service.

WHEN Mr. Christopher Thackray Eddy retired to his Manchester home in the United Kingdom, towards the end of 1960, he left behind in Ghana a record of great service to education. For thirty years he served the country's educational system as a missionary teacher, school supervisor, principal, headmaster, administrative officer in the Ministry of Education, and chairman of a teachers' council.

As a lay missionary of the Methodist Church, Mr. Eddy went to Ghana in 1930. He had taught at the Royal Grammar School, Newcastle upon Tyne, after winning a four-year scholarship at Queens' College, Cambridge. He was for fifteen years a member of the staff of Wesley College, Kumasi, including ten years as the Vice-Principal. He was also a member of the old Central Advisory Committee on Education, and he contributed greatly to the development of education, particularly at the beginning of the Government's Development Plan for Education.

The Ministry of Education "borrowed" him in 1952 as Assistant Director of Education in charge of teacher-training for five years when the rapid expansion of primary and middle education called for bold planning. It was Mr. Eddy who established the National Teacher-Training Council and who, in 1958, became its first chairman. When, in the same year, the Government wanted someone to



MR. EDDY, who became Principal of the Winneba Teacher Training College, takes an English class. The college is co-educational and can accommodate 280 students.

develop Winneba Training College, Mr. Eddy was a natural choice.

His plans were to transfer the teacher-training wing in the Kumasi College of Technology to Winneba to make room for the development of technical courses at Kumasi. He also helped to draw up development plans for the new college costing £G280,000.

New buildings were built on the college's 367 acres, including a housecraft block equipped to train teachers in science, health education, child welfare, needlework, dressmaking, first aid and home nursing.

There are also a music school, a gymnasium and an art and crafts wing, six new classrooms, four dormitory blocks and 19 bungalows.

Winneba is now a co-educational institution with a capacity of 280 students, working on specialist or post-secondary courses. Many students who have passed through Mr. Eddy's hands have risen to occupy high positions. They include Mr. N. A. Welbeck, former Minister of State and now head of the Builders' Brigade and Young Pioneers; Mr. J. K. A. Amuzuah, District Commissioner, Axim; Dr. K. A. Busia, former Professor of Sociology in the Ghana University College, and now Professor of African Studies in Leyden University, Holland; Mr. C. M. O. Mate, Principal Secretary, Ministry of Health; Mr. F. L. Bartels, Headmaster of Mfantshipim School; and Mr. P. K. Owusu, Principal Education Officer, Teacher-Training.

Mr. Eddy handed over Winneba Training College to a Ghanaian successor, Mr. C. J. Bannerman, who was formerly Principal of Nkwaw Training College at Aburi, and a former colleague of Mr. Eddy at Mfantshipim.

MR. A. W. K. TAMAKLOE, who studied at the University of Reading and the Chelsea Polytechnic, London, supervises the weaving class.



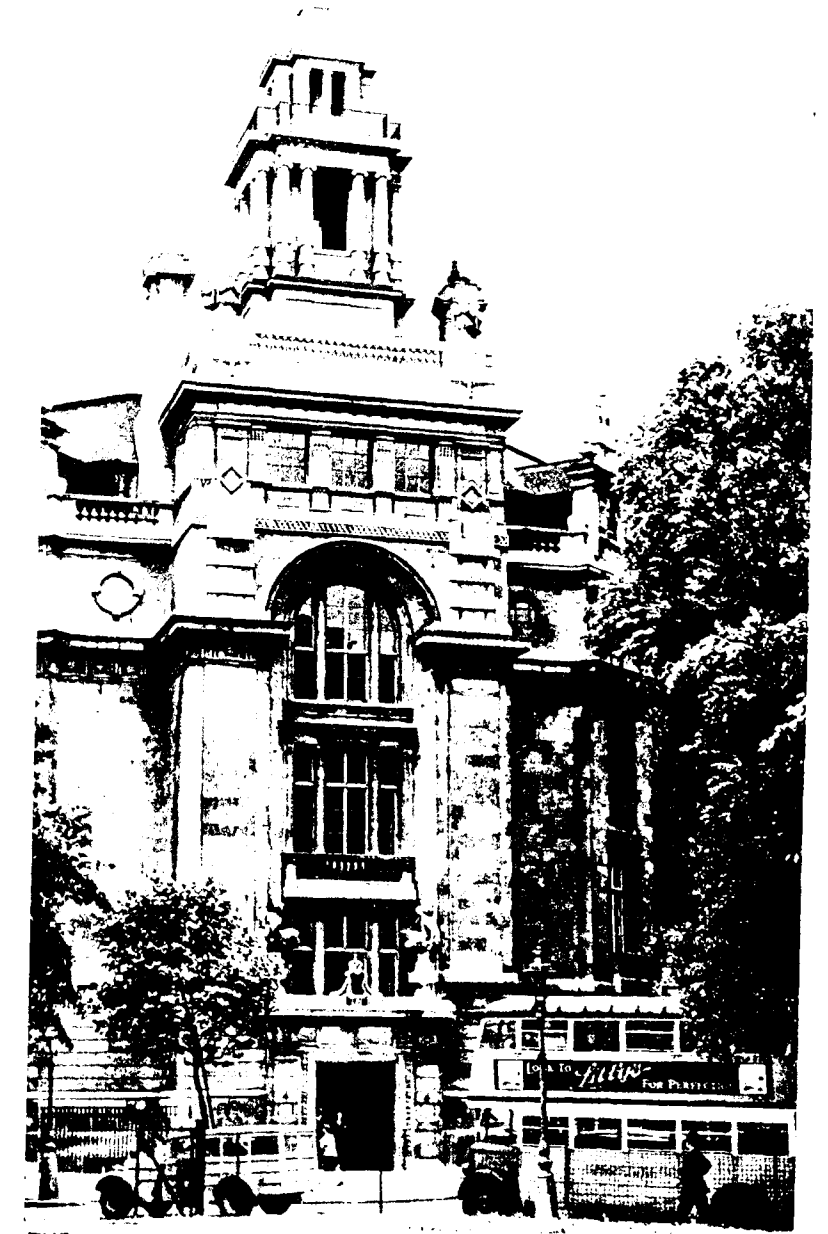
SCULPTURE is another popular subject. These young men, in the art and crafts department of the college, are training to be teachers.



COOKING class in the housecraft block of Winneba Teacher Training College—a college developed by Mr. Eddy.



REHEARSALS by the African Music orchestra at Winneba. A music school is one of the facilities at the college, which cost £G280,000 to develop on a 367-acre site.



THE Crown Agents, a unique organisation, has a staff of 1,600 and serves more than 200 customers overseas. Above: The headquarters building in London.

THE CROWN AGENTS

*They Deliver the Goods—of the Right Quality,
at the Right Price*

It was on a Saturday morning when the telephone rang in a room of an imposing stone building in London, a few yards away from the palace of Westminster. The call was made to the Crown Agents for Oversea Governments and Administrations, and it came from the Ministry of Health in Kaduna, Northern Nigeria. Sulphamezathine drugs were needed for the treatment of an epidemic of spinal meningitis.

The medical and surgical supplies department of the Crown Agents went into action. First they telephoned the Sales Manager of Imperial Chemical Industries Ltd. That same afternoon a loudspeaker appeal was made at a football ground at Grangemouth, in Scotland. Packers watching the match were asked to volunteer for special duty.

The response was immediate. A ton of sulphamezathine was packed. The next

THE "grab dredger" Marabou, here undergoing trials, was ordered by the Crown Agents on behalf of the Nigerian Ports Authority. In 1959 approximately 176,000 orders, large and small, were placed by the Crown Agents.



THE CROWN AGENTS *Continued*

day British Overseas Airways Corporation unloaded cargo from a Nigeria-bound plane to make room for the emergency consignment.

On Tuesday—three days after the telephone call—Northern Nigerian doctors fighting the epidemic of spinal meningitis which caused, at its peak, over 500 deaths in a week, were armed with ample supplies of the essential drug.

Effective action such as this, though not always so dramatic, is typical of the services provided by the Crown Agents, an independent, non-profit-making body which acts as commercial and financial agents for more than two hundred customers—"Principals", as they are called.

For very small fees the Crown Agents undertake to buy, inspect, ship and insure, anything needed by their Principals—from a railway locomotive or a generating set to drawing pins or cricket bats. In 1959 they

placed 176,000 orders and sent abroad goods valued at nearly £67 million.

Here are some of the items handled: locomotives, rolling stock, bridges, rails, buildings, and all classes of railway material; power and other electrical plant, vessels and vehicles; machine tools; earth moving, road making and similar plant; textiles, uniforms, headgear, footwear, drugs, chemicals, hospital and laboratory equipment, cement, paint, oil, tar, paper and board, office machinery, typewriters, books and forms, stamps, currency notes, coinage.

The Volta Bridge in Ghana, a thermal power station in the Bahamas, an airfield in The West Indies, water schemes for Hong Kong—these are some of the projects which have passed through the hands of the Crown Agents. The engineering departments of the Crown Agents not only place orders for equipment, but also act as advisers and consultants for all kinds of civil and mechanical engineering projects.

The finance department handles a great variety of business, including the manage-

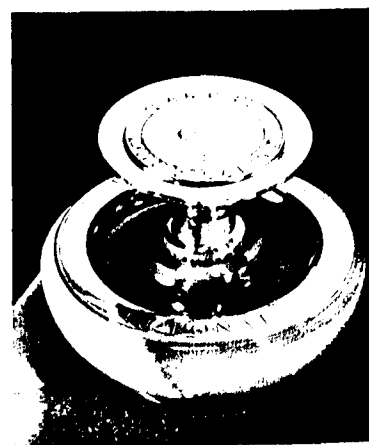
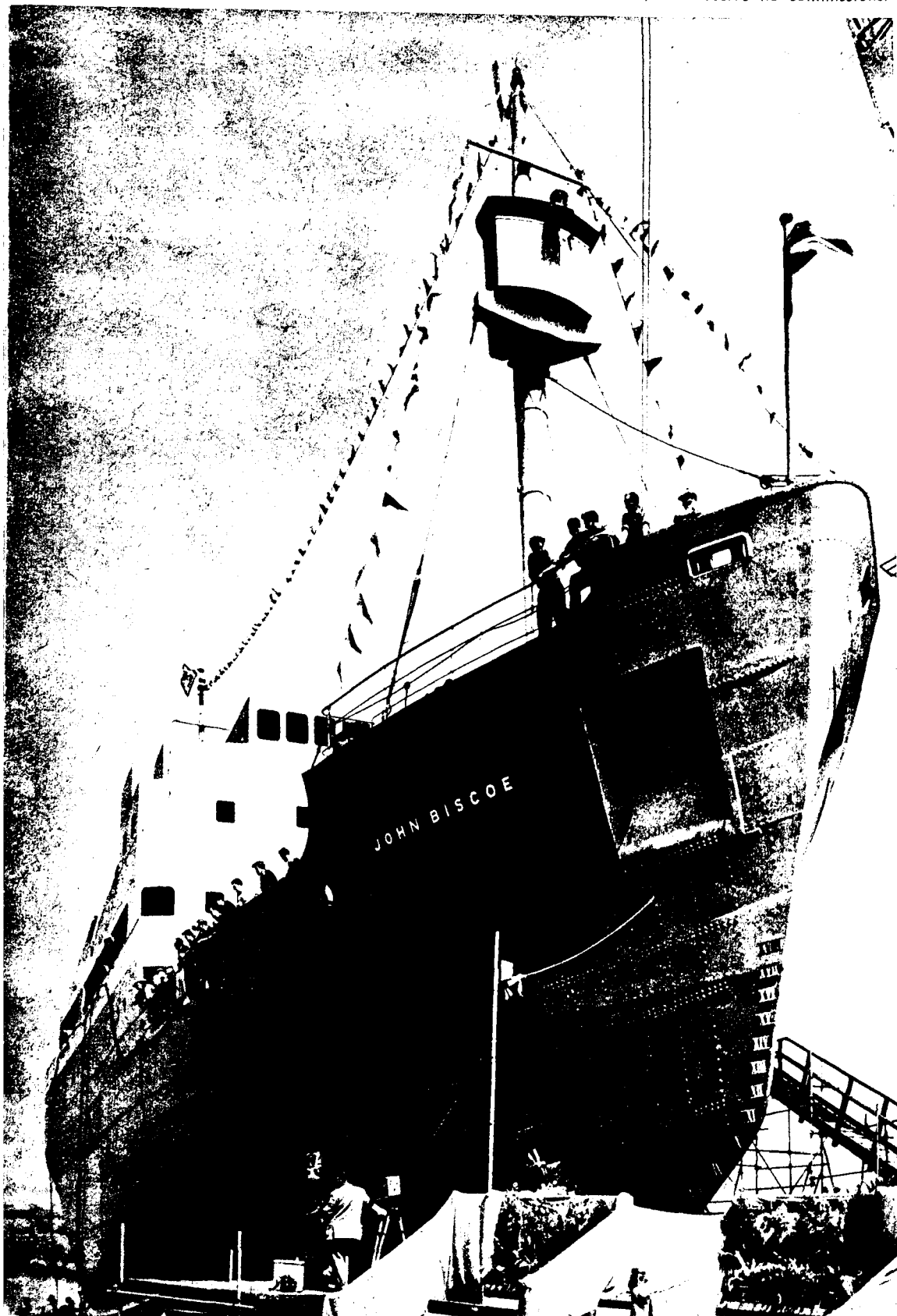
ment of invested funds and the employment of the Principals' cash resources in London. Altogether the department administers the investments of nearly 1,200 separate funds, totalling well over £1,000 million. It also floats loans to help in financing projects.

Another important service is the help given to overseas countries to recruit, in the United Kingdom, suitable staff for a wide range of mainly technical posts. In an average year the Crown Agents help to fill about 1,500 vacancies of this kind.

The organisation was established in 1833. It replaced a system under which overseas territories appointed their own agents in the United Kingdom to perform a variety of commercial and other services. Today it has a staff of more than 1,600, men and women who combine a high degree of skill and experience with a good knowledge of the territories served, including over 100 engineering inspectors living in the principal centres of industry in Britain and Europe.

Except for professional and other specialists, the staff is recruited from the lists of the United Kingdom Civil Service, though no member of the staff is a Civil Servant; no part of the Crown Agents' earnings goes into the United Kingdom Exchequer. If at the end of the working year there is a surplus

THE ship about to be launched (below) was ordered for the Falkland Islands Dependencies Survey. The Crown Agents depend entirely on fees from their customers, and receive no commissions.



THIS paper-weight was bought on behalf of Nakuru Municipality, Kenya, for presentation to H.M. the Queen Mother during her tour of East Africa.

in revenue, after providing for reserves, it is dealt with either by a reduction of fees or by a distribution to the Principals in proportion to the amount of business done.

Here are examples of the charges: for purchase and shipment of stores, one and one-third per cent of the value of each consignment; sale of stores, one per cent of the proceeds; letting and execution of contracts, 0.15 per cent to 0.05 per cent; selection of candidates for appointments, two and a half per cent of the first year's salary.

One Public Accounts Committee reported, after an exhaustive inquiry: "We have come to the firmest possible conclusion that the Crown Agents provide this government with an excellent service at low cost, and combine with that service a wealth of experience which makes our association with them very well worth while".

The Royal Society provided another testimonial to the Crown Agents, who, incidentally, helped to acquire the husky dogs which were used by Sir Vivian Fuchs on his expedition across Antarctica. The Secretary of the Royal Society wrote: "Since August 1955 the Crown Agents for Oversea Govern-



BOOTS destined for Tanganyika are inspected at headquarters before dispatch. The Crown Agents will supply anything, from a generator to drawing pins, even husky dogs for an Antarctic Expedition.



MISS M. F. BRUCE, from Lagos, Nigeria, works at headquarters as a telex operator. The organisation was established in 1833.

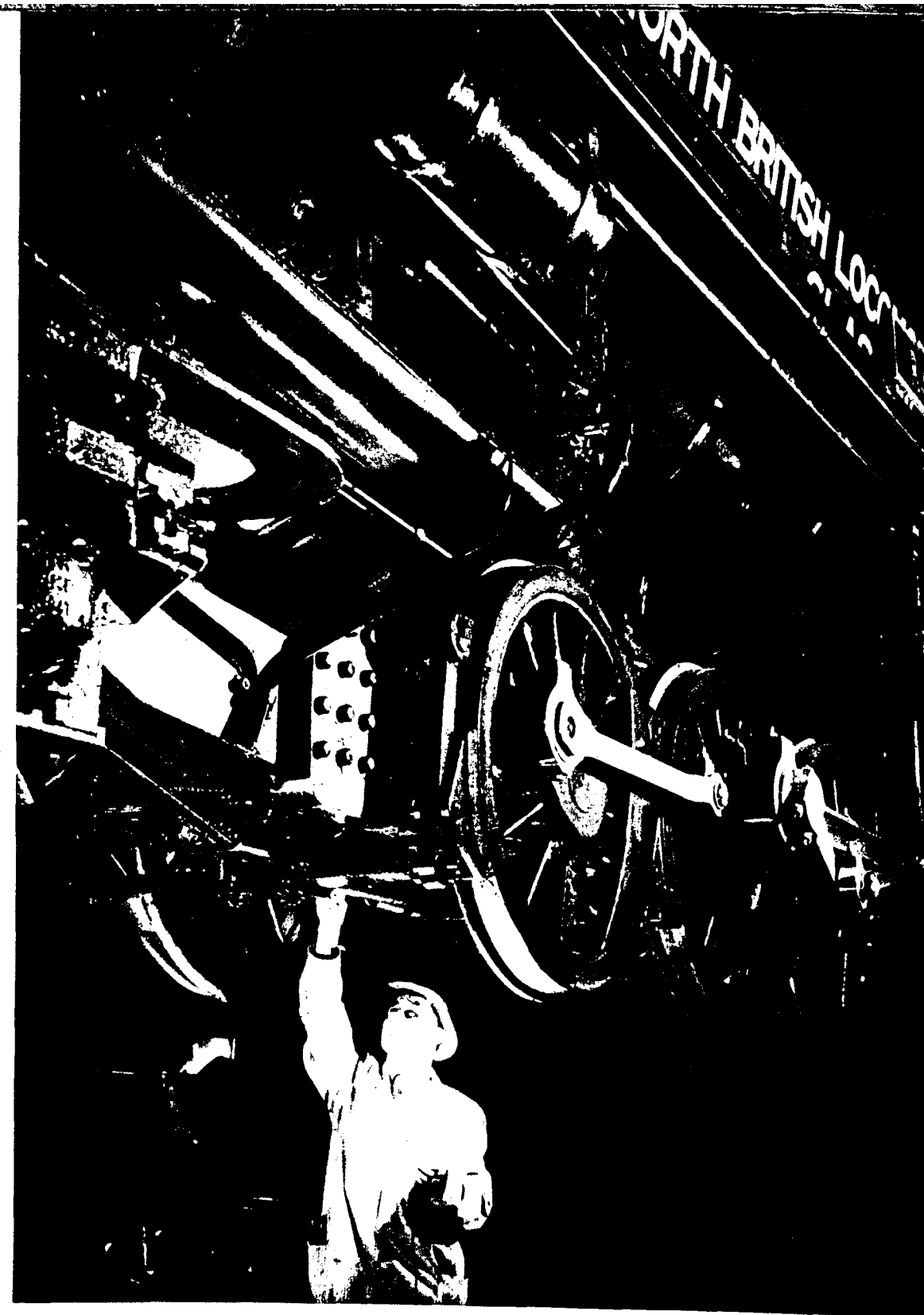


THE pay department handles nearly half a million payments a year. An overseas student (above) drawing his allowance.

ments and Administrations have given extremely valuable assistance to us in connection with our International Geophysical Year Antarctic Expedition.

