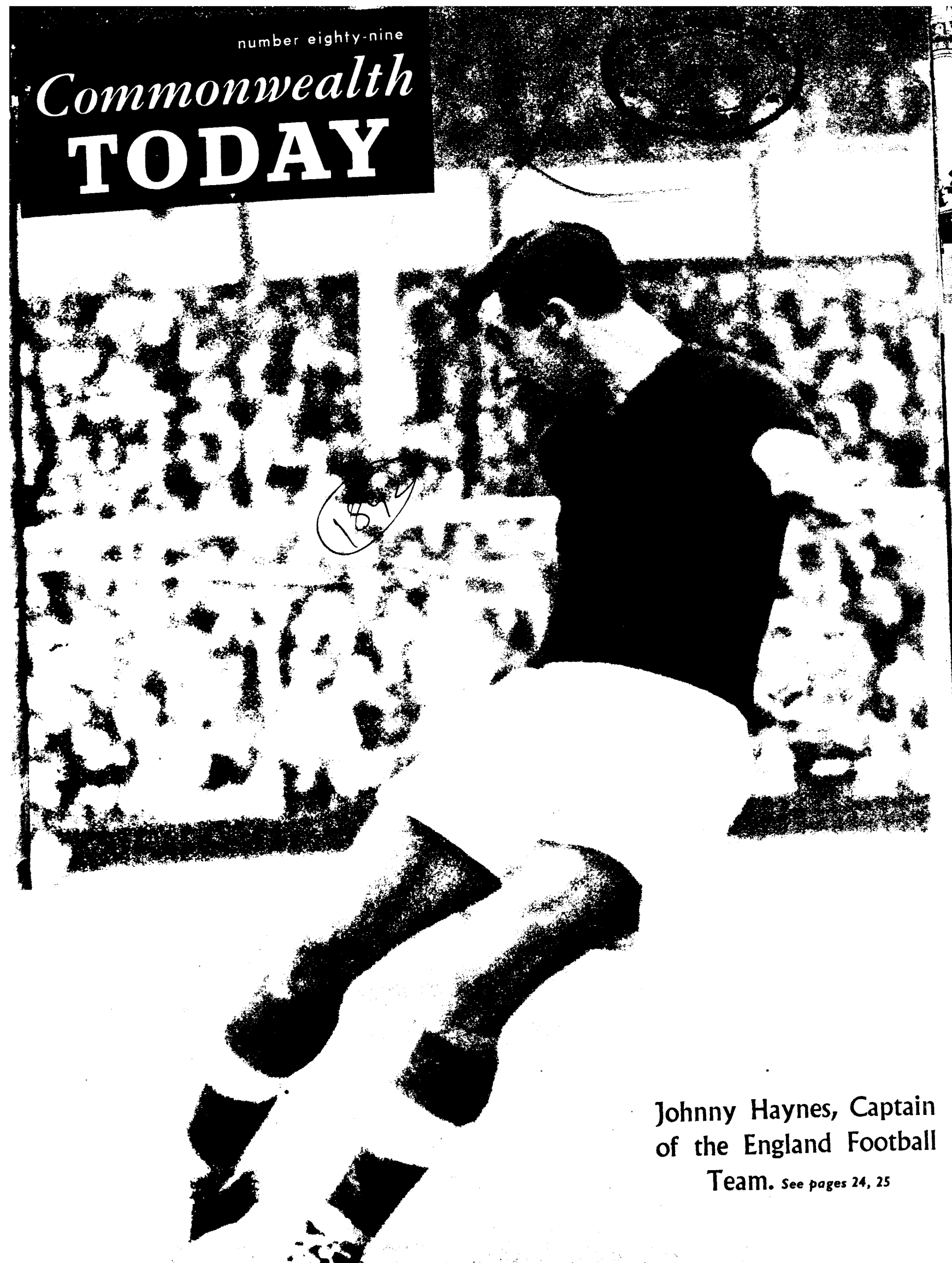




Johnny Haynes, Captain
of the England Football
Team. See pages 24, 25

Commonwealth TODAY

Presenting the Commonwealth and the World

NUMBER NINE

123801

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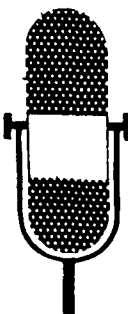
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Speaking of the

Commonwealth



THE new home of the Commonwealth Institute, now taking shape in London, "will provide convincing and timely evidence of the importance and vitality of the Commonwealth and all it stands for".

These words were spoken by the Director of the Institute, Mr. Kenneth Bradley, in a talk at the Royal Commonwealth Society. The Institute, whose new premises are expected to be opened towards the end of October 1962, was dedicated, he said, to spreading knowledge and understanding of each other among millions of men, women and children who belonged to a great family; it was in the vast network of personal relationships between men and women that the real strength of the Commonwealth was to be found.

The new building, Mr. Bradley continued, would be the only building in the world to represent friendship and mutual understanding, social and cultural links between the peoples of the Commonwealth.

Inside there will be a permanent exhibition, illustrating the life, scenery, economy and institutions of all the Commonwealth countries. There will also be a cinema, equipped with a stage, which could be used not only as a lecture platform but also as part of a theatre which would become the home in London of music, ballet, and drama from the Commonwealth countries. The art gallery would similarly become the home in London for all that was best in Commonwealth drawing, painting and sculpture.

Mr. Bradley also gave details of other features of the Institute—studios for making exhibits and a special children's "kingdom", in which there would be a classroom for handling and inspecting products, and arts and crafts from Commonwealth countries, and a comprehensive library.

The British Government was contributing £600,000 towards the cost of the Institute and generous gifts had also come in from other Commonwealth countries, such as copper for the roof from Northern Rhodesia, aluminium from Canada, and furnishings for the vast reception room from India, while nearly all the timbers had been given by Canada, Australia, New Zealand and Commonwealth countries in Africa.

The new Commonwealth Institute—in Kensington High Street, south of Holland Park and adjacent to Holland Walk—will indeed be a fitting expression of that co-operation and friendship which are the essence of the Commonwealth association.

More and more Commonwealth students—particularly postgraduate scholars and academic staffs of Commonwealth universities carrying out research into the social sciences and history of the Commonwealth—have been making good use of the facilities provided at the Institute of Commonwealth Studies of the University of London.

This Institute, which was established in 1949 to promote the advanced study of the Commonwealth, has also attracted scholars from countries outside the Commonwealth. For example, members of the American Economic Co-operation Administration, while on their way to Africa, visited the Institute for a "short course" on African problems. The Director of the Institute, Professor Kenneth Robinson, is an authority on African politics and government.

Postgraduate seminars held by the Institute have been attracting a growing number of scholars. Some of the subjects of the seminars: the recent history of the Commonwealth; political institutions in the new States in the Commonwealth; the social implications of technological change in the Commonwealth, with special emphasis on land reform and land settlement; African history and pan-Africanism.

One field in which the Institute has been of special assistance is that of census-taking. The Secretary of the Institute, Mr. T. E. Smith, formerly of the Malayan Civil Service, is a demographer by profession, and during the past year officers appointed to conduct censuses in Nigeria and the Gambia have each spent a month at the Institute studying under his guidance.

Another important centre for Commonwealth studies in Britain is in Queen Elizabeth House, Oxford. This is a residential centre, extensions to which were opened by Britain's Prime Minister, Mr. Harold Macmillan, Chancellor of Oxford University.

Having completed a five-year plan of building, the organisers believe that Queen Elizabeth House will now be able to follow the aims of its charter more fully. One of the aims: to encourage a study of matters affecting the Commonwealth overseas by providing a centre where people of standing in their own country can have access to the academic resources at Oxford University.

The establishment of Queen Elizabeth House was made possible by a gift of £100,000 from Sir Ernest Oppenheimer in 1954 and a Government contribution of £50,000 from the Colonial Development and Welfare Fund. Extension funds amounting to about £76,000 were contributed mainly by British companies with Commonwealth interests and those who sought to benefit Commonwealth relations.

The Warden of Queen Elizabeth House is Australian-born Mr. L. C. Wilcher, a Rhodes Scholar and a former Dean of Trinity College, Melbourne; and the sub-Warden is Dr. Tom Soper. During the years in which Queen Elizabeth House has been open, students from all Commonwealth countries have been housed there while they have studied and examined Commonwealth problems with experts.

Representatives from Commonwealth countries will meet at Montreal in Canada, between 13th May and 6th June, 1962, for the second Duke of Edinburgh's Study Conference. The first Conference, held at Oxford in 1956, was attended by 277 members.

It is expected that over 260 representatives will attend the Montreal Conference. The team from Britain, of 40 men and women, were selected by a committee of industrialists and trade union leaders from over 120 nominations by employers' organisations, trades unions, nationalised and private industries.

H.R.H. the Duke of Edinburgh will preside over the conference. At the closing sessions there will be presentations of reports and exchanges of opinions among the representatives, most of whom are, or will be, selected as being persons who are likely to occupy positions of responsibility in industrial and labour organisations.