"In all, four separate voyages have been made to the Royal Society Base, Halley Bay, and throughout each cycle of twelve months the Crown Agents have placed orders for our stores, chartered the necessary vessels, packed the stores, arranged for their loading on board the ships, and have made detailed arrangements for the payment of some of our men whilst at Halley Bay and during their periods of leave. . . ."

Whether it is equipping expeditions, or carrying out such tasks as shipping drinking water to Gibraltar to alleviate a drought, or finding a man to take the job of Production and Quantity Controller in a Newfoundland shoe factory, the Crown Agents carry through the assignment without fuss and at the lowest cost.



INSPECTING a giant locomotive for Nigeria. Over 100 Crown Agents inspectors live in the principal industrial centres of Britain and Europe, and consultants are available to advise on all kinds of projects.

THE CUSTOMERS...

Here is a list of the customers, or Principals, as they are called, of the Crown Agents, who act for governments or public bodies only, not for commercial interests.

Colony, Protectorate, and Trusteeship Territory Governments.

Aden, Antigua, Bahamas, Barbados, Bermuda, British Guiana, British Honduras, British Solomon Islands Protectorate, British Virgin Islands, Brunei, Dominica, Falkland Islands, Fiji, Gambia, Gibraltar, Gilbert & Ellice Islands, Grenada, Hong Kong, Jamaica (including the Turks and Caicos Islands and Cayman Islands), Kenya, Malta, Mauritius, Montserrat, New Hebrides (Anglo-French Condominium), Southern Cameroons, North Borneo, Northern Rhodesia, Nyasaland, Pitcairn Islands, St. Christopher-Nevis-Anguilla, St. Helena, St. Lucia, St. Vincent, Sarawak, Seychelles, Sierra Leone, South Georgia, Tanganyika, Tonga, Trinidad and Tobago, Tristan da Cunha, Uganda, The West Indies, Western Pacific High Commission, Zanzibar, The High Commission Territories of Basutoland, the Bechuanaland Protectorate and Swaziland.

Other Governments and Organisations.

Bahrain, Ceylon, Cyprus, Ghana, Iran, The Hashemite Kingdom of Jordan, Indian Railways, United Kingdom of Libya (including the Provincial Governments of Cyrenaica, Tripolitania and the Fezzan), Federation of Malaya (and the States of the Federation individually), Maldives Islands, Newfoundland, the Federation of Nigeria (and the three Regional Governments individually), the State of Singapore, the Somali Republic, the United Nations, more than 100 municipalities, local government authorities and other public bodies.



MR. CHRISTOPHER OJURI (left), with his wife and son in Newcastle, is studying medicine at Durham University. Right: Another medical student, Olufunmilayo, "swoots" in a Glasgow Park.

MEET THE OJURIS

Members of a Large Nigerian Family Training in Britain

STUDYING in various parts of England, Scotland and Wales are eight members of a Nigerian family. Hard working and ambitious, they have settled down happily in Britain to train as doctors, nurses, chemists and engineers. The attitude of 24-year-old Miss Margaret O. Ojuri, from Lagos, now in her third year of training at the Preston Hospital, North Shields, north-east of England, is characteristic of the others.

"We want", she said, "to make our family better than it ever has been. Our training in Britain will equip us to provide a worth-while service on our return to Nigeria. What is always at the back of our minds", she added, "is the thought that we will have a little hospital of our own. It is a goal worth striving for."

Medical student Christopher Ojuri, 29 years of age, who lives with his wife and three-year-old son, Olatokumbo, in Newcastle-upon-Tyne, also spoke of the opportunities for service that lay ahead—not so much as an individual but as a joint family effort.

He was the first of his branch of the family to travel to Britain. He arrived in 1954 and is now more than half way through his course of medical training at King's College, Durham University. He had no regrets, he said, about turning his back on the business career which had been originally planned for him by his family.

"What I like best about my life here", he said, "is the free and easy University atmosphere, one in which we are encouraged to extend ourselves, mentally and physically."

About twelve miles away is another member of the family, 20-year-old Miss V. Duro Ojuri. She is taking a pharmacy preliminary course at the Sunderland Technical College, where students from many parts of the world are working together in the well-equipped laboratories.

"I came to Britain", she said, "because I realised I would find the right conditions for hard work and progress—friendliness, expert tuition and the best of equipment." Speaking of the family's hopes for a hospital of their own, she said: "At present we do not have a qualified doctor. But we will have one before very long. If we all work hard, I do not see why our dream cannot come true."

Also studying to be a chemist is Alfred Ojuri, 25, who arrived in Newcastle in 1959. He expects to be in Britain for five years and is studying at the College of Further Education. In 1961 he hopes to go to a University, in Manchester.

Other members of the Ojuri family are working and studying in Cardiff, South Wales; in Bradford, Yorkshire, and in Glasgow, Scotland, where Olufunmilayo A. Ojuri, aged 24, is studying medicine at the University. He shares lodgings with two other Nigerian friends, who are studying accountancy and mechanical engineering respectively. At least five years of study lie ahead of him—before he can qualify as a doctor and help fulfil the family dream.



MISS MARGARET OJURI who is training as a nurse in North Shields, Northumberland.



ALFRED OJURI—with Mr. D. Dobie an English teacher—is taking a pre-pharmacy course, Newcastle.



TWO more determined Ojuri—Miss Duro (above) who is a budding pharmacist, and Adekunle (below) who is studying to be a Civil engineer, Bradford.



MR. A. H. M. KIRK-GREENE, the course Supervisor (above), cuss their plan of procedure in a village. Many interesting Below: Students interview a farmer



TWO white-coated Assistant District Officers talk with villagers selling their wares in a village in the Zaria District of Northern Nigeria. The officers were gaining practical experience during a training course based on Zaria's Institute of Administration.

'OPERATION ZAZZAU'

Improving Administrative Techniques in Nigeria

TWENTY-NINE Assistant District Officers on an Administrative Training Course in Zaria, Northern Nigeria, met the people of the local villages and collected facts about their way of life in "Operation Zazzau"—the old name for Zaria.

The idea behind "Zazzau", which was devised by Mr. A. H. M. Kirk-Greene, supervisor of the course, was that personal contacts with the villagers would not only give the officers a change from the hard academic work at Zaria's Institute of Administration, but would also help to broaden their outlook, and be of immense practical value.

Working in small groups, the officers visited thirteen villages in the district, collecting information on questions of age, literacy, occupation, taxation, livestock, the size of farms, sources of income, and so on. It was a detailed investigation of the history, organisation and way of life of an entire community.

"Asset indicators", such as bicycles, sewing machines, and radios, were noted. A ten per cent "sample" of the population was taken, and analyses were made of income and expenditure, with particular reference to the way savings, if any, were used, and of the relative proportions of cash and subsistence crops.

Analyses were made of trading occupations, how shop owners managed their business, and of how the people obtained their information—from newspapers, the radio, visitors, and Government Information

Services. The value of adult education classes was investigated, and a collection was made of the life stories of the oldest inhabitants of the villages as a contribution to the history of Northern Nigeria.

The project brought home to the students the truth that the life of an Assistant District Officer is not easy—that he has to be all things to all men, from sympathetic listener to competent adviser.

The officers soon found that when delicate questions concerning wives and sources of income were put to villagers, the right, tactful, approach was essential; they realised that the willing co-operation of the villagers was a measure of the students' tact and ability to gather information without arousing resentment.

"Zazzau" achieved its main aim, which was to polish and improve administrative techniques; and the villagers themselves enjoyed the experience. In one village, for example, they admitted that it had never occurred to them to inquire into the origins of their village. Helping Mr. Kirk-Greene as lecturer was M. Abubakar Mashagu, an Assistant District Officer; and surprise visits were paid by the Principal of the Institute, Mr. M. J. Bennion.

"If this scheme proves as great a success as the students seem to be making it", said Mr. Kirk-Greene, "something along these lines might well become a permanent feature of future courses at the Zaria Institute of Administration".

number seventy-nine
Commonwealth
TODAY





CAPTAIN J. W. Day, the Marine Superintendent of a cement factory in Brisbane, Australia, holds a piece of cleaned coral used in cement manufacture.

Cement from Coral

IN AUSTRALIA there is a cement factory with a marine superintendent in charge of a fleet of three ships used for transporting coral. The factory with such unusual features is the Queensland Cement and Lime Company's installation at Darra, a suburb of Brisbane, capital of Queensland.

The marine superintendent is Captain J. W. Day, a former harbour master at Vizagapatam, on the east coast of India. There Captain Day gained wide experience in dredging, an asset he now uses in dredging

coral from the vast deposits near a small island, known as Mud Island, in Moreton Bay, near Brisbane.

For its sea work the company employs forty men, including three ship's masters. "As far as we know", says Mr. L. J. Jones, the General Manager of the company, "we are the only cement manufacturers using coral dredged from the sea."

Coral provides the lime essential in the making of cement. Dredging, and carrying coral the forty miles from Mud Island up the Brisbane River to the factory's wharf, are complex procedures.

"The whole operation", says Captain Day, "from the wharf at Darra to the dredge in Moreton Bay and return, must be completed in 12½ hours. We are dependent on the tides; we go down to Mud Island with the tide ebbing and come back with it rising.

"It takes 4½ hours to reach the dredge from the wharf, five hours to return loaded, and half an hour for discharge, leaving 2½ hours for loading at Mud Island. The loading rate from the dredge is 800 tons an hour—12 to 13 tons a minute. If I lose ten minutes it means I have lost 120 or 130 tons of coral."

The *Coral*, stationed at Mud Island, was a tank landing craft. She has a number of special features for her highly specialised work, including two "spuds" or mooring posts at the stern; when one is lowered to the sea bed, the vessel can then pivot in an arc; at the bow there is an 80-ft. suction

ladder carrying two cutters, driving gear and suction pipes.

The main carrier, *Cementco*, has a hopper capacity of 2,000 tons, and six propellers and six rudders. Each propeller is powered independently and the vessel can cruise at 7½ knots on four engines. "She is the handiest ship I've ever commanded", says Captain Day. "You can turn her on a sixpence."

Back at Darra Wharf, *Cementco* discharges her cargo through 44 hydraulically operated hopper doors which open on the river bed. From there the coral is recovered by wharf-mounted cranes. The coral is thus washed twice: when it is suction-dredged from the main mass, and when it is recovered from the river.

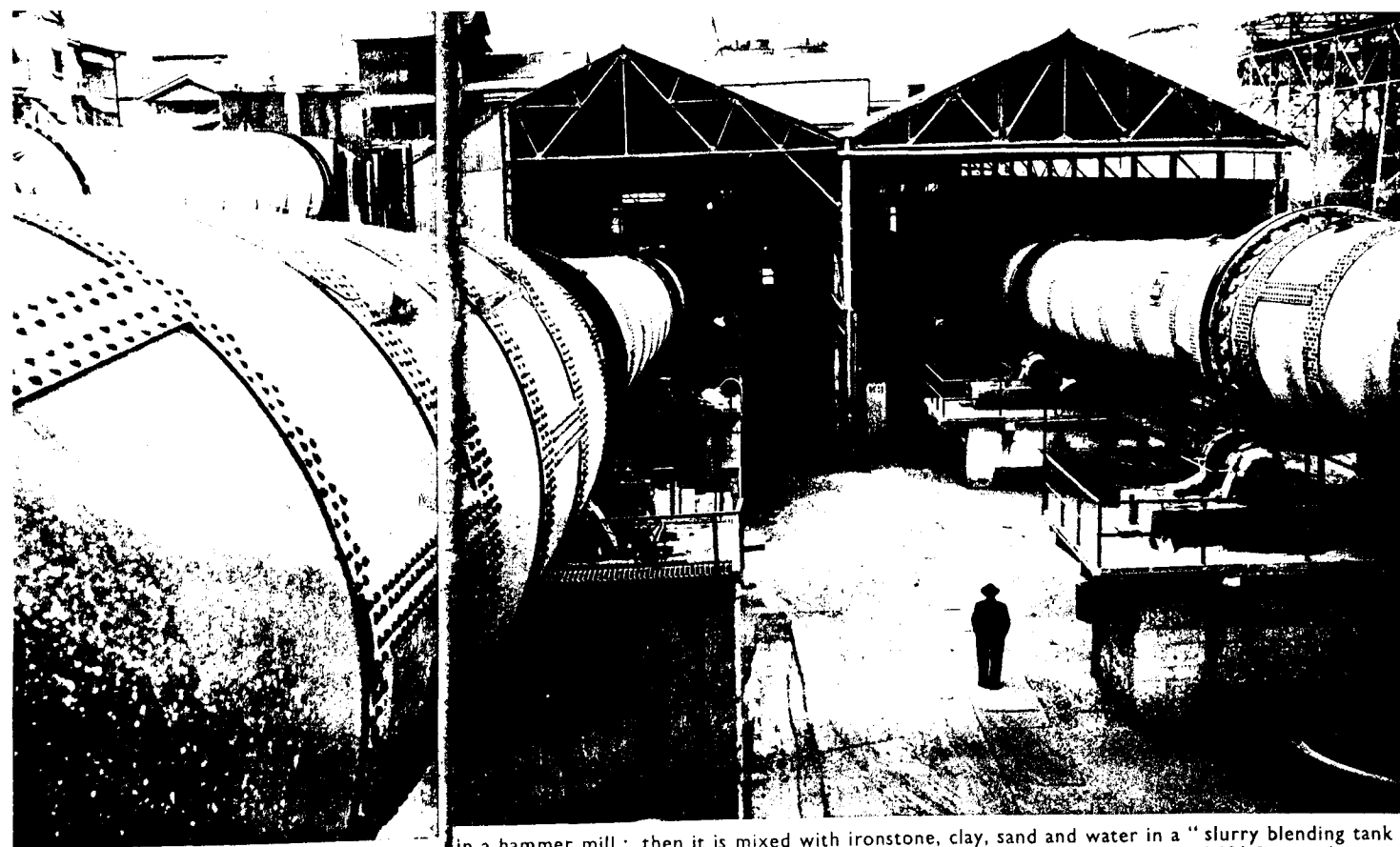
The Right Properties

The great coral deposits, exploited by the Queensland Cement and Lime Company, possess ideal physical and chemical properties for the manufacture of high-grade Portland cement. Unlike the usual beach deposits comprising quartz sand with varying percentages of sea shells, the coralline around Mud Island is a mixture of calcareous corals and algal materials in a reef 18 to 20 feet thick.

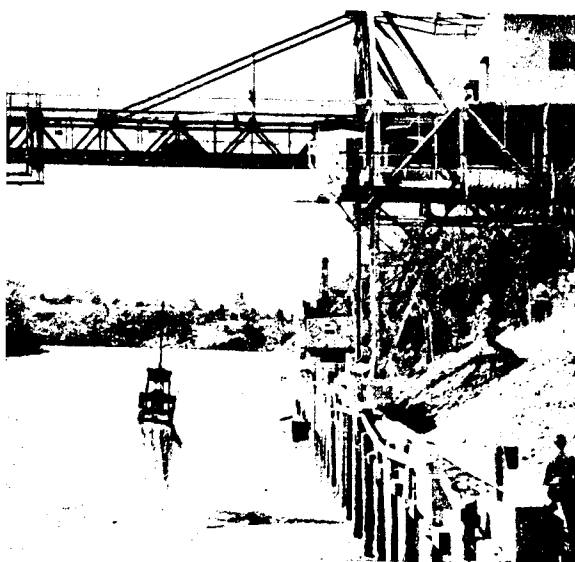
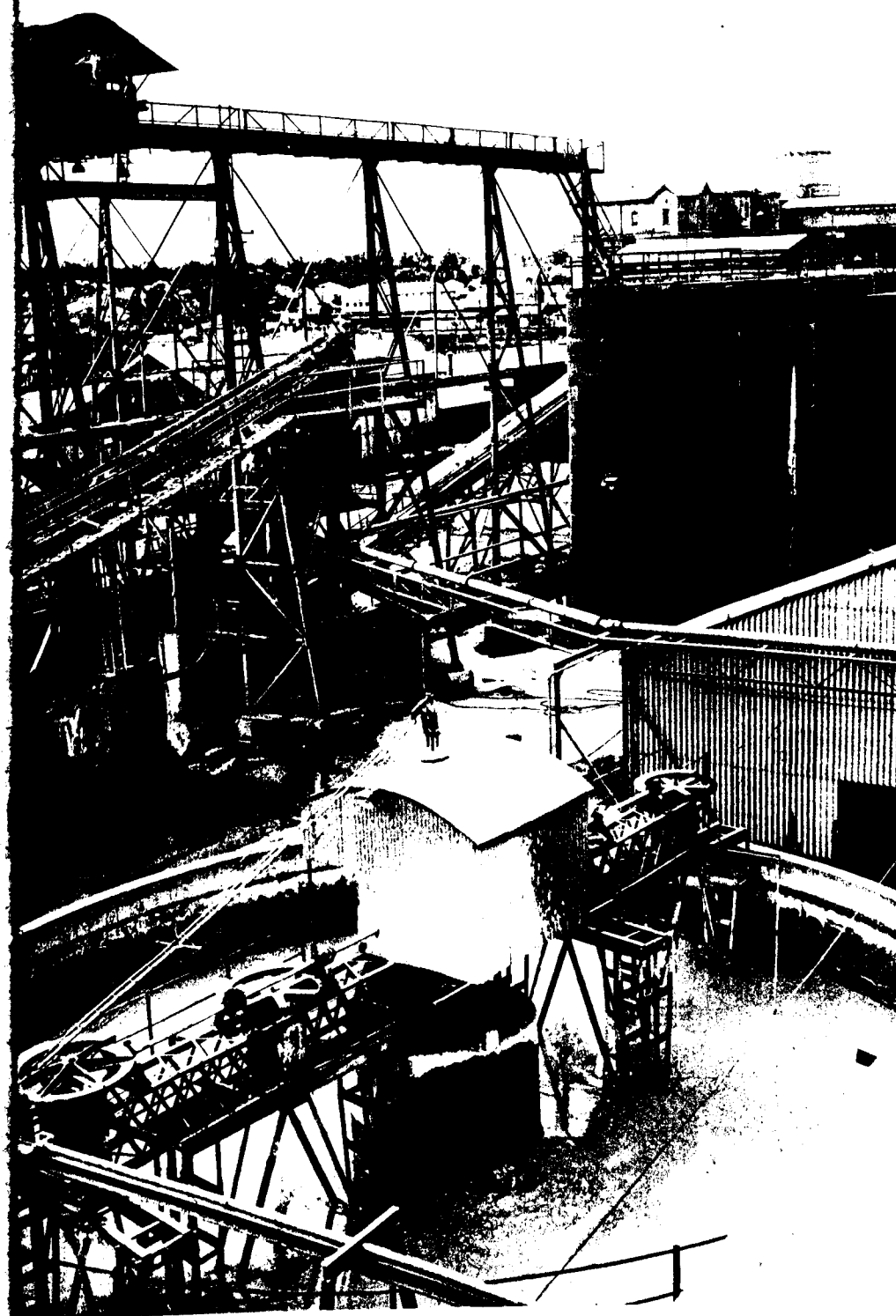
Materials required to make a 94 lb. bag of cement at Darra are 13½ lb. of coral, 8 lb. of sand, 5½ lb. of clay, 4 lb. of gypsum, and half a pound of ironstone. The factory uses 600,000 tons of coral a year, but reserves in Moreton Bay are unlimited.