COMMONWEALTH TODAY SOUVENIR ISSUE



THE ROYAL VISIT TO GHANA

Strengthening the Commonwealth's Ties of Friendship

H.M. THE QUEEN drives to Cape Coast through gay streets with President Nkrumah of Ghana to attend a Grand Durbar of Chiefs of the Central Region.





SPEAKING at a State dinner given in her honour, the Queen said that Ghana's membership of the Commonwealth gave expression to "the very real affection which I believe exists between Britain and Ghana, and which is now the main link between our two countries."

MANY thousands of friendly Ghanaians assembled at the airport in Accra to give a typically warmhearted welcome to Her Majesty Queen Elizabeth II and H.R.H. the Duke of Edinburgh. It was there, amid the thunder of a 21-gun salute, that the Queen first set foot on Ghana's soil at the start of her 12-day tour.

The Royal couple were met at the foot of the aircraft steps by President Nkrumah, who, in his speech of welcome, referred to the Duke of Edinburgh's visit to Ghana two years before. The Queen expressed her earnest hope that her visit would "help to show the world that Ghana attaches importance and value to her membership of the Commonwealth".

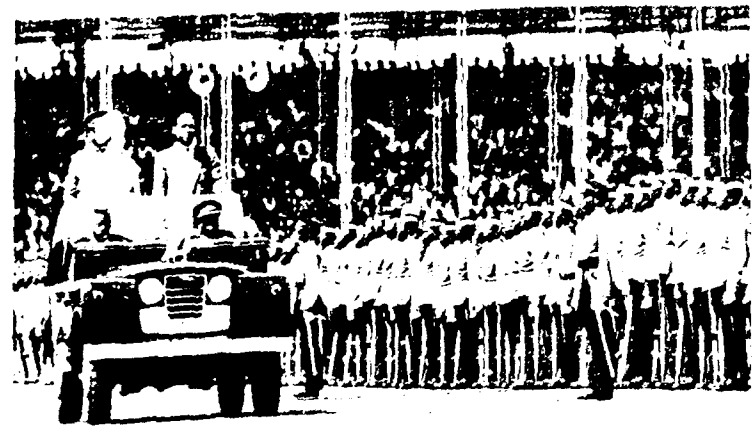
It was indeed a Commonwealth occasion. Flags of the Commonwealth countries were flying at the airport, and banners, crests, and portraits of Commonwealth leaders lined the main streets. As the Queen drove from the airport accompanied by the President, the crowds who filled the pavements and waved flags from windows and balconies, cheered a warm welcome.

The Queen spent the night at Government House, Osu—formerly Christiansborg Castle—and the next day she inspected contingents of

Continued on page 6



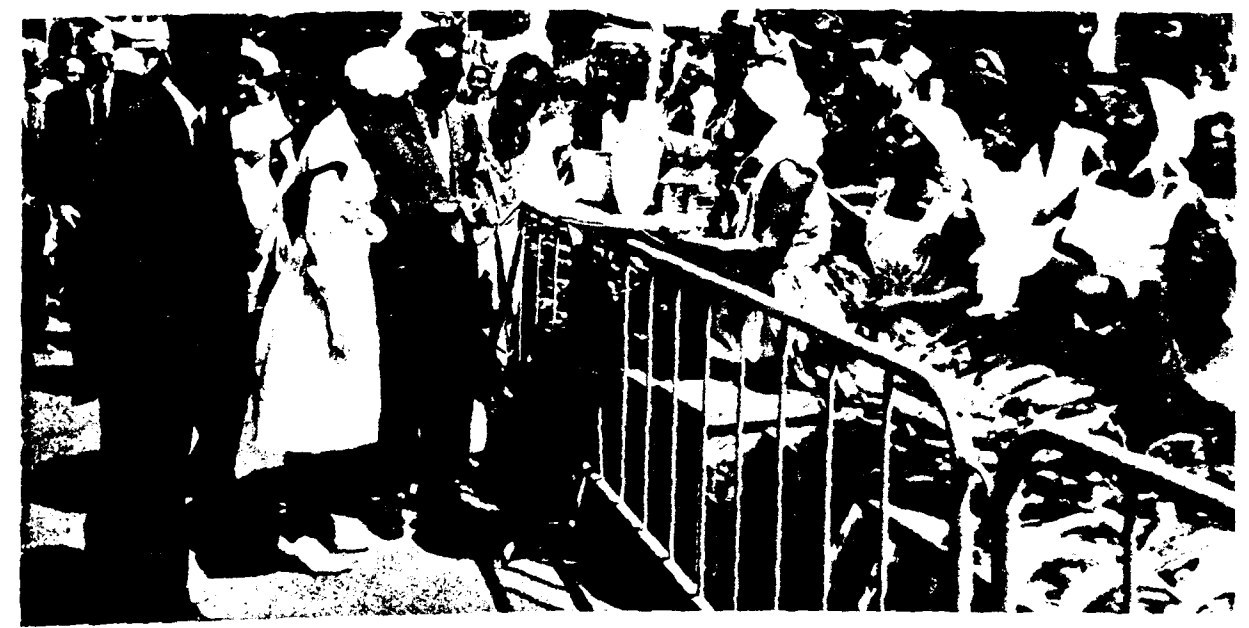
AT ACHIMOTA School, near Accra. With the Royal visitors is the Headmaster of the school, Mr. D. A. Chapman. Below: The Queen with President Nkrumah at a Day Nursery.



ON THE second day of her visit the Queen inspected men of Ghana's modern armed forces, and contingents of policemen, in Black Star Square, Accra. A crowd of 100,000 watched the march past.



IN KUMASI the Queen attended a Durbar (above) of Ashanti chiefs. She also visited the Central Hospital and the Kwame Nkrumah College of Science and Technology, symbol of the modern Ghana.



THE QUEEN pauses with President Nkrumah in Accra's market place. The stallholders are about to present the Queen with a wooden tray and eating and drinking utensils as souvenirs of the visit to Ghana.



A ROYAL greeting for one of the guests at a garden party at Government House, Osu—formerly Christiansborg Castle—which was the Queen's home in Accra. Later there was a reception for the Diplomatic Corps.

H.R.H. the Duke of Edinburgh talks with a group of admiring girl students at the University of Ghana, Legon, which he visited with the Queen. It was his second visit. . . . The first was during his individual tour of Ghana in 1959, when he addressed a special Convocation at the University.



Continued from page 4

Ghana's Forces and police in Black Star Square. That evening she attended a State Dinner given in her honour by the Ghana Government, and told the guests: "I may not have been here very long but I can already feel the energy and sense of purpose of this vigorous nation."

Talking of the Commonwealth the Queen said: "We know it as a group of equals—a family of like-minded peoples whatever their differences of religion, political systems, circumstances, and races, all eager to work together for the peace, freedom, and prosperity of mankind. We know, too, that in this family group no member loses one jot of its own sovereignty or individuality."

The Queen continued: "One of the great features of any family association is that it is not based upon some rigid set of rules. It derives its strength from the respect and affection which members have for each other. This allows a wide degree of disagreement and intelligent discussion. I think it is of the greatest importance that we should remember this within the Commonwealth family."

Membership of the Commonwealth, she said, gave a most practical and eloquent expression to the changed relations between Britain and Ghana. "It is a positive acknowledgment of equality, and it also gives expression to the very real affection which I believe exists between Britain and Ghana, and which is now the main link between our two countries."

"As you seek to build a better life for all, and as you harness the resources of the modern age to your chariot of progress, you will have with you the great spiritual traditions of your country—respect for the chief, the essential democracy of your family and social system—and you will be sustained by the innate gaiety and zest of your people."

Eventful Days

Gaiety and zest. This was evident on every hand as the Queen carried out her crowded programme. In one morning, on the third day of her visit, she watched a regatta at Accra Harbour, attended a reception given by the Ghana Council of Women at the Y.W.C.A. Hostel, and visited the Queen Elizabeth II Day Nursery and Makola Market. One of the most moving moments came on the following day, a Sunday, when she attended a Remembrance Day service at the war memorial in Black Star Square. When the Queen, dressed in white, walked the 50 yards from the dais to the memorial, it was already dark. Two spotlights shone on her; and as she laid the wreath on the memorial, and bowed before the statue of a Ghanaian soldier, cheering broke from the crowd.

The Queen and the Duke went to Tamale, in the north of Ghana, where they attended a Durbar of Chiefs from the Northern and Upper Regions of the country. In a predominantly Muslim community the Queen was welcomed by the Paramount Chief of the

Dagomba, who presented her with an elephant's tusk. Then amid much merriment the Tumu-Koro of the Upper Region placed a hat of flapping leather tongues and thongs on the Duke of Edinburgh's head. A variety of other presents were given to the Queen and the Duke—some of them intended for the Royal children, back home in England. They included carved stools, native spoons, a xylophone, and a tom-tom.