Current production is 300,000 tons a year, but when the company's £A1,250,000 expansion programme is completed in 1961, production will go up to 500,000 tons a year. Eventually the Darra factory together with a smaller one at Townsville in North Queensland, will supply the cement needs for all of Queensland, New Guinea, the Northern Territory, and northern New South Wales.

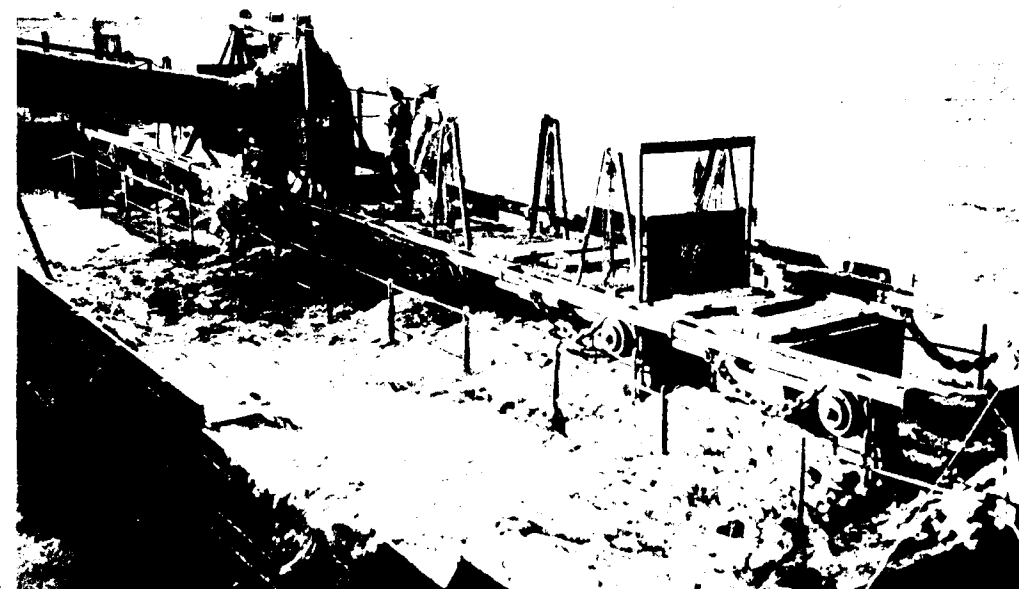
It is some of the cheapest cement produced in Australia, this cement from the sea!



ON arrival at the factory the coral is crushed in a hammer mill; then it is mixed with ironstone, clay, sand and water in a "slurry blending tank" two of which are shown above. The biggest of the kilns is 350 feet long and 12½ feet in diameter.



CORAL dumped in the Brisbane River for washing is recovered (above) by a grab, and stacked on the wharf. Below: Coral and sea water flood into the carrying vessel *Cementco*.



TRADE WINDS

Commonwealth Industrial Notes

British industries and engineers are playing a leading part in the construction of a £2,250,000 project in Nyasaland which, by 1962, will end water restrictions in the towns of Blantyre and Limbe. A £1,000,000 contract for the supply of 30 miles of high-pressure mains was given to a British firm and the piping has already been delivered. The laying of the pipeline, under a £410,000 contract awarded to Richard Costain (Africa) Ltd., entails the crossing of several rivers, roads and railways. When completed the scheme will supply 1,500,000 gallons of water daily. Allowance has been made for development.

Canada is to contribute materials and technical help worth 3.5 million dollars towards the construction of the Shadiwal Hydro-Electric Development Project in West Pakistan. As well as serving industry, power from the project will be used to operate tube wells in the reclamation of water-logged land.

More schools have been built more quickly during the last ten years than ever before, according to Britain's Ministry of Education. For the first time a specific programme of building for the Youth Service has begun. In 1949 it was estimated that at least two million new school places would be needed by 1961. But estimates had to be placed higher; the overall stock of school places has had to be increased by 2,600,000.

India's first rayon pulp plant will be located in Mavur, Malabar, Kerala State, the Government of which will make available 160,000 tons of bamboo yearly.

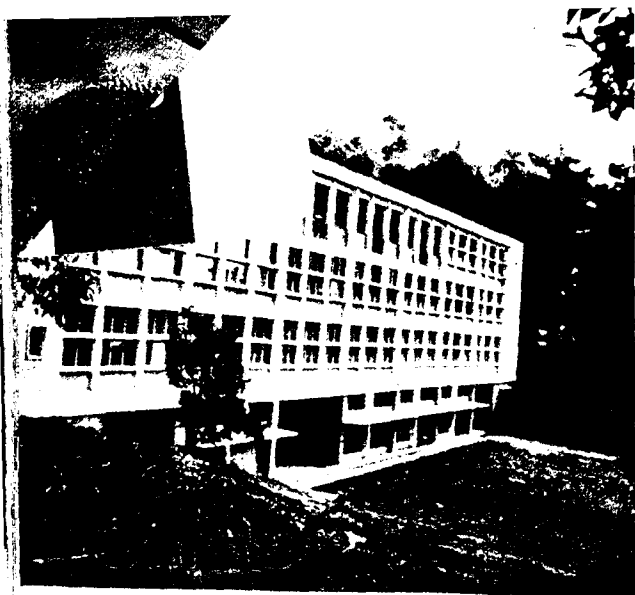
A fully automatic egg packing and grading machine, which can handle 1,000 cases of eggs a week with a staff of four people, has been produced by a British firm in Trowbridge, Wiltshire. After weighing and stamping, the eggs are channelled according to weight grades and are taken to a conveyor, believed to be the first one of its kind in the world. It ensures that every egg is packed with its point downwards; there are no breakages and no hair cracks for no two eggs touch each other.

A large sheep farm is being established near Rawalpindi, in Pakistan, at a cost of about Rs. 1,000,000. The farm will consist of a breeding station and research centre, and 1,000 breeding ewes of very fine wool will be kept. The farm will work as a nucleus for the propagation of farms among existing and prospective breeders in Rawalpindi, Murree, and Hazara, which are climatically the most suitable areas for the breeding of superior-quality sheep.

A contract for generating plant for a power station at Kingston, Jamaica, has been placed with a British electrical firm in Manchester, England. The plant is for an extension to the Hunt's Bay Station Co., and includes a 20 MW. turbine generator together with condensing and heating equipment. The order is valued at more than £250,000.

The British Motor Corporation has completed the £A20 million expansion of its main Australian plant in Sydney; it can now produce 50,000 vehicles a year, including a car with 96 per cent of its parts made in Australia.

Three vision and three sound transmitters, together with studio equipment for New Zealand's new television stations in Christchurch, Wellington, and Dunedin, have been ordered from Britain. The new order means that all four of the New Zealand television stations will have transmitters supplied by the same firm; the fourth station, at Auckland, has been carrying out experimental work with a 500-watt transmitter.



SIERRA LEONE ACADEMY. The new Albert Academy school building at Freetown. From Leslie Cross, 2 Crocker Lane, Freetown, Sierra Leone.



NIGERIAN STUDENTS. A group in the chemistry laboratory of the Government College, Kiffi, Northern Nigeria. They are carrying out an experiment under the guidance of a British instructor. From Alan E. Ajonye, Government College, Kiffi, Northern Nigeria.

READERS' PICTURES

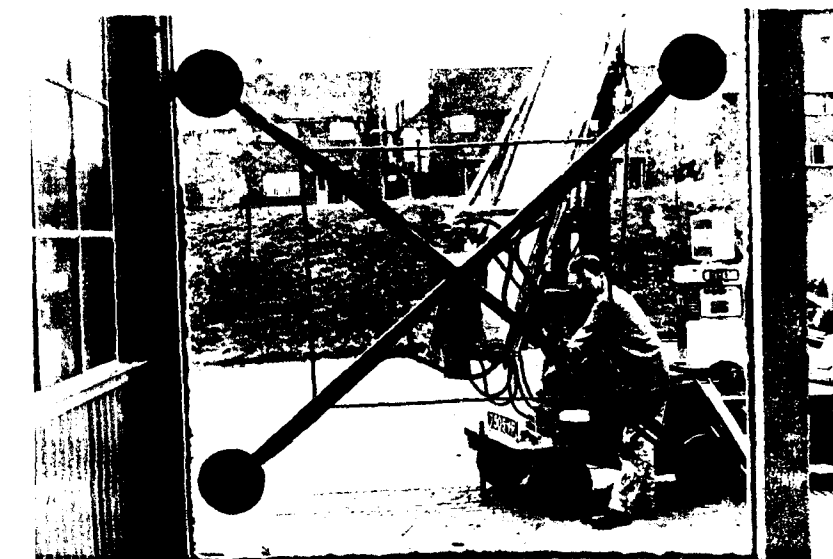
This is a further selection of pictures from our readers. They are invited to send in photographs which they have taken themselves. A fee of a guinea will be paid to the owner for each published picture. Please write captions and addresses in **ENGLISH** on the backs of the prints. Photographs will not, as a rule, be returned.

MALAY WEDDING. The bride and the groom. Weddings in Malaya are usually held at night. From Yeoh Swee Cheang, No. 241 Main Road, Bagan Serai, Perak, Malaya.

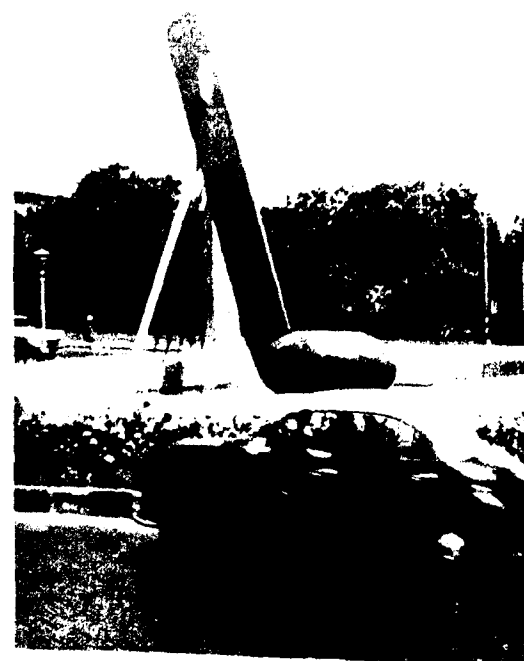


NEW USES FOR MODERN FABRICS. One hundred and twenty 2,500-gallon Neoprene-coated water tanks have been ordered by the United Kingdom Home Office for emergency use by Britain's Fire Services. This one is being demonstrated at a training centre in Gloucestershire. The tanks are light, cheap, easy to put up, and rot-proof, enabling them to be stored without damage.

NEW



ROBOT PLATE-LIFTER. A new machine for lifting and placing sheets of steel, plate glass, or any type of rigid panelling or facing, has been introduced by a Birmingham firm. Known as a Robot Plate-Lifter, it is hydraulically operated and consists basically of a long jointed arm mounted on a turntable on an electric truck. At the end of the arm, four vacuum faceplates give a grip of about 900 lb., and will grip and lift any reasonably smooth sheet material.



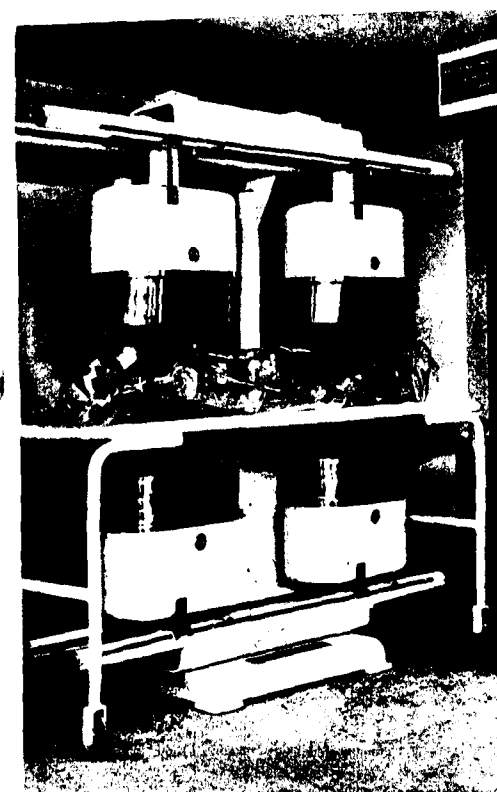
KARACHI LANDMARK. The musical fountain in Karachi City, Pakistan. From Shahan Ali, 1252 R. J. Building, opp. Bohrapir Ranchore Road, Karachi, Pakistan.



RICE HARVEST. Women at work in the rice fields of Malabar. From P. T. Sankaran Nayar, Inspector of Boilers, Kakinada, India.



CACAO in The West Indies. Cacao cuttings in a Trinidad nursery ready to be planted out. Right: Cacao beans, dried in the sun, are danced upon by bare-footed men to give them a final polish. It is from the seeds of the small evergreen cacao tree that cocoa and chocolate are prepared. From G. W. Smith, Imperial College of Tropical Agriculture, St. Augustine, Trinidad, The West Indies.



SUPER-SENSITIVE RADIATION MONITOR. An instrument which can detect and measure extremely weak radioactivity in the human body has been developed by a Scottish firm for use in the Department of National Health and Welfare, Ottawa, Canada. It is being demonstrated here on the model of a man made of glass. It will allow tracer research with radioisotopes to be carried out at very much lower levels of activity than has been possible in the past. It will also be useful in research establishments.



TALKING BOOKS FOR THE BLIND. A "talking book" being fitted to a tape recorder by its inventor, Mr. L. Pender (centre). Lord Fraser (right), Vice-President of Britain's Royal National Institute for the Blind, said it was "the most important invention for the blind since Braille". Last year the Institute supplied blind people in Britain with 2,000,000 long-playing records—700 different recorded books. The "talking book" will play back for 22 hours; a long-playing record can last 40 minutes.



HAND-PROPELLED HARVESTER. This strip-harvester in a test row of Australian wheat is so light (200 lb.) and simple to use that a woman can handle it with ease. It was invented by Mr. Gilbert E. Poynter, an ex-farmer, working with the State of Victoria Soil Conservation Authority, Melbourne. It is driven by a 1.3 h.p. four-stroke motor, and can be made for less than £100. It will cut from five to fifteen acres of crops in about half the time it would take to reap the same acreage with a sickle.

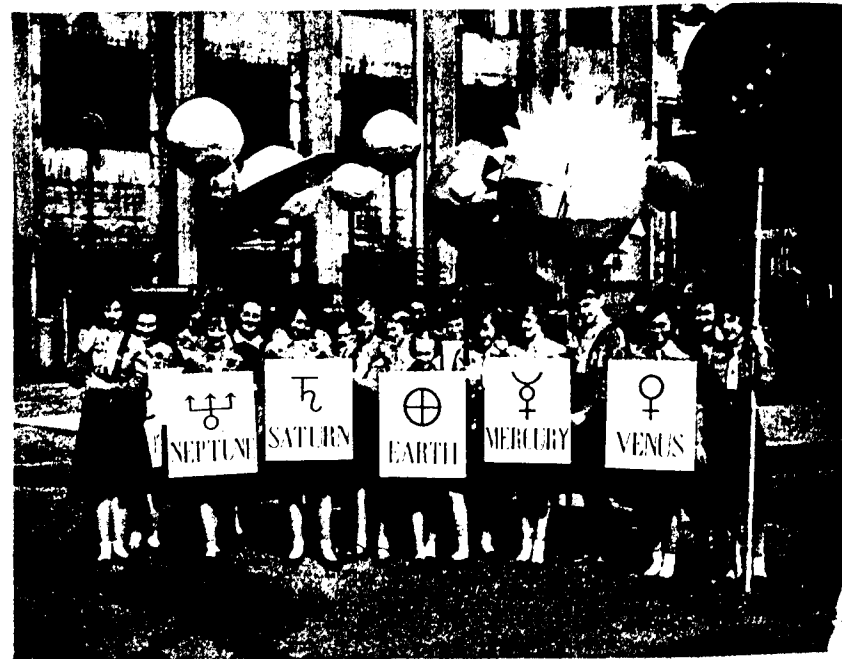


AT THE Festival of Commonwealth Flowers, London; the Ceylon stand. L. to r.: The High Commissioner for Ceylon in the U.K., Mr. G. de Soyza; his wife, Mrs. de Soyza; and Mr. R. H. M. Thompson, Under-Secretary of State, Commonwealth Relations Office.

THE COMMONWEALTH IN LONDON



GIRL GUIDES from Hong Kong at the Girl Guides Jubilee celebrations held at Wembley Pool, Middlesex. Next to the Hong Kong Guides is a Guide from Trinidad, The West Indies.



GIRL GUIDES from Northampton, England, in their "Solar System" tableau the celebrations at Wembley. Girl Guides and Rangers from all over the Commonwealth attended these Jubilee celebrations. See page 20.

Commonwealth
TODAY

In Canada's Manitoba Province, the first to be sited and which covers an area of 246,512 square miles. See pages 6, 7 for a feature on Canada's Flying Farmers.

FARNBOROUGH AIR SHOW • BRITAIN'S RESEARCH FOR INDUSTRY
FRONTIER DOCTOR • RUGBY IN THE COMMONWEALTH

No.
80

Commonwealth TODAY

Presenting the Commonwealth to the Commonwealth

NUMBER EIGHTY

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ACKNOWLEDGMENTS

PHOTOGRAPHS—From Cover, Colour photograph, Canada official, Page 6, 7, Canada official, 5, 10, 11, Tanganyika official (13); 18-20, New Zealand official (4); 21, Ghana official (7); 26, Nigeria official (9). Back Cover, colour photographs, Australia official.