In Kumasi the Queen visited the Central Hospital, attended another Durbar—of Ashanti Chiefs—and saw the Kwame Nkrumah College of Science and Technology. The tour had now reached its half-way stage, and was already being acclaimed on all sides as a brilliant success.

The Royal programme included a visit to Tema, where a huge artificial harbour is being built, and to the site, at Akosombo, of the projected Volta River Dam. Already about £4,000,000 has been spent on preliminary work and surveys, and when the dam is complete it will incorporate a power house which will generate more than twenty times all the electric power now generated by the electricity department.

The day before the Queen left Ghana she attended morning service in the Holy Trinity Anglican Cathedral, Accra, and was present at a lavish fireworks display in Black Star Square.

The Queen and the Duke left Ghana's shores at Takoradi, where they boarded the Royal yacht *Britannia*. The correspondent of

"I may not have been here in Ghana very long, but I can already feel the energy and sense of purpose of this vigorous nation"—H.M. the Queen at a State Dinner



THE QUEEN dances with President Nkrumah at a farewell ball given in her honour at the State House. Prince Philip is dancing with Madame Fathia.

the London newspaper *The Times* wrote in his report: "One of the grey work-a-day wharves was transformed into a rainbow scene for this national farewell ceremony, the culmination of the Queen's 12-day visit. Immaculate ranks of sailors were lined up, the corners of a red-carpeted dais were held by cavalymen with scarlet tunics, striped yellow pillbox hats and tall lances, and the chiefs were as splendid as ever, weighted down with their ornaments of gold under the gaudy canopies of their state umbrellas."

In her farewell speech the Queen said she had been deeply touched by the welcome she had received, and thought that it demonstrated the value which Ghana, in common with other members of the Commonwealth, attached to their unique association. Ghana, as the senior African independent member, had a particularly valuable and distinctive contribution to make in the Commonwealth's counsels during this critical period of change and development.

President Nkrumah said that he was sorry

there had not been time to show the Queen every part of Ghana (she did not see the Volta region, formerly British Togoland). "We hope", he said, "that this visit has done much to strengthen the relations between Ghana and Britain as well as the Commonwealth."

The Royal yacht sailed away to a thrilling Hausa fanfare, and the talking drums called their insistent message across the sea: "The Queen travels safely, safely; may no harm come to her on her voyage."



THE ROYAL CAR in the new town of Tema, Cape Coast, where a vast artificial harbour is being built. New industries are being created at Tema including an aluminium smelting plant.



THE QUEEN on the site of another of Ghana's great development projects, at Akosombo, where £4,000,000 has already been spent on preliminary work and surveys for a huge dam and power house on the Volta River.



SCIENTIFIC Assistant Mr. A. T. Umoh, who is working on the development of a small-scale canning industry; to Kenya on the packing of pineapple slices in plastic cases; to Singapore on making cashew apple wine; and to Aden and Tanganyika on producing tomato paste or *purée*.

RESEARCH ON TROPICAL PRODUCTS



JUTE is checked for the quality and fineness of its fibres. Raw materials, used in the Institute for research and treatment, come from almost every country of the tropics and sub-tropics. New uses are being found for them.



A TRUMPET tree from British Honduras is being investigated to determine its suitability for paper making. Reports from the Institute and other technical laboratories are being sent to the Government.

Making the Most of the Commonwealth's Natural Resources

TEAMS of scientists working at the Tropical Products Institute in the heart of London are assisting the less advanced countries of the tropics and sub-tropics to develop and use more efficiently their "renewable resources". No natural resources are too remote or unlikely for the Institute's experts to investigate.

Because many countries have a seasonal surplus of fruits and vegetables, the Institute's advice has been sought on methods of making better use of these supplies. Advice has been given to Fiji and Nyasaland on how to set up a small-scale canning industry; to Kenya on the packing of pineapple slices in plastic cases; to Singapore on making cashew apple wine; and to Aden and Tanganyika on producing tomato paste or *purée*.

Perfume from Geranium Oil

At the request of pineapple producers in the Federation of Malaya, an investigation is being made at the Institute into the reason for differences between the flavour of Malayan pineapple juice and juices from other suppliers. This is an important point when it comes to selling the product in the world's markets. Improvement of the flavour and appearance of Seychelles cinnamon bark is being sought by the research workers for the same reason; and studies continue on the compounds present in banana skin wax, to see if the wax has any commercial value.

Because of the high price of geranium oil in recent years, the Institute was asked by planters in Kenya to investigate ways of producing a high-grade crop for the perfumery trade. On the Institute's recommendation, Kenya obtained a quantity of cuttings of the

Bourbon type of geranium favoured by the trade, and crops are now being grown