PREPARED BY
THE CENTRAL OFFICE OF INFORMATION
LONDON

PRINTED IN ENGLAND FOR HER
MAJESTY'S STATIONERY OFFICE BY
SAMUEL STEPHEN LTD., LONDON

Speaking of the

Commonwealth...



After visiting the Commonwealth Exhibition in Edinburgh, Ceylon's High Commissioner in Britain, Mr. Gunasena de Soyza, spoke of his country's belief in the ideals of the Commonwealth—"in the increasing diversity of nations which it represents, but bound together as they are by certain basic sentiments held in common. We believe it to be one of the most effective instruments that can ever be devised for achieving the greater good of the world".

Mr. de Soyza paid a further tribute to the Commonwealth when he was the guest of honour at a luncheon given by the Victoria League in London.

"We should be justified", he said, "in proclaiming the Commonwealth as being the sanest world association... It was a remarkable tribute that countries which had been colonies had on attaining independence decided to remain members of the Commonwealth."

Speaking on "The Law in a Changing Commonwealth" at a formal sitting of the Superior Court of Montreal, Canada, Viscount Kilmuir, Britain's Lord Chancellor, said that however the constituents of the Commonwealth of Nations might change, whatever differences of tradition and mental attitude might result, one element must remain if human peace and comfort were to continue: justice must be administered. The courts must function on the basis that the rule of law must provide that everyone, be he official or private citizen, should be equally answerable for his actions in the courts; and doc-

trines of law must be flexible enough to adapt themselves to changing conditions. "There must be created and maintained a body of judges whose character and reputation have made the ordinary man accept their opinions in substitution for his own view of his own rights", said Lord Kilmuir.

An annual competition for works by Commonwealth sculptors is held each year by the Royal Society of British Sculptors. The decision to make the award was taken about two years ago under a fund set up by the late Sir Otto Beit, a Fellow of the Royal Society of British Sculptors and a benefactor of the arts.

Since 1925 the award of a medal has been made for works exhibited in London. The new competition, now in its third year, will be for works exhibited outside London—in Britain and the rest of the Commonwealth.

Distinguished scientists from every Commonwealth country have been on a tour of British scientific, industrial, agricultural, academic and other advanced research establishments as part of a programme organised by the British Commonwealth Scientific Committee.

The Chairman of the Committee, Sir Harry Melville, who is Secretary of the United Kingdom Department of Scientific and Industrial Research, said that it was hoped that discussions of such subjects as oceanography, air pollution control, antarctic research and astronomy would lead to closer co-operation in Commonwealth research.

TONGA

Stamp Corner

NOBODY who watched the Coronation Procession of Queen Elizabeth II in the streets of London, on film or on television, will ever forget the regal charm and friendliness of Queen Salote of Tonga, who represented her country at that historic event of 1953.

Christened by Captain Cook as "The Friendly Islands" in tribute to his reception there two centuries ago, Tonga comprises 150 islands spread over a wide area of the South Pacific Ocean. Although it is an independent kingdom with a democratic constitution, Tonga accepted British protection in 1900, during the reign of King George Tubou II, whose portrait appeared on some of the early Tongan stamps. When he died in 1938 he was succeeded by his daughter, Queen Salote, and the twentieth anniversary of her accession was marked in 1958 by the issue of three special stamps showing the Queen in her robes of State. Her Silver Jubilee five years later was celebrated by five stamps in a similar design, and special issues have also marked the Queen's fiftieth birthday and the fiftieth anniversary of the treaty of friendship between Tonga and Great Britain.

In 1953 a fine series of fourteen pictorial stamps designed by a New Zealand artist, James Berry, was issued for general use in Tonga. The 1d. stamp has a view of the Royal Palace at Nuku'alofa, on the main island of Tongatapu, with an inset portrait of Queen Salote.



The aerodrome at Fua'amotu, in the south of Tongatapu island, is featured on the sixpenny stamp, and in almost all the designs can be seen an aircraft, symbolic of the advance in air

transport which has brought Tonga and other remote Pacific island groups into regular communication with the rest of the world.

A special favourite with collectors is the three-penny stamp, which shows the Swallows' Cave, on Vava'u island. This takes its name from the large number of swallows which nest in the roof of the cave, and in calm weather visitors may explore the cave by boat and swim in the clear water. Printed in shades of blue and green, this stamp is one of the most striking of Tonga's many attractive issues.

C. W. HILL



HAPPY TO MEET

The Commonwealth in London. Friendly gossip... a shared joke... a greeting more than casual? A street scene captured by the candid camera of a London freelance photographer.

FARNBOROUGH...

The World's Greatest Air Show

BRITAIN'S annual air show at Farnborough, about 15 miles south-west of London, are the best known in the world. Organised by the Society of British Aircraft Constructors, the static shows and flying displays attract top level delegations from all over the world. At the last show about 8,000 guests from 115 countries attended, together with hundreds of thousands from Britain.

The Chairman of the Society, Sir George Dowty, announced that orders placed during the show were valued at £20,000,000. In the first nine months of 1960 108 British transport aircraft alone, valued at about £104,000,000, have been sold by the industry which, since the end of the last war, has exported aircraft aero-engines and spare parts worth well over £1,000,000,000.

In each of the twenty-one shows which have been held by the Society of British Aircraft Constructors since the first at Hendon in 1932, there have been significant exhibits and prototypes which have led the way into new fields of development. On the stands, in display parks and in the air over Farnborough, visitors were given a vivid idea of the resources and capabilities of the re-grouped British aircraft industry. There were thrills aplenty, colour and splendour, and ever-increasing power.

Of the greatest significance, however, was what was generally accepted as the "star turn" of the show—the demonstration of Britain's Short SC1 "flat riser", or vertical-take-off aircraft. It uses a powerful jet "thrust" to rise vertically from the ground and then moves into forward flight.

The unhurried performance of this Rolls-Royce engine flat riser, the complete control by the pilot—Mr. Tom Brooke-Smith—as shown by positioning and effortless turns, changing into high-speed flight, made clear to everyone watching that here was a develop-

The "Big Five" of Aviation

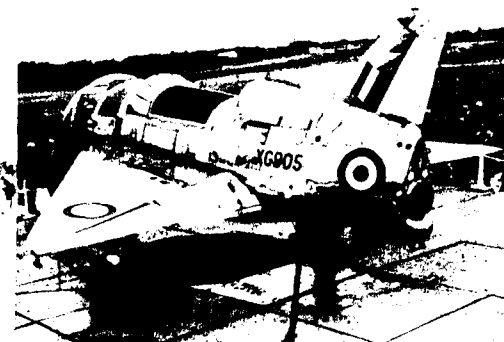
Because of the amalgamations of British aircraft firms, in the interests of still greater efficiency, five major groups—compared with 19 companies in the previous year—provided most of the exhibits at the Farnborough Show. These are the firms that make up the "Big Five".

AIRFRAME MANUFACTURERS

The British Aircraft Corporation: Bristol Aircraft, English Electric Aviation, Hunting Aircraft, and Vickers-Armstrongs (Aircraft).
The Hawker Siddeley Group: Sir W. G. Armstrong Whitworth Aircraft, A. V. Roe, Blackburn Aircraft, de Havilland, Folland, Gloster Aircraft, and Hawker Aircraft.
Westland Aircraft: All the chief helicopter manufacturers, including the helicopter interests of Bristol Aircraft, Fairey Aviation, Saunders Roe, and Westland.

AERO-ENGINE MANUFACTURERS

Rolls-Royce
Bristol Siddeley Engines: Armstrong Siddeley, and Bristol Aero-Engines.



"STAR" of the show was this research aircraft, the Short SC1, which can take off and land vertically—a most encouraging prospect for the future.

ment which may revolutionise flying in the future. This experimental British aircraft has been called "a milestone in aviation history".

In the stands at Farnborough were many of the aero-engines that Britain exports in large numbers. More than 1,600 turbine-powered aircraft have been bought or ordered by the world's air lines, outside the Communist countries, and British jet or turbo-prop engines were specified in over 1,000 of them. More than £300,000,000 worth of British



VICKERS VANGUARD, ordered by Trans-Canada Air Lines—"the most economical, flexible, medium-haul airliner". Total seating is for 96.



ARMSTRONG WHITWORTH'S ARGOSY, typical of the new generation of utilitarian turbo-prop transports; has many rapid-loading virtues.



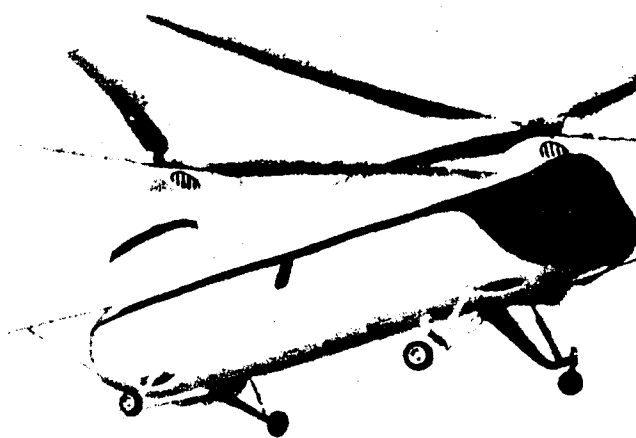
HANDLEY PAGE Dart Herald jet-prop transport. It has been on successful, extensive see-it-in-action demonstration flights, covering over 175,000 miles.



ASSORTED helicopters. Britain's industry now has a complete range of advanced helicopters to offer the world, and the displays were impressive.

aero-engines have been sold abroad since the end of the war, and of this total Rolls-Royce has accounted for nearly £140,000,000. In addition, thirteen types of British aero-engines are produced under licence in overseas countries, including Australia and India.

Farnborough has shown once again that the British aircraft industry is vigorous, enterprising, and as confident as ever, maintaining a flow of exports that continue to run at a rate of about £150,000,000 a year.



The Story of a Great British Doctor in Pakistan



EXAMINING a Frontier patient. The fascinating story of Sir Henry's life is told in his book, "Frontier Doctor", which has a foreword by General Sir Robert Lockhart, Indian Army (Retired); published by Hodder and Stoughton Ltd., 25 shillings.

"He could have made himself a fortune in Harley Street; instead, he made himself a legend in Pakistan..."

SIR HENRY HOLLAND

THESE words (above right) from a newspaper article on Sir Henry Holland aptly sum up the life of one of the most beloved doctors Britain has produced. He could indeed have made a fortune in London's famous Harley Street, where so many accomplished men of medicine have their practice; instead he worked for fifty years in the northern frontier regions of West Pakistan, where, as Sir Henry himself has said, "glare and heat, dust and flies, together with vitamin deficiency in diet, and calcium excess in water, contribute to a variety of eye diseases".

In his retirement Sir Henry lives in the pleasant Hampshire town of Farnham, not far from London. But he is still active—a world traveller. In August 1960 he flew from London to Manila, in the Philippines, to receive the Magsaysay Award for outstanding public service; and it was characteristic of him to give away the award, worth £3,500, to the hospital in Quetta, Pakistan, which was the centre of his life's work.

Born in Durham, England, in 1875, Sir Henry studied medicine in Scotland, at Edinburgh University. In 1900 he arrived in Quetta, a qualified but little experienced doctor, to start a career as a medical missionary with the Church Missionary Society.

Famous Clinic

He soon discovered that in the rugged, dusty lands of the North-West Frontier, people of all ages urgently needed eye treatment. In 1909, a rich philanthropist invited him to Shikarpur to operate on poor patients, and there he founded his famous clinic attached to the Quetta Hospital, where eye surgeons from many lands have since been grateful to gain practical experience.

Sir Henry devoted himself to treating the blind and the nearly blind. On his busiest days he would carry out as many as a hundred operations, a large proportion of which were for cataract, an eye disease that can cause total blindness. More than 100,000 people it has been estimated, owe their sight to him personally.

He has spoken of the thrill he experiences when, after he had operated on all four eyes of an old couple, they saw each other for the first time in two years.

When he visited one of his former patients

the Wali of Swat, in the remote north-west of Pakistan. Sir Henry asked the Wali how his eyesight was.

"Bring me a rifle", said the Wali in reply—and his marksmanship—seven "bulls" with seven shots—was an eloquent tribute to Sir Henry's skill as a surgeon.

The clinic at Shikarpur drew its patients from a very large territory. Some came from villages 500 miles away, bringing the entire family along, complete with livestock and household goods.

Dr. P. H. Decker, an American doctor, described the clinic as he found it in 1937:

"The operating building is situated several hundred yards from the ward grounds and consists of an examining room and a treatment room, each capable of holding about 50 patients. There are two operating rooms, each with two operating tables. Four of us usually operate for about six hours each day.

Their Busy Days

"One Monday recently we began work at 10 o'clock in the morning and did not finish until 7 o'clock in the evening. During this time—in eight hours of actual work—187 eye operations were performed."

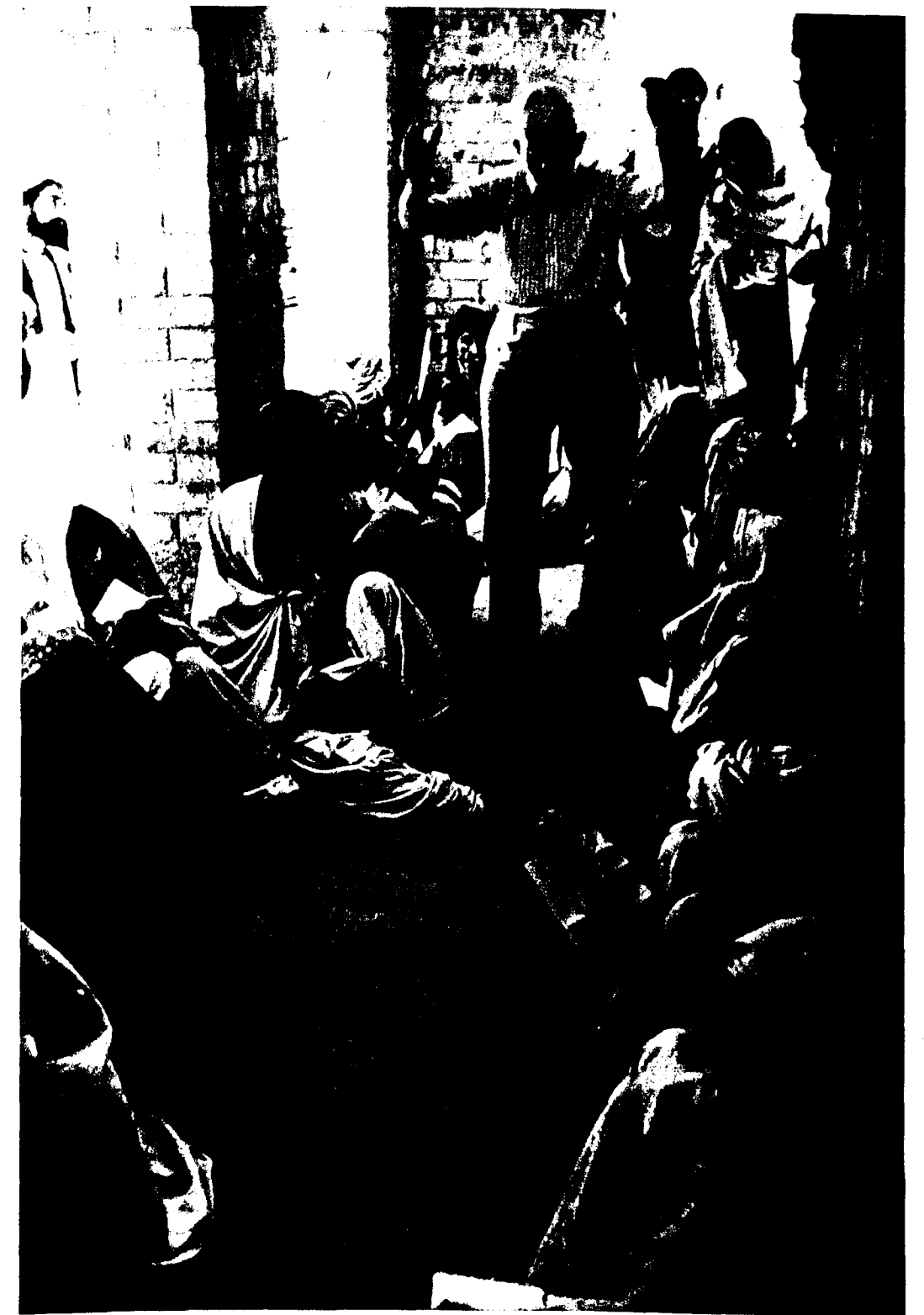
He adds: "The clinic is really a quite happy place. Many hundreds are led in blind, and they walk out without help, the world once more being bright before them."

As he worked in Quetta, Shikarpur, and in Khairpur, where he set up another eye clinic; as he travelled through Baluchistan, or journeyed to Kabul to operate upon the King of Afghanistan; Sir Henry won the respect and affection of the predominantly Muslim population.

He married a Sister-Tutor at the Quetta Hospital, and their two sons, Harry and Ronnie, both became doctors and both helped their father with his work in Pakistan.

He retired in 1948, but since then has returned to Pakistan several times. His latest visit to the country he loves was in 1960, when he celebrated the 60th anniversary of his arrival in Quetta, and also the 50th anniversary of the Shikarpur eye hospital. The celebrations were marked by spontaneous demonstrations of affection from tribesmen who had trekked from all parts of the country—some even from Afghanistan—to pay him tribute.

(Continued overleaf)



THE central figure in an almost Biblical scene. Sir Henry moves among patients waiting for treatment at his clinic in Shikarpur. More than 100,000 people owe their sight to him personally, and many thousands more have been successfully operated on by visiting eye specialists inspired by Sir Henry's work.

Canada's Flying Farmers

Using Aircraft to Increase Efficiency and End Isolation



MORE efficient farming methods in Canada are helping to raise the already high standard of the country's agricultural produce. For example, Canadian farmers are making greater use of aircraft, especially on their vast prairie farms.

Distances shrink and bad roads are no obstacles to the airborne farmer. Today a 300-mile flight to a big city is as quick and easier than a 30-mile drive over dusty or muddy roads to the nearest town.

An aircraft has become a valuable asset, almost an essential, to many a Canadian farmer. He uses it to go shopping, to visit neighbours, to obtain machinery replacements; he uses it for seeding, for spraying, for counting and rounding up cattle, checking fences and water supplies, dropping salt blocks to grazing livestock, and for general inspection—seeding, summer fallowing or ripening of harvest crops.

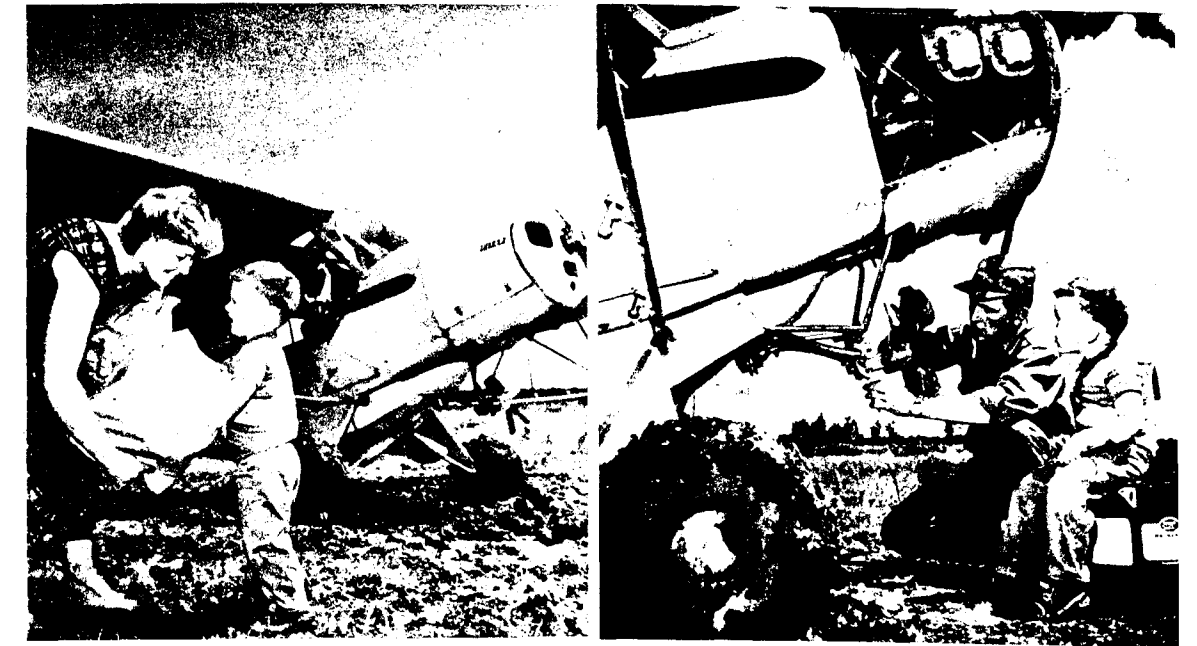
Over 500 farmers, ranchers and their wives belong to flying farmer clubs, and the farmers have their own flying associations. The aircraft used by these farmers range from two-seaters powered by 65 h.p. engines to five-seaters with 300 h.p. engines.

Flying lessons costs 360 dollars for a course approved by the Canadian Department of Transport. The Government refunds 100 dollars of this amount as partial compensation. Solo flights are usually made after eight hours of instruction.

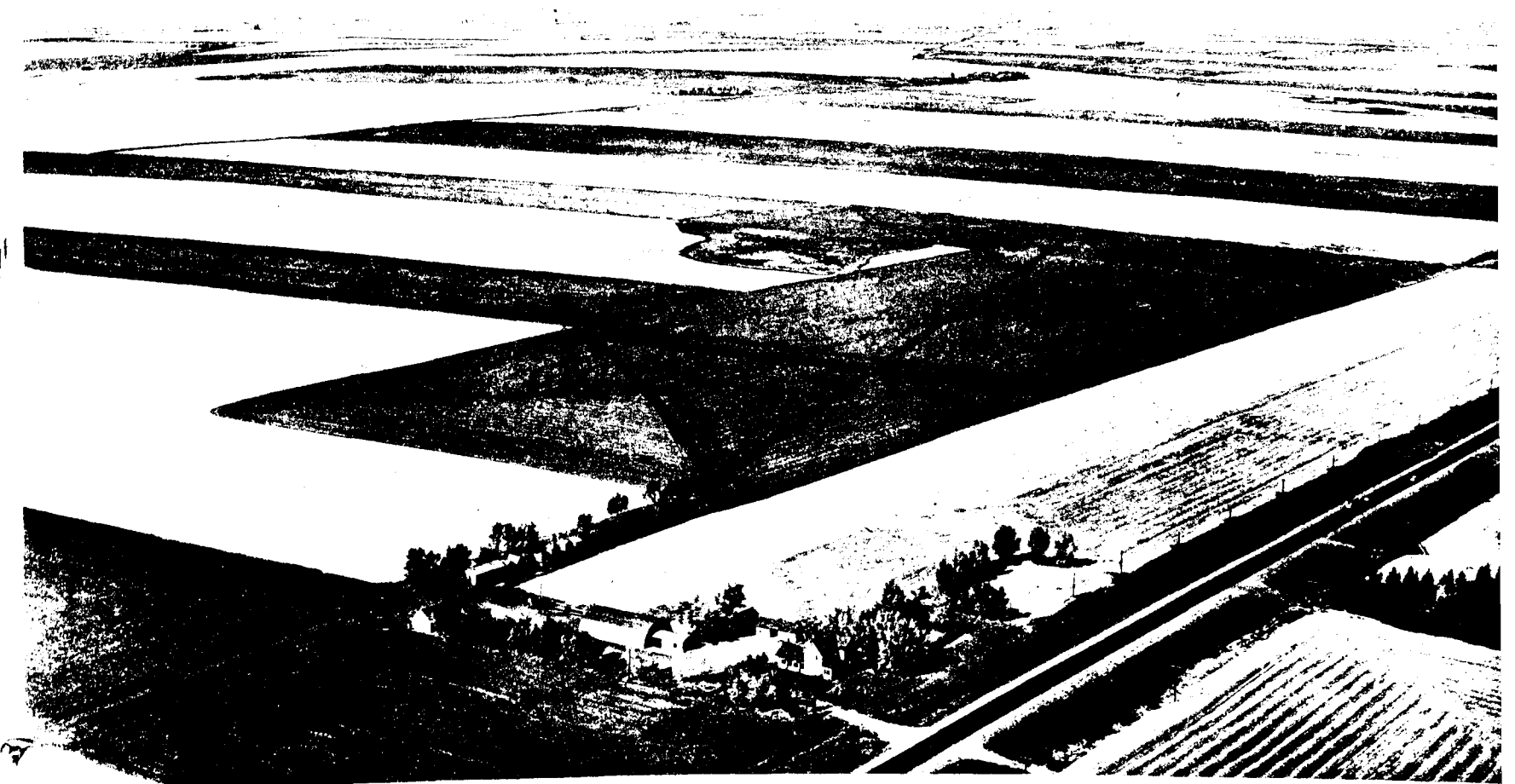
All aircraft used on the farms must be checked and repaired by qualified aero-mechanics. In the first four years since it was formed, the Saskatchewan Flying Farmers' Association—which has about 260 members—has not had an accident. In fact, the safety record for flying farmers is so good that special insurance rates are available to them.



WHETHER searching for stray cattle (above, left), flying workers to distant areas, or spreading seeds from the air, the flying farmers' small, speedy aircraft are a boon. Above, right: Home for lunch.



ON prairie farms it is often the man in the family who does the shopping—by air. Above: Young Allan, son of farmer E. McEachern, Manitoba, reaches for a tit-bit; later (right) he watches his father at work.



THE view a flying farmer has of the prairies of Saskatchewan, showing the intricate patterns of "contour ploughing". The use of aircraft saves much valuable time.



SIR HENRY'S family in Pakistan. L. to r.: His wife, Lady Holland; Dr. Ronnie Holland, his younger son, and his wife; Dr. Harry Holland; and a grandson. Dr. Ronnie Holland is wearing the ribbon of Tamgha-e-Pakistan, awarded in recognition of his State work.

Continued from page 9

One of the high spots of his tour was when, surrounded by his family, including his eldest son, Dr. Harry Holland, he attended the Sibi Durbar to watch his younger son, Dr. Ronnie Holland, receive the award of the Tamgha-e-Pakistan, in recognition of his work for the State. Dr. Ronnie is now in charge of the hospitals and clinics.

Sir Henry travelled through the Punjab, then to Bannu and Peshawar, where he spoke to students of the Edwardes College on Independence Day. In Quetta he opened the new out-patients' block, given by the Quetta Municipality, where some 100 patients can be treated at one time.

On his return to England he spoke of the "amazing" progress in Pakistan. "I was astonished", he said, "to see the tremendous strides that have been made in things like hospitals and clinics and public health, education and Village Aid."

It is a tragedy that this great doctor, who has done so much for so many, is himself in danger of going blind. But he accepts it philosophically. "I have been the means of helping—oh, I can't say how many people", he said, "and that is good to look back on."



A member of a patient's family waiting in his well-upholstered bullock cart outside the Shikarpur Hospital where thousands of sufferers have been given back their sight.



TANGANYIKA'S Chief Minister, Mr. J. K. Nyerere, takes the prescribed oath at a ceremony in Dar es Salaam before the Governor, Sir Richard Turnbull. Also sworn in were the nine other non-official Ministers and the two civil service Ministers.

TANGANYIKA'S

A GREAT STRIDE

TANGANYIKA has become the first territory in East Africa in which elected members of the Legislature form a majority of the Ministers. In a message to the members of the Government, and through them to the people of Tanganyika, the Secretary of State for the Colonies, Mr. Iain Macleod, said: "The changes which have brought this Government into being represent a great stride forward towards the goal of self-government and independence. Her Majesty's Government welcomes these changes and has complete confidence that the problems of the future will be faced with courage and realism and in the knowledge that the good of all the people in Tanganyika must be served without fear or favour. The Government and people of the territory have a unique opportunity to show by their example that men and women of all races and all conditions of society can live and work together harmoniously in a spirit of interdependence. I am sure that with wisdom and understanding you will not fail to meet this challenge."

At a public meeting in Dar es Salaam, the non-official ministers in the new Government—seven Africans, two Europeans and one Asian—were personally introduced by the Chief Minister to the people present.

The Chief Minister said at the meeting: "You have demonstrated your unity in the recent elections and I ask you to go on in unity. When we formed our nationalist movement we set out to do one thing—to unite people; and the people of Tanganyika accepted our leadership, and immediately began to think of themselves not as Europeans, Indians or Africans, or even as Wasukuma, Wamasai or Wanyamwezi, but as Tanganyikans. It is that unity that has made it possible to reach this stage peacefully."

In a broadcast speech soon after the result of the elections, Mr. Nyerere said that "Tanganyika aims to achieve complete independence within the Commonwealth in 1961 with the co-operation of the Government and people of the United Kingdom."



Mr. J. S. R. Cole, Attorney-General.



Mr. M. J. Davies, Information.



Mr. J. K. Nyerere, Chief Minister.



Sir Ernest Vasey, Finance.



Chief A. S. Fundikira, Lands, Surveys and Water.



Mr. D. N. M. Bryceson, Health and Labour.



Mr. C. G. Kahama, Home Affairs.



Mr. R. M. Kawawa, Local Government and Housing.



Mr. A. H. Jamal, Communications, Power and Works.



Mr. P. Banani, Agriculture and Co-operative Development.



Mr. A. Z. N. Swai, Commerce and Industry.



Mr. O. S. Kambona, Education.

NEW GOVERNMENT

FORWARD TOWARDS INDEPENDENCE

"We have reached this stage in the constitutional development of our country", he said, "after six years' struggle. Does this mean we have achieved all we set out to achieve when we established our nationalist movement? It means nothing of the kind; we are not an independent country yet."

"We are encouraged in our aim by the genuine co-operation we have already received from the British Government in reaching this stage. We are also encouraged by the recent resolution of the United Nations Trusteeship Council which noted a statement by the administering authority that 'it will be for elected leaders to decide how and when they wish to ask for independence'. Our early independence is therefore assured."

Mr. Nyerere referred to the Government's intention to expand educational facilities as rapidly as possible within the limits of its resources. He said the Government intended to put great emphasis on expanding agricultural production and improving communications; and that, in the sphere of industrialisation, Tanganyika greatly needed the participation of foreign capital. The Government also intended to intensify the exploration and exploitation of mineral resources.

To reach this objective, Mr. Nyerere said, certain basic conditions would have to be fulfilled: the first essential was co-operation—the creation of a community of co-operating individuals; and there could be no true co-operation without respect for one's fellow men. The second essential was, therefore, mutual respect.

"It was the character of our people", Mr. Nyerere added, "which made inevitable our achievement of responsible government and which again renders inevitable the achievement of our complete independence. It is that same character which will ensure our success in the struggle against ignorance, poverty, disease and fear—a struggle in which I am proud and privileged to lead you."



THE non-official Ministers in the new Government making their first public appearance: the meeting in Dar es Salaam opened with the singing—with upraised arms—of "God Bless Africa".

by J. B. G. Thomas

Rugby Football in the Commonwealth



HE'S OVER! Clarke, of New Zealand, dives over the line to score a try in an international match in New Zealand in 1959, when the "British Lions" touring team was defeated. One of the glories of rugby is the swift passing of the ball followed by a breathtaking dash through the opposing defences.



AN Australian player kicks a goal in a game against England at Twickenham, the best known rugby stadium in the world. The goal is 18 ft. 6 in. wide, and the crossbar is 10 ft. above the ground.



WALES beat England, 3-nil, in this match at Cardiff. The Welsh "scrum half" (number seven) is about to pick up the ball in an attempt to start an attack. Although rugby is tough, there are less serious injuries than in Association Football.

RUGBY Football has had a remarkable development since the end of the war, and has become a popular sport in several Commonwealth countries.

Since its origin at Rugby School in 1823, when one "unruly boy", William Webb Ellis, showed a fine disregard for the football laws of the time and picked up the ball to run with it, the administrators of the game in the four Home countries of England, Scotland, Ireland and Wales have refused to create a world organisation—as has been done in Association Football—to control and develop the game.

There is, however, a governing body called the International Board, which consists of two members from each of the following countries: the four Home countries and Australia, New Zealand and South Africa, with equal voting powers. By 1962 the game should be flourishing in Canada, Ceylon, the Federa-

Isles in 1905, lost only one match, and scored 830 points against 39. Wales alone, of the Home countries, beat them. Twelve months later South Africa sent her first side, the "Springboks", to Britain, and in 1909 a team, "Wallabies", came over from Australia.

The South Africans are the reigning world champions, and in the British winter of 1960-61 are defending their title in the United Kingdom against the challenge of the four Home countries. They have not been beaten in a rugby international in Britain since 1906. The South African public, and the Rhodesians, are equally keen on the game; in 1955 some 750,000 spectators paid nearly half a million pounds to watch 25 matches in South Africa.

Grounds all over the Commonwealth are being enlarged to cope with the crowds that want to watch touring teams. At Ellis Park, in Johannesburg, nearly

There are only 13 players a side, and both the rules and the method of scoring differ considerably from Rugby Union.

Rugby was introduced to various countries of the Commonwealth by members of Her Majesty's Forces over 100 years ago. Since then it has been nurtured by settlers and their descendants, and by British officials, and adopted as a national game.

A great step forward for the game in the Commonwealth is that it is now being taught and played in the schools and Universities; in many instances instead of soccer. The interchange of University students within the Commonwealth is doing much to spread a knowledge of the game, and a supply of highly skilled and well-trained players should become increasingly available as more new schools and Universities are opened.



SOUTH AFRICA won the 1960 Test series against New Zealand, beating the visiting "All-Blacks" 8-3 at Port Elizabeth. Above: A New Zealander prepares to "kick to touch" during the game.



Zealand, beating the visiting "All-Blacks" 8-3 at Port Elizabeth. Above: A New Zealander prepares to "kick to touch" during the game.



LESS celebrated teams also go on tour. Forwards jump for the ball in a match between Cambridge University (Past and Present) and the Combined South African Universities.

tion of Rhodesia and Nyasaland, Kenya, Tonga, Samoa and Fiji, in addition to the seven countries already named.

Canada hopes to send a representative team on an 18-match tour of the British Isles in the winter of 1962-63. Fiji also is seeking a short tour in Britain. The colourful and expert Fijian footballers have toured Australia and New Zealand, and in 1960 entertained the Maoris as they toured the Pacific islands of Samoa and Tonga. In an exciting Test Match a few years ago they beat Australia, and are regarded as one of the greatest attractions in the game.

The Maoris of New Zealand are superb footballers, and have played a vital part in making New Zealand's "All-Blacks" one of the leading teams in the world. The original "All-Blacks" team visited the British

100,000 people can be accommodated, and there in 1955, on the occasion of the first Test Match between South Africa and the British Isles—the most exciting big game that I have ever witnessed—95,000 people were present. At the magnificent Eden Park, in Auckland, nearly 70,000 people watched the British Isles defeat New Zealand.

Australia does not, as yet, have such big crowds, but 25,000 people filled the Sports Ground at Sydney when the British Isles played Australia there in 1959. Rugby Union football is gaining ground in Australia, and thriving after years of dominance by the Rugby League.

The League game, incidentally, which is also played in the north of England and in New Zealand, is a professional "breakaway" movement from Rugby Union.

HOW THE GAME IS PLAYED

The playing field has a maximum length—including the area behind the goals—of 160 yards, and a maximum width of 75 yards.

A goal is scored when the oval ball is kicked over the crossbar. There is no net, as in Association Football. The players number 15 a side and are made up of eight forwards, two half backs, and five backs including one full back.

Points are awarded as follows: A try—3 points. This is awarded when a player succeeds in carrying or dribbling the ball beyond his opponents' goal line, and grounding it. A goal scored from a try (in which case the try will not count)—5 points. The side which has scored the try is permitted a "place kick" at goal. A goal scored from a free kick or penalty—3 points. A dropped goal—3 points. This is scored when a player in possession of the ball kicks it, from any part of the playing area, over the crossbar.

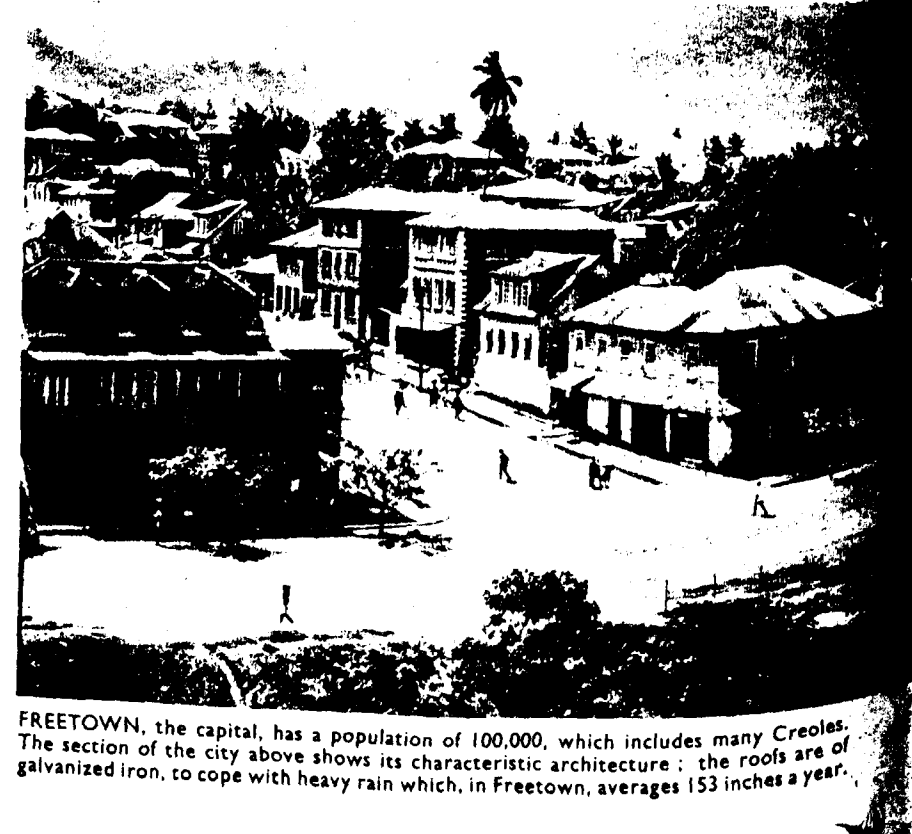
Rugby is a strenuous game in which the players may be bodily tackled and brought down, while in possession of the ball. It has scrummages, in which the opposing forwards lock together and struggle to heel the ball to their own waiting backs, and line-outs, when the forwards line up and jump for the ball as it is thrown into play from the touchline.

Players may run with the ball, pass it, or kick it, to gain ground; but they may not pass the ball forwards. If they do, they are penalized.



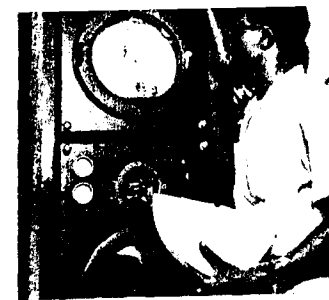
SIR MILTON MARGAI, the Prime Minister of Sierra Leone, shakes hands with the Secretary of State for the Colonies, Mr. Iain Macleod, at the start of the Constitutional Conference which was held at Lancaster House, London,

in 1960. Sierra Leone is a country of 2,260,000 people and 27,925 square miles: it has a long history of friendship with Britain, and has announced its intention of seeking membership of the Commonwealth as an independent nation.

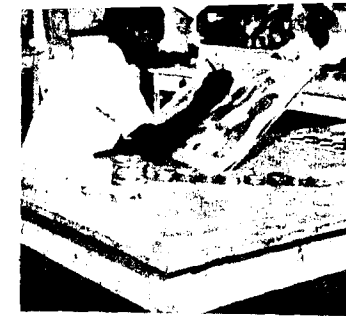


FREETOWN, the capital, has a population of 100,000, which includes many Creoles. The section of the city above shows its characteristic architecture: the roofs are of galvanized iron, to cope with heavy rain which, in Freetown, averages 153 inches a year.

◀ A BRITISH-MADE bus passing the Secretariat—administrative centre—in Freetown. Founded as a home for freed slaves, the city has always had a large measure of self-government.



CHECKING the flow of oil (above) from a tanker discharging at Freetown docks. Right: Students of biology at Fourah Bay College.



ART students work on colour composition at Freetown's Prince of Wales school. Education is the largest item of expenditure.

SIERRA LEONE

moves forward

ON APRIL 27th, 1961, Sierra Leone will become the third of the United Kingdom's West African territories to achieve independence during the past four years.

Ghana was the first, in 1957, and the Federation of Nigeria followed in October 1960. Now comes the turn of a country with a history unique among Britain's dependencies. Sierra Leone consists of a Colony and a Protectorate whose connections with Britain are of quite different origins. The Colony was established by British philanthropists as a home for freed slaves as early as 1787; the Protectorate over the hinterland was not declared until more than a century later.

Through the United Kingdom's policy of working with the local people to construct economic, social and political foundations for self-government, the Colony and Protectorate have become one country which will shortly take its place among the nations of the world. Its government has already made known its intention of seeking admission to the Commonwealth.

Sierra Leone covers 27,925 square miles and has 210 miles of sea coast. At the base of the forested hills of the Sierra Leone peninsula is Freetown, the capital, which has a population of over 100,000 and possesses one of the finest natural harbours in the world.

This city—with its famous College of Fourah Bay, associated with Britain's Durham University—is not only the seat of Government, but also the foremost trade and cultural centre in Sierra Leone, long the home of one of the most advanced communities in West Africa.

The Protectorate area of the new nation comprises three Provinces and covers 27,669 square miles. It is laced by a network of rivers and streams, and ranges from flat, low-lying country with extensive mangrove swamps, to an upland plateau of some 1,500 feet; near the Guinea border, Bintimani peak and the summits of the Tingi range rise to over 6,000 feet.

In the South-West Province the rivers and inlets are lined with coconut palms. In the past the main crop has been piassava—a fibre extracted from raffia palm which is used for brooms and brushes—but the cultivation of rice is being encouraged by the Government. The climate is humid, and over the whole of the plains the rainfall in Sierra Leone averages 100 inches a year.

The Northern Province is a country of great variety and many different peoples. In the hills to the east, round the historic city of Kabala, nomad herdsmen tend herds of dwarf cattle, the only breed that can withstand the disease spread by the ever-present tsetse fly. In the north-west are tidal swamps, and further south the iron ore deposits of Marampa.

The South-East Province is the richest of the three, possessing a suitable climate for coffee and cocoa cultivation, and the extensive diamond deposits.

There are approximately 2,260,000 people in Sierra Leone; the Creoles, descendants of freed slaves, live mainly in the Colony area, and there are many different tribes in the interior. Most of the people grow their own food—rice, palm oil, cassava, millet, maize, sweet potatoes, yams, bananas and plantains, chillies. . . .

[Continued overleaf]



THE ROAD TO INDEPENDENCE

Signposts from the history of Sierra Leone

- 1562. Arrival of Sir John Hawkins, probably the first Englishman to visit the country.
- 1787. Following a decision to create a home for freed, destitute slaves, Granville Sharpe, a leader of the slavery-abolition movement, sent out settlers who founded Freetown.
- 1799. The Sierra Leone Company granted a Royal Charter; Freetown constituted a corporation, with mayor and aldermen.
- 1807. The United Kingdom Parliament made the slave trade illegal.
- 1808. Sierra Leone made a Crown Colony.
- 1811. First unofficial member appointed to Advisory Council.
- 1827. The Church Missionary Society founded the college at Fourah Bay.
- 1876. Fourah Bay College affiliated to Durham University.
- 1924. New constitution, extending the jurisdiction of both Legislative and Executive Councils to the Protectorate: first elections held.
- 1943. Two African unofficial members appointed to Executive Council.
- 1953. Six African ministers appointed.
- 1956. Legislative Council redesignated House of Representatives; franchise extended.
- 1958. Further constitutional advances.
- 1960. Constitutional conference discussed the date for independence.



ABOUT a thousand ships a year call at Freetown, which has a magnificent harbour and handles nearly all of Sierra Leone's import and export trade. Above: The Palm Line cargo vessel *Akassa Palm*, which voyages between London and ports in Europe and West Africa, alongside the Queen Elizabeth II quay at Freetown.

SIERRA LEONE MOVES FORWARD continued from page 15

The Sierra Leone Produce Marketing Board, set up in 1949 to secure the most favourable arrangements for marketing the country's produce and to assist in developing agriculture, is the sole exporter of most agricultural produce. In 1958 Sierra Leone exported 54,609 tons of palm kernels, 3,348 tons of raw coffee, 2,828 tons of cocoa, 98,885 cwt. of piassava, 20,702 cwt. of kola nuts, and 15,785 cwt. of ginger.

The chief industrial exports were diamonds, worth over £7 million; iron ore, 1,421,563

tons, worth £4,490,460, and chrome ore, 11,211 tons, worth £114,847.

A stumbling block to the Government's plans to develop processing industries is a shortage of natural fuel. There is, however, scope for hydro-electric development, and between 1950 and 1958 available power rose from 5.93 million to 21.09 million kilowatts.

The Government assists Sierra Leoneans to enter commerce and industry by providing financial aid through the Development of Industries Board. Some time ago it invited

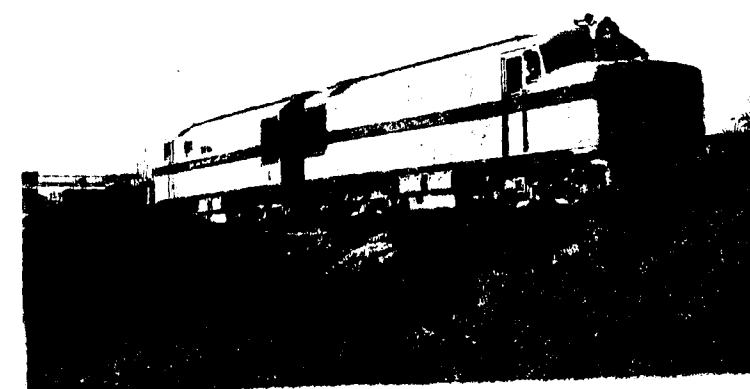
a firm of industrial consultants to carry out a survey of the country as part of the programme to attract capital for industrialisation.

Communications on land are made difficult by densely wooded or swampy terrain, but there are almost 3,000 miles of roads, and a railway connects Freetown with several of the inland centres.

Sierra Leone faces the future with confidence—a relatively small but vigorous and forward-looking independent nation within the Commonwealth.



TWIN power scrapers, like busy insects, gather iron ore from the Masaboin iron mine at Marampa. In 1958 Sierra Leone exported nearly 1½ million tons of crude iron ore worth £4,490,460.



ONE of several modern diesel-electric locomotives in service on Sierra Leone's main line railway. Below: Sierra Leone diamonds—the largest single export. The country produces about a quarter of the world's supply of diamonds, a large proportion of which is sold to Britain for industrial uses.



STUDENTS in the new biology laboratories at the Prince of Wales school. Below: Women's Institute members at a sewing class. In 1958 there were 522 primary and 26 secondary schools in Sierra Leone. Higher education is provided by the University College at Fourah Bay.





THE beauty of Lake Matheson, in Westland National Park, attracts crowds of visitors. Westland, established in 1960, covers 210,000 acres and extends from sea level to 12,000 feet.

NEW ZEALAND'S most magnificent indigenous forest is in Urewera park (454,000 acres) in the North Island. The giant trees which dwarf the figure of a man (left) are typical of the forest, full of animal and bird life.

THE mighty Franz Josef Glacier is a river of ice which grinds its way slowly from the mountains towards Peter's Pool (below) in the Westland park, draining the area around Mount Cook.



NEW ZEALAND'S NINE NATIONAL PARKS

(Continued from page 19)
mountaineers and winter sports enthusiasts. The pass itself was discovered in 1864, ending a search for a short route from the Canterbury plains to the West Coast of the South Island.

Tasman National Park, named after Abel Tasman, a Dutch navigator of the seventeenth century, includes high country stretching inland for six miles. It has many pleasant beaches bounded by steep cliffs.

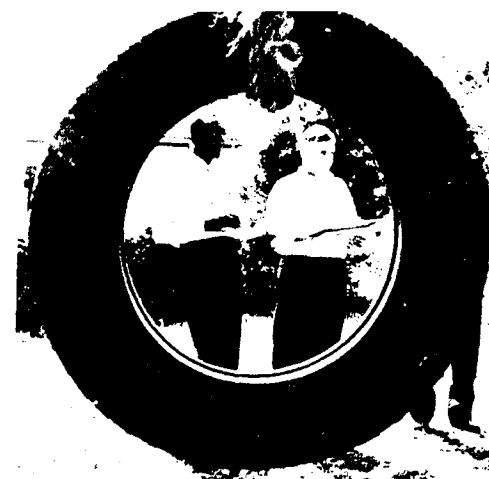
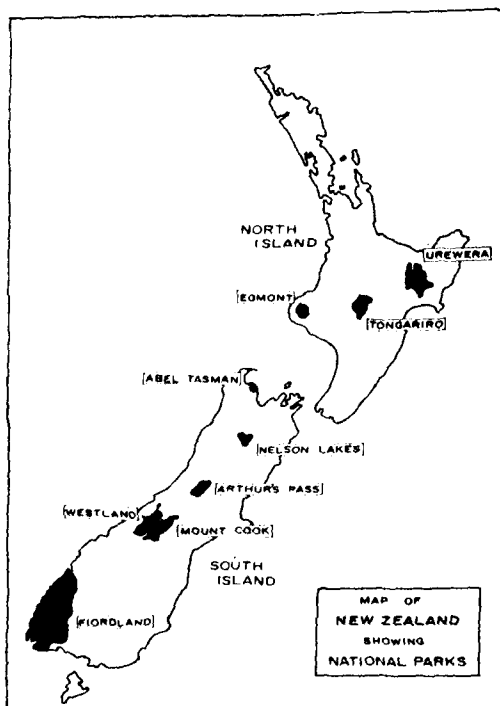
Mount Cook (173,000 acres) includes a glacier 18 miles long, and a mountain, Mount Cook, 12,349 feet high. There is good ski-ing and hunting.

Urewera (454,000 acres) is the second largest park. Its forests include tawa, rimu, matai and rata trees, at the lower levels; and, higher up, red and silver beeches, ferns and shrubs. Bird life is abundant and varied, and there are pigs and deer in the bush. The highway from Wairoa to Rotorua, which passes through the park, provides tourists with a scenic drive of exceptional beauty.

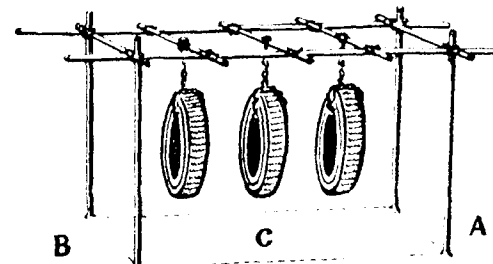
Nelson Lakes contains lakes Rotoiti and Rotorua, and is excellent country for rambling, trout fishing, and water sports.

Westland (210,000 acres) extends from sea level to 12,000 feet, and was the last park to be established.

New Zealanders are proud of their nine regions of lovely "wilderness".



TWO members of the Testing Board note progress. On the right is the Director of the Institute for Education, Mr. Taylor.



THE problem: to move a heavy iron pipe, and a large tin can, from "A" to "B", using the tyres and without touching the ground.



1. The first idea—that one man should work his way through the tyres with a rope—fails. The leader falls into the "chasm" and is considered to have endangered the lives of the others.

Testing for leadership in Ghana

ONE of the problems of newly independent African States is to find sufficient numbers of educated and highly responsible men to fill executive posts.

A method used in Ghana, for selecting men of the right calibre, is called "Testing For Leadership". It consists of setting a group of men a task that can be performed only by a well-planned common effort. To find the right solution to the set problem, and carry it through successfully, demands intelligence, quick wits, and organisational ability, as well as energy and physical skill.

It is essential to rely on one person to take command of the group, but this person is not chosen beforehand—he reveals himself during the test. The examiners give marks to each candidate under a number of headings, and decide from the results the fitness of each man for responsible leadership.

The illustrations show a group of young Ghanaians carrying out one of the tests. The object is for six men to find a way of transporting a heavy iron pipe, and a large tin can, from point "A" (picture diagram above) to point "B", using only the suspended rubber tyres, and ropes.

Another test, not illustrated here, sets the problem of moving a pipe over a "chasm" without the help of tyres, with only a rope.

The groups of candidates are always made up of people who have not previously worked together, and the candidates do not have prepared methods of tackling the problems.

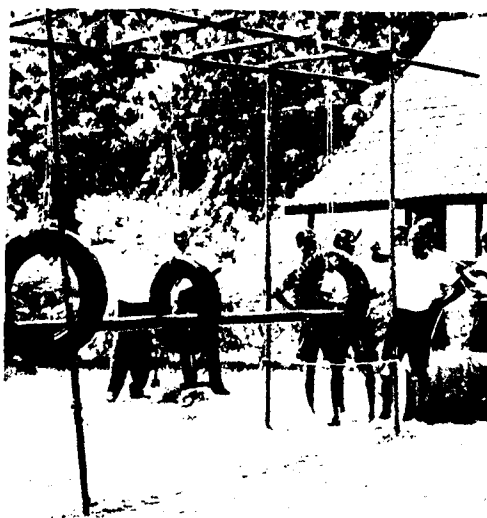
The board of examiners consists of teachers from the Institute for Education, which is a faculty of the University of Accra. Not only students of the University undergo the tests, but many Government employees and others from private organisations take part.



2. Dunyoh, another of the students, thinks hard and then suggests a different method.



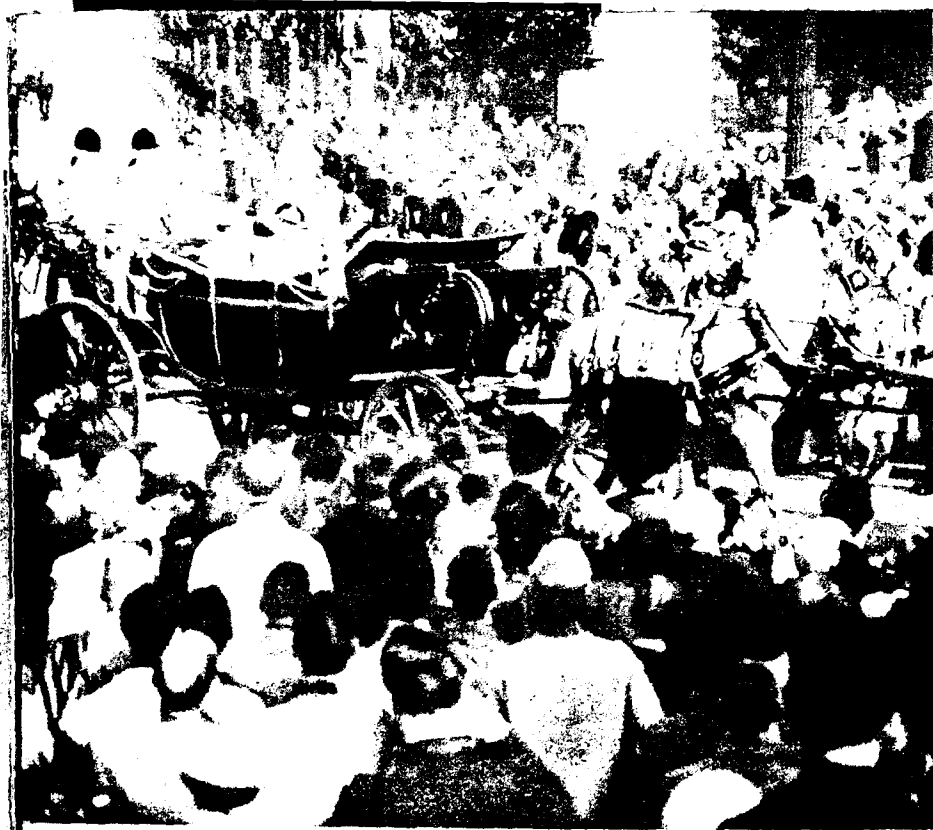
3. His plan is to heave the pipe through all three tyres and use it as a bridge. Will it work...?



4. It looks promising. The pipe has been man-handled into place and Dunyoh has taken command.



5. The tin can is swung across the "chasm". Clearly, Dunyoh has found the right solution to the problem.



CROWDS in London gathered to cheer the carriage procession in which the King and Queen of Nepal travelled to Buckingham Palace. King Mahendra is seen here with Queen Elizabeth. In the second carriage came Queen Ratna with the Crown Prince of Nepal and the Duke of Edinburgh. The Duke of Kent, who had welcomed the royal visitors at Gatwick airport and travelled with them in the train to Victoria station, was in the third carriage with members of the Nepalese royal party.

KING AND QUEEN OF NEPAL IN BRITAIN

THE King and Queen of Nepal, who spent a fortnight visiting centres in Britain after their three-day State Visit in London, received a warm-hearted welcome wherever they went.

In a speech at the State Banquet at Buckingham Palace Queen Elizabeth said that every succeeding generation of travellers, mountaineers and others who had gone out to work together with the Nepalese people had succumbed to the magic of Nepal. In Britain's earliest contacts with Nepal "we learnt to respect your martial spirit and prowess at arms. We have never changed that opinion".

As a symbolic instance of the cordial relations between the two countries since 1815, the Queen recalled the day of her Coronation when she had had "the thrill of hearing the news that one of your subjects, with one of mine from the Commonwealth, had just succeeded in reaching the summit of the world's greatest mountain".

At a luncheon in Guildhall when King Mahendra and Queen Ratna were welcomed by the City of London, the Lord Mayor of London, Sir Edmund Stockdale, recalled "with admiration and gratitude the material assistance afforded to our country by the kingdom of Nepal in two world wars".

The King, speaking on this occasion of the prospects of development and the idea of coming together for the betterment of both countries, added: "Your gracious Queen and Prince Philip are making their first visit to Nepal. You may come along, too, as many of you as possible whenever you can, and see our land for yourselves. We will try to make you feel as much at home as you have made my wife and myself feel over here".

Nepal's relations with Britain have continued unhindered for over a century, and during the State Visit the promotion of King Mahendra to the rank of Field-Marshal in the British Army was approved by H.M. Queen Elizabeth.

AT Buckingham Palace, with Queen Elizabeth and the Duke of Edinburgh are King Mahendra and Queen Ratna of Nepal. On the left is Crown Prince Birendra of Nepal—who is at school at Eton.



SCULPTOR Ronald Moody, from Kingston, Jamaica, with one of his works in concrete, "The Mother", which he exhibited at a London gallery. He also sculpts in wood. Of this aspect of his work a distinguished art connoisseur said: "He carves from blocks of wood with a robust yet delicate chisel, figures and heads of very personal character. How this calm, meditating artist attacks the noble living material, grasping its planes and volumes with the hand of a master, re-echoing the hidden forces of the soul in faces of exotic expression not consciously evoked, is truly extraordinary".



INDUS WATERS SETTLEMENT was reached on the division of the waters of the Indus River system between India and Pakistan. Mr. Nehru, the Indian Prime Minister, received a most friendly reception when he visited Karachi to sign the agreement, which was also signed by Field-Marshal Mohammad Ayub Khan, the President of Pakistan. On the right (above) is Mr. W. A. B. Iliff, one of the three Vice-Presidents of the World Bank (the International Bank for Reconstruction and Development). Under the agreement, India shall, after a period of ten years, have the exclusive use of the eastern rivers of the Indus basin, and Pakistan the exclusive use of the western rivers, with the exception of certain limited uses by India in Kashmir. Storage capacity as well as canals will be constructed in Pakistan to make good the loss of the eastern river water, and the World Bank has secured promises of financial help for this development. The United Kingdom, Canada, Australia and New Zealand have all promised grants; Britain's contribution alone will be worth over £20 million.

PEOPLE AND EVENTS

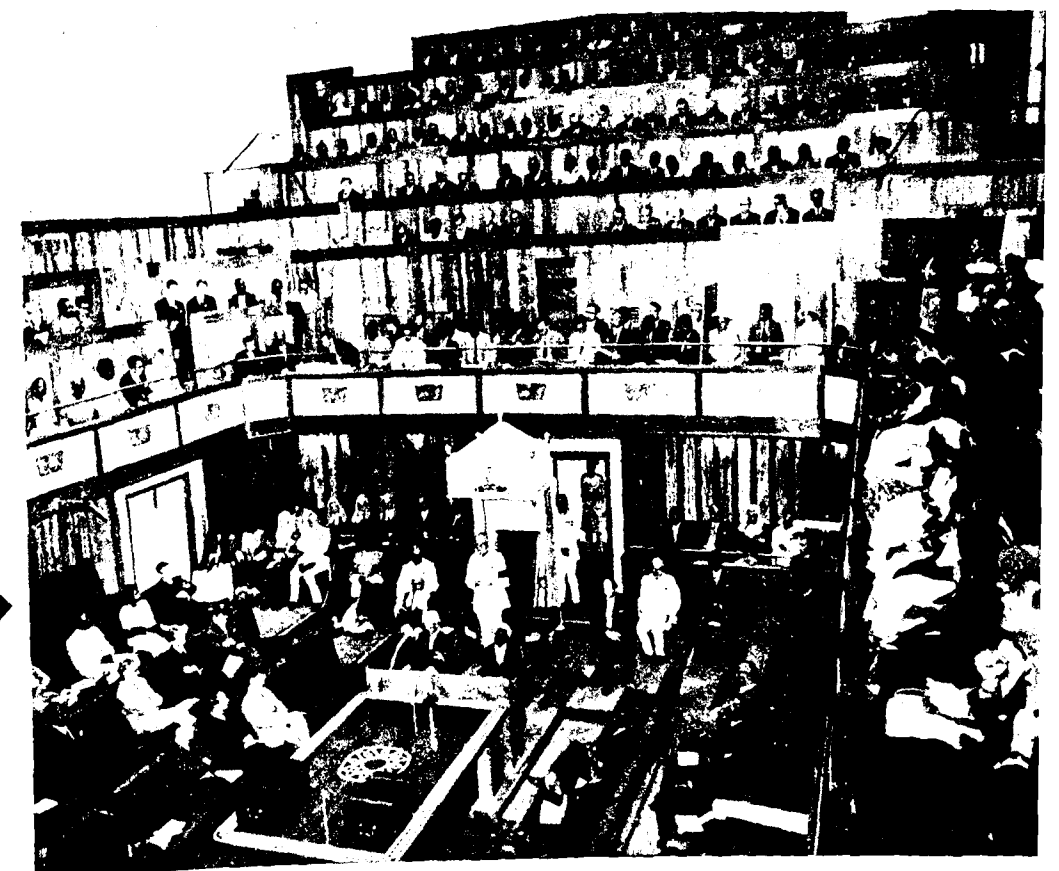


THE PAKISTAN HOCKEY TEAM beat Australia 3-0 in a match (above) at the Olympic Games, and went on to win the gold medal. Commonwealth countries won 55 medals—13 gold, 19 silver, 23 bronze—and relative to population Australia was the most successful competing country in the world. She won 8 gold, 8 silver and 6 bronze medals, and had, in Herb Elliott, the 1,500 metres winner, one of the outstanding athletes of the Games. The United Kingdom won 2 gold medals, together with 6 silver and 12 bronze medals, and New Zealand also had 2 gold medals. Canada, South Africa, India, Ghana, Singapore, and The West Indies, were among the silver and bronze medal winners.



AFRICAN FARMERS in the Native Purchase Areas of Southern Rhodesia have decided to start their own farming magazine, a three-language journal that will reach every one of the 6,000 members of the recently constituted African Farmers' Union. Above (l. to r.): Signing the agreement to launch the journal are the General Secretary of the Union, Mr. I. F. Chipunza; the President and the Editor of Rhodesian Farmer Publications, Mr. A. S. Heale and Mr. J. A. Morrison, respectively; and the President of the Rhodesia National Farmers' Union, Mr. E. B. Evans.

SOME of the delegates to the Commonwealth Economic Consultative Council, which met in London. They are (l. to r.) Mr. D. M. Fleming, the Canadian Minister of Finance; Mr. K. A. Gbedemah, Ghana's Minister of Finance; Mr. Morarji R. Desai, the Indian Minister of Finance; Mr. Selwyn Lloyd, the United Kingdom Chancellor of the Exchequer; and Mr. H. E. Holt, the Australian Treasurer.



INSIDE UGANDA'S new Parliament Building, in Kampala, when the Governor of Uganda, Sir Frederick Crawford, delivered the communication from the Chair. Seated on his left is the Secretary of State for the Colonies, Mr. Iain Macleod. In the foreground are the two dispatch boxes which were presented to the Uganda Legislative Council by the United Kingdom branch of the Commonwealth Parliamentary Association to commemorate the opening of the new building. The General Council of the Association presented the Legislative Council with a specially bound volume of Erskine May's "Parliamentary Practice".

Mainly for Women

ASSORTED TOPICS AND EVENTS



ATIYA HASAN— PAKISTAN PAINTER

Mood and Music Inspire Her Work



WITH four major "one-man" shows behind her, Atiya Hasan is establishing herself as one of Pakistan's most promising young women artists. She has an astonishing variety of styles, all of them seemingly bent on breaking away from the popular conception of oriental art.

In 1960 she held her third and fourth "one-man" shows simultaneously; her paintings were on view at the British Arts Council premises in Karachi, and, in Washington, the Pakistan Ambassador to the U.S.A., Mr. Aziz Ahmed, opened an exhibition of her paintings that had formerly been shown in London at the Royal Commonwealth Society's gallery.

Entirely self-taught, 32-year-old Atiya Hasan did not begin to paint until 1954, and has never been to an art school. Hers are what she describes as "mood" paintings. She listens to music on her tape recorder—Wagner, Dvořák's "New World" symphony, Swan Lake; or Caribbean calypsoes, fiery Spanish zapateados and flamencos—and then she allows herself to lapse into an almost trance-like state in which she paints with fierce abandon and speed.

"I am still experimenting, still feeling my way," she told me. "I've had no formal training, and I wish so much that I had learnt to draw horses and trees and the human form."

But in spite of her obvious weakness in draughtsmanship—or perhaps because of it—she has found a freedom of style that is very rare in Pakistan, a looseness that is difficult to achieve normally. It is all the more remarkable because she seldom uses models; most of her portraits are drawn from imagination or memory, and all show a powerful sense of rhythm and movement and, above all, of colour. She makes a bold and original use of colour combinations, full of vibrant light, that set the mood immediately.

VIGOROUS AND VERSATILE

Inspired by memories and music, Atiya Hasan's subjects are wildly diverse—from formalised, delicate oils and pastels of classical western ballet, to fiercely proud tribesmen from the wild Bugati territory of West Pakistan.

Market scenes in the Karachi bazaars; a fat, smug marmalade cat dozing in the sun; a mother and child, in the minor key of a Greco, with tremendous pathos; a disconcertingly cynical view of a typical society party; a strikingly tender portrait of her small son—Atiya's style seems to change with each painting; yet, linking all, is her skilful use of colour and her vigorous, almost masculine brush strokes.

Atiya was born in South India in 1928; her mother died when she was five years old. She went to some of the famous Indian schools and finished at Madras University.

She and her husband Atta decided to settle in Pakistan. Then in 1950, after their first child, a girl named Sabiha, had polio, the family moved to London.

Back in Pakistan a year later, Atiya had her second child, and it was not until he was out of the baby stage that she began to think about painting.

Intensely feminine, with a tremendous, infectious vitality, Atiya seems to fit in wherever she may be—wearing paint-stained jeans as she scrambles over desert rocks, or appearing at a diplomatic party, wearing one of the many delightful saris and choolis which she designs herself and which are as original as her paintings. She loves experimenting in cooking, particularly Turkish dishes, and is passionately fond of cats.

There is little doubt that Atiya Hasan's career as an artist is only just beginning. That she has a promising future she has already proved by the success of her latest exhibitions.

Sylvia Matheson



Ghanaian Child Care Officials in Britain

FOUR officials of the Ghana Child Care Society paid a visit to the United Kingdom as guests of the Commonwealth Relations Office. They came to see aspects of life in Britain, particularly the network of services concerned with the care of mothers and children in need. They visited the Home Office and the London County Council, heard about the rapidly developing child care work, and after tours in and around London spent a week in Bristol and another week in Cardiff, looking at cottage homes, nurseries, foster homes, family group homes, and approved schools which, in Ghana and some other Commonwealth countries, are known as remand homes. Included in their busy programme were visits to a national children's home and orphanage, a special school for handicapped children, Church Army children's homes, and a big health centre.



Mrs. H. Evans-Lutterodi, one of the four visitors from Ghana, talks with children in a Family Group Children's Home at Basildon New Town, in Essex.



With Mr. C. J. M. Alport, the Minister of State for Commonwealth Relations (second left), are (l. to r.) Mrs. M. A. Quaye, Assistant Matron of an orphanage in Ghana; Mrs. H. Evans-Lutterodi, Executive Member of the Ghana Child Care Society; Mr. P. Carlis-Paitto, the Chairman of the Society and Mrs. P. de Graft-Hayford, another Executive Member.



Mrs. Quaye and Mr. Carlis-Paitto get along well with young children at Basildon, where foster homes are organised by Churches along with the Children's Department of the Home Office.



A visit to the National Children's Homes' own Printing Technical College, where apprentices are trained.

OLYMPIC GAMES WINNERS...



The Marquess of Exeter, a former British Olympic athlete, presents a Gold Medal (left) to Anita Lombrough, aged 19, of Huddersfield, England, after her victory in the women's 200 metres breast-stroke swimming event at the 1960 Olympics. Anita won in the world record time of two minutes 49.5 seconds.

Natalie Steward (right) who was born in Bulawayo, Southern Rhodesia, displays her two Olympic swimming medals—the silver medal (in her left hand) which she won in the 100 metres backstroke, and her bronze medal, won in the 100 metres freestyle.



Credit and Marketing

FLOURISHING CO-OPERATIVES
IN NORTHERN NIGERIA

NORTHERN Nigeria now has about 900 registered co-operative societies, compared with 278 in 1957. It was fifteen years ago that the Co-operatives Division of the Northern Region Ministry of Social Welfare and Co-operatives started the first "thrift and loan" societies to encourage savings among salary earners. Although the idea was successful, and about 100 of these societies still exist, the expansion of normal banking facilities proved a strong counter-attraction and the societies therefore switched to "credit and marketing"—the chief function of the rural co-operatives.

The co-operatives have given valuable help to farmers who were often deeply involved with moneylenders. A total of £1½ million in overdrafts has been approved for the financial year 1960-61—more than double the sum available three years ago. Society members can draw upon the funds to grow more crops, and are expected to repay at the end of each harvesting season. The marketing scheme helps by cutting out the profits of "middlemen" and securing the best possible prices for the members' produce.

Mixed Farming

Apart from direct help to the farmers, the co-operative movement encourages better agricultural planning in the Region. The benefits of mixed farming are emphasised, and farming in general no longer aims at satisfying merely the subsistence needs of the communities.

In the 1958-59 season, 11,000 tons of groundnuts and 1,000 tons of cotton were exported from Northern Nigeria through the societies. The figures for 1959-60 were 20,000 tons of groundnuts and 3,000 tons of cotton, as well as 800 tons of benniseed, and large quantities of coffee, palm kernels, rice, guinea corn, soya beans, and other produce.

The co-operative organisations are supervised by inspectors who, until 1955, received their basic training at the Ibadan Co-operative School in Western Nigeria. Now co-operative courses are run at the Northern Region's Institute of Administration in Zaria. There is also a correspondence course in co-operative book-keeping for inspectors who have not attended one of the normal training courses at Zaria.

Advanced training of inspectors, with a view to fitting them for promotion to Assistant Registrar, is given at the Loughborough Co-operative College in the United Kingdom; and two Nigerian inspectors have been sent to the well equipped Pakistan Co-operative College at Lyallpur.



MOST of the groundnuts sold by co-operatives in the northern part of the Region are sent to Kaduna and stocked in pyramids; later, they are sent by rail to the coast for shipment overseas.



A CO-OPERATIVE official, Malam Shehu Abbas, advises members of Zonkwa (Zaria Province) Society how to make the best use of their pre-season loans, which they must repay at the end of the harvest.



KURAMI (Katsina) Co-operative Society buys cotton from members. In the 1958-59 season, 11,000 tons of groundnuts and 1,000 tons of cotton were exported from the Region through the societies.

RESEARCH FOR INDUSTRY

The Scientific Work at Britain's National Physical Laboratory

RESEARCH plays an essential part in modern industry. The superb quality of a very wide range of British products is the result of not only the traditional skills used in their manufacture but also of intensive scientific research. In addition to the many research centres which manufacturers themselves maintain, Britain has one of the world's most up-to-date research establishments in the National Physical Laboratory at Teddington, on the outskirts of London.

The purpose of the Laboratory was, in the first place, to establish a public institution "for the standardisation and verification of instruments, the testing of materials and the determination of physical constants". The latest development stemming from these terms of reference has been the achievement by the Standards Division of the first practical atomic standard of frequency, more popularly known as the "atomic clock".

Although the Laboratory serves as the national centre for standards, it is more than this; it has also achieved a world-wide reputation for

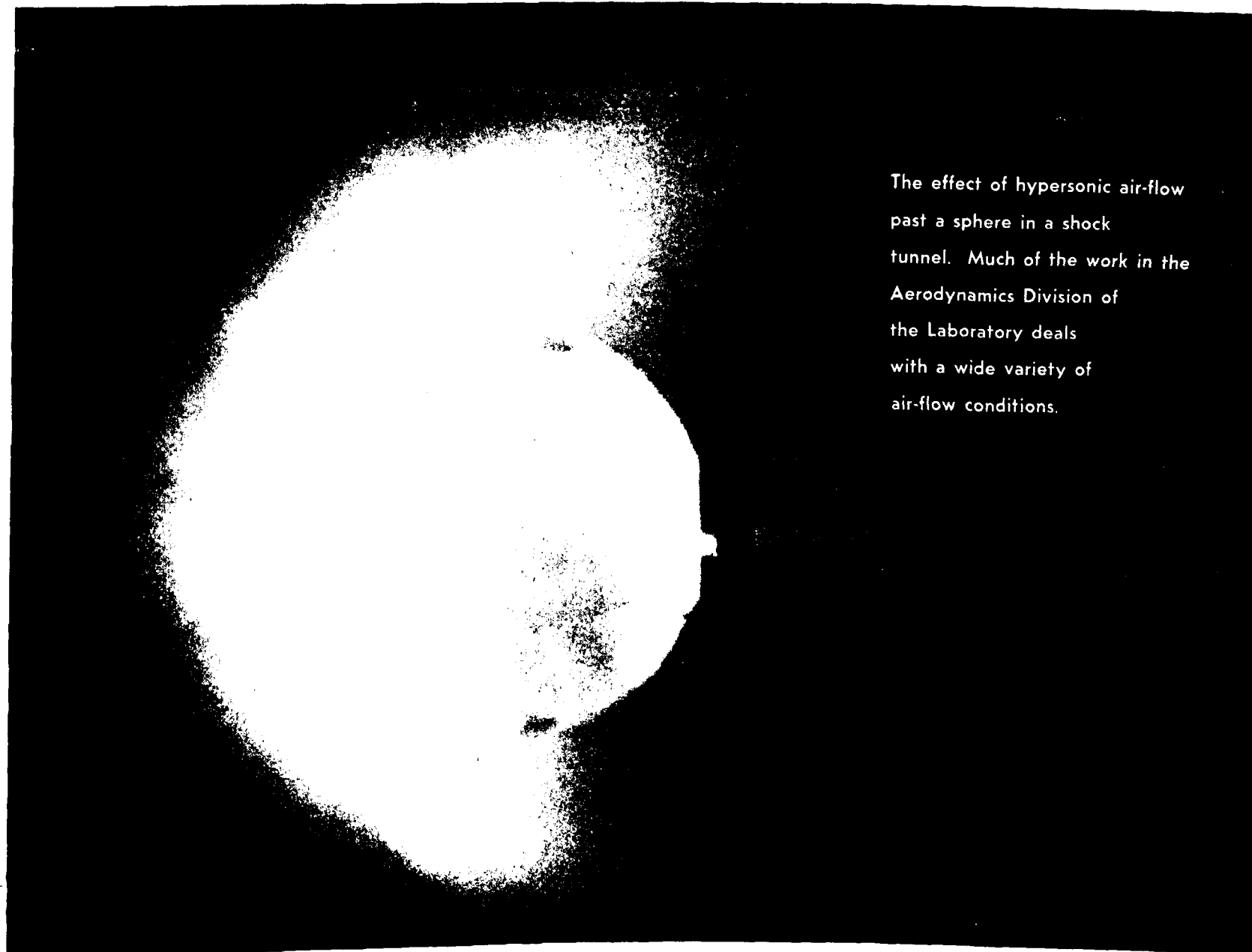
research into fundamental and applied physics, carrying into action the words of the late King George V (at that time Prince of Wales) who, at the official opening of the Laboratory in 1902, said:

"The object of the scheme is, I understand, to bring scientific knowledge to bear practically upon our everyday industrial and commercial life, to break down the barrier between theory and practice, to effect a union between science and commerce."

Shortly after the Government's Department of Scientific and Industrial Research was created in 1917, financial responsibility for the National Physical Laboratory was transferred to that body. The scientific programme, however, is determined by an executive committee appointed by the Royal Society which, with the British Association for the Advancement of Science, was responsible for the original decision made in 1898 to create the Laboratory.

Many top-ranking Commonwealth scientists, delegates to the recent Tercentenary Celebrations of the Royal Society, were able to pay a

[Continued overleaf]



The effect of hypersonic air-flow past a sphere in a shock tunnel. Much of the work in the Aerodynamics Division of the Laboratory deals with a wide variety of air-flow conditions.



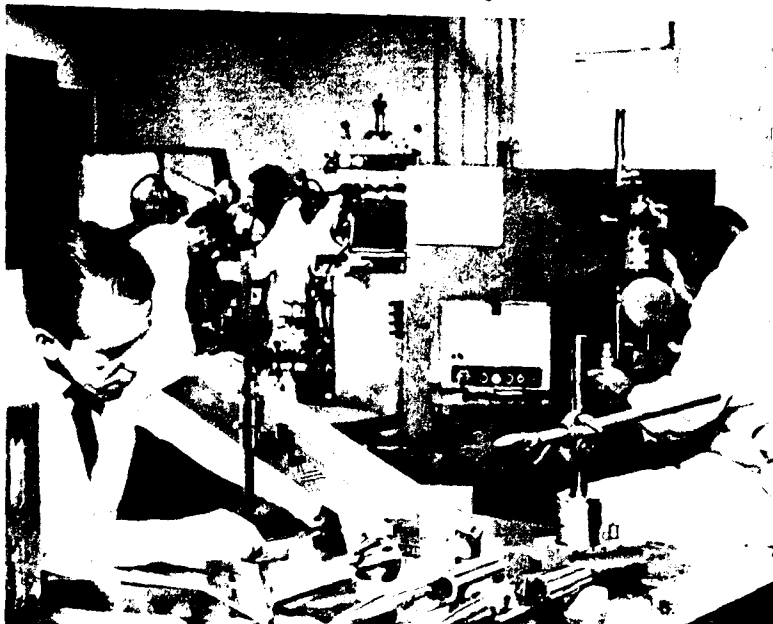
RESEARCH FOR INDUSTRY

BUSHY HOUSE, a Royal residence which, in 1900, was granted by the Crown for the founding of the National Physical Laboratory.



A MODEL fixed under the carriage in the great towing tank at the Ship Hydrodynamics Laboratory, Feltham. By this means studies can be made of the ship's motion at controlled speeds and in following seas.

IN the Aerodynamics Division—part of the model shop for the high-speed wind-tunnel. In the foreground are some models.



visit to this Laboratory and see how successful has been the experiment in which government has participated in scientific and industrial research.

They learned, among other things, that the Laboratory had formed a nucleus from which have developed several of the 15 stations of the Department of Scientific and Industrial Research. Two of these stations began life as divisions of the Laboratory.

The present Director of the Laboratory, Sir Gordon Sutherland, is a Fellow of the Royal Society, as were the five directors before him. They were Sir Richard Glazebrook 1900-19, Sir Joseph Petavel 1919-36, Sir Lawrence Bragg 1937-38, Sir Charles Darwin 1939-49 and Sir Edward Bullard 1950-55. Furthermore, about 20 members of the staff have been elected to the Fellowship of the Royal Society at various times since 1900, all of which is an indication of the very high standard of work carried out at the Laboratory.

The tradition of pioneering the application of physics to a wide variety of practical problems began under Sir Richard Glazebrook.



SIR GORDON SUTHERLAND, F.R.S. (far left), Director of the National Physical Laboratory, and Dr. G. G. Macfarlane, the Deputy Director. The Laboratory has a staff of about 1,100, organised under ten divisions.



THE automatic computing engine (ACE), a large, very fast electronic digital computer designed by the Autonomics Division and now a tool of the Mathematics Division.

It was at the Laboratory that radar was born; the originator, Sir Robert Watson-Watt, was Superintendent of the Radio Division when he wrote his report from which came all the early developments.

The Aerodynamics Division has for long played a leading part in our understanding of the problems connected with subsonic, transonic and supersonic flow over aerofoils. The Mathematics Division provides a computing service for government departments and industry.

The first digital computer to offer a computer service to industry was built there—the pilot model ACE. An engineered and improved version of this, the DEUCE, is now extensively used in Britain and abroad. The new ACE is a powerful mathematical tool used to further research projects needing complex computations.

Having done its pioneer work in constructing digital computers, the Autonomics Division of the Laboratory is moving into newer fields. The main work in this division is to devise automatic ways of carrying out massive and tedious tasks in industry and commerce and to develop adaptive machines—the name given to the new kinds of computers which will learn from experience. One section of this division is working on mechanical language translation—from Russian to English—and automatic character recognition.

The Metallurgy Division has long been recognised as one of the finest metallurgical research stations in Britain. The Ship Division has provided invaluable service to the shipbuilding industry by its work on hull forms and propeller design. With its magnificent facilities at Feltham, recently opened by H.R.H. the Duke of Edinburgh, it has begun an ambitious programme of research on the problems of “sea-kindness”—reducing the unkindly motions of ships in rough waters.

It is not uncommon to find that work begun in the Laboratory because of its value to basic science turns out to have extremely valuable applications to industry. An example of this occurred when studies in the Light Division on a new way of producing diffraction gratings were applied very successfully to machine tool production and control.

The National Physical Laboratory's growing list of publications, issued periodically and obtainable from H.M. Stationery Office or through booksellers, shows how diverse is the work carried out at the laboratories at Teddington. Such work is not only of high intrinsic value to today's scientists but is also of interest to all those who want to know something of the way modern scientific research is applied for the practical good of people.

THE atomic clock, which gives a frequency and time interval accurate to one second in 300 years. Dr. Louis Essen, F.R.S., looking at the clock, was responsible for the research leading to its development.



TRADE WINDS Commonwealth Industrial Notes

A British company is to market a series of Hover-trucks—robust commercial vehicles, the first of which will carry a payload of five tons, based on the principle of the early Hovercraft.

Simple controls will make them almost as easy to drive as any ordinary truck and they will be no more difficult to maintain. They will be capable of being used over land, water, marsh or broken ice or along rough ground in undeveloped areas. A patented system of control and propulsion will give the truck—known as GERM, Ground Effect Research Machine—considerably greater degree of manoeuvrability, both while hovering and at speed, than has so far been achieved by any other “ground effect” vehicle.

Ghana Aluminium Products Ltd. proposes to install a £1 million aluminium rolling mill, which will eliminate the need to import many semi-fabricated aluminium products into Ghana, and will employ over 200 Ghanaians.

In 1959 Canada maintained her position as the fourth trading nation of the world, after the United States, the United Kingdom and Germany. The value of her exports reached a new record of 5,179,600,000 dollars, and imports were valued at 5,654,000,000 dollars.

India's Third Five-Year Plan (1961-65) calls for a total investment of £7,650,000,000 compared with £4,862,000,000 invested in the Second Plan. Its principal aims are a 5 per cent a year increase in national income, self-sufficiency in food, and rapid expansion of basic industry. About £1,288,000,000 will be spent on agriculture, including irrigation works, and about £1,154,000,000 on industry and mining.

The United Kingdom still provides nearly one-third of all overseas investment in Australia, and United Kingdom concerns of various kinds have over 500 branches there.

Ten diesel electric locomotives, worth nearly £1 million, are being built at a north of England works for the East African Railways and Harbours Administration, an order obtained against strong foreign competition. The locomotives weigh 97½ tons, have a maximum output of 1,840 h.p., and will be able to haul 700 tons at 45 m.p.h. on level tracks, and at 15 m.p.h. on steep gradients at altitudes over 9,000 feet.

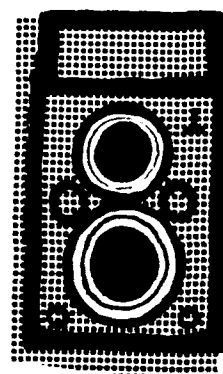


A London firm is to prepare a detailed investigation and report for a projected drainage and sewerage scheme in the suburbs of Colombo, capital of Ceylon.

Industry in Hong Kong is still expanding, but the Colony continues to rely very largely on textile and garment production, which comprises 42 per cent of Hong Kong's exports.

Britain's census on 23rd April, 1961, will be the fastest yet because of a remarkable computer which will be one of the largest in England. It will have a “fast access” store of 40,000 characters and a supplementary store of 60,000 characters on a magnetic drum. It is estimated that about 20,000 separate checking actions would be needed in an average sized district of 650 people, and the computer would complete these and query any errors in about 20 seconds. The first provincial report of the census will be out in two months.

Trade between Singapore and Australia rose in value in 1959 by 16.4 million dollars to 234.6 million dollars. Singapore's exports to Australia accounted for most of the increase, rising by 11.2 million dollars because of Australia's growing demands for rubber.



Readers' Pictures

This is a further selection of pictures from our readers. They are invited to send in photographs which they have taken themselves. A fee of a guinea will be paid to the owner for each published picture. Please write captions and addresses in ENGLISH on the backs of the prints. Photographs will not be returned unless specially asked for.



MATHURA MAIDEN. The Mathura women of Andhra Pradesh, India, wear colourful and heavy garments, laden with ornaments.
From S. V. Satyanarayana, J/83 Ramgopal Pet, Secunderabad, Andhra Pradesh, India.

SPRING! This picturesque scene in Lahore, West Pakistan, was photographed in the early morning light.
From Mohammad Afzil Minhas, B/125, Pura Hairan, Sialkot City, West Pakistan.



HOME FROM THE MARKET. Bajau men of North Borneo return home on their kerbau (buffalo) after attending the weekly market.
From G. R. Wells, c/o P.W.D., Jesselton, North Borneo.



SAND AND SUN. Camels herded in a desert region of Kenya.
From W. Ochieng, C.M.S. Maseno School, P.O. Maseno, Kenya.



LONG BOAT. Two students use a dugout to explore the marshes of a lake in South Ceylon. When fitted with an outrigger, the craft can also be used for sailing.
From T. P. G. Wijepala, 64/32 Sangamitta Mavata, Colombo 13, Ceylon.



CARNIVAL IN TRINIDAD. A Carnival warrior in his chariot.
From Kristendath Ramkissoon, Mohess Road, Penal, Trinidad, The West Indies.

BIRDS' NEST. This huge birds' nest in arid bush country in South Africa is the home of hundreds of finches. Wild parakeets also nest here in perfect harmony. The nest is deserted during the day.
From A. Solomon, Box 156, Bulawayo, Southern Rhodesia.

RECORDS WHILE YOU DRIVE. A new fully automatic record player with two-button control enables motorists to play records while they drive. Possible disturbance on bumpy roads has been overcome by coupling the turntable assembly to a balancing system employing three springs and a rubber pad, and two steadying weights, attached to the underside of the assembly. Tests have shown that with this system, even on the roughest roads and most difficult hills, at any speed and during the sharpest turns, the player's diamond "stylus" pick-up stays in the groove of the record, and reproduction maintains its quality.

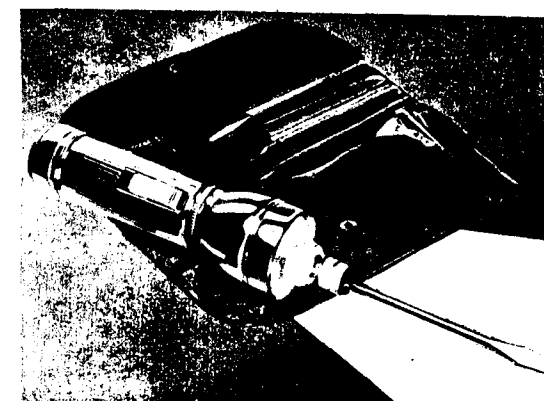
NEW COLLATING MACHINE. This new, easily worked machine is able to collate up to six sets of duplicated or printed material automatically. The backs of the plates which form the trays are concave so that the paper is easily manipulated. There are six "feed fingers", one for each tray, each tipped with a sorbo grip which rests lightly on the top sheet of each stack of paper and lifts it clear for easy gathering.



GH CARRIER. This "Shorland Straddle Carrier", seen making the acquaintance of a giraffe, has been specially designed for carrying between its "legs" such items as timber, pipes, rods, bars, boilers, tanks, bricks and paper reels. It is ideal for use over rough ground.



UNBREAKABLE. Fifty-gallon drums that can be bounced from a lorry but will not break are now being made in Britain from rayon coated and impregnated with Hycar nitrile-rubber. They can easily be folded for storage.

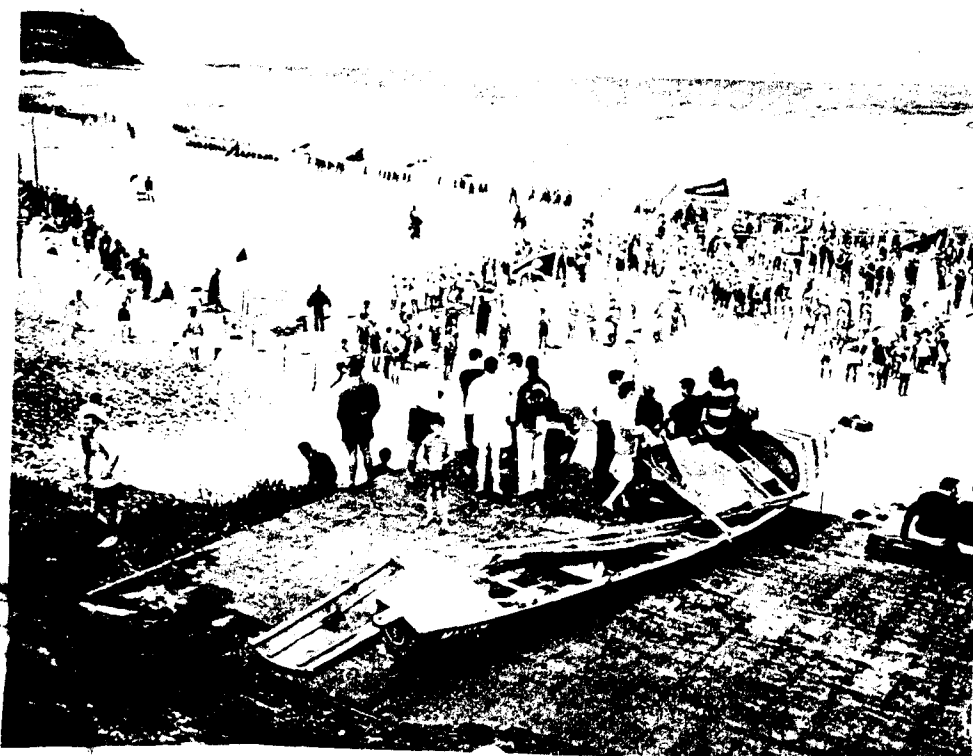


FLASHLIGHT SCREWDRIVER. Handymen no longer have trouble when they have to use a screwdriver in dark constricted places or at night. Instead of holding a torch in one hand and the screwdriver in the other, they can go to work with a combined-screwdriver torch, called the "Sunrise light-driver". It enables illuminated screwing to be carried out one-handed.



BRAWNY Australians in surf boats defy Pacific breakers of tremendous power in the annual Surf Championships. About 1,500 amateur life-savers enter.

AUSTRALIA'S SURF CHAMPIONSHIPS



WITH flags flying, the life-saving teams parade on the beach. In the 1959-60 summer season highly trained volunteers saved 5,520 people from the sea on Australian coasts, of whom 2,600 were brought in with life lines, 2,540 without them, 150 by surf boats, and 230 with various other gear.

HUGE seas roaring in from the Pacific Ocean brought thrills to swimmers and boat crews in the 1960 Australian Surf Championships, held at Merewither Beach, near Newcastle, a major steel-producing city on the east coast of Australia.

The carnival is the biggest and most colourful of many such events held each summer. It attracted six inter-state and 24 club teams, a total of 1,500 of the 17,000 volunteer life-savers who patrol Australian beaches during the long swimming season—October to April on southern and east coast beaches, but almost all the year round in the sub-tropical and tropical north.

Volunteer life-saving in Australia began at the turn of the century. In 1909 there were eleven clubs; today there are 212 life-saving clubs with a membership of 19,000 and in 53 years over 120,000 people have been saved from the sea.

Australian life-saving methods have spread to many countries, and clubs on similar lines have been started in Britain, Canada, New Zealand, South Africa, Pakistan, Ceylon, Singapore, The West Indies and West Africa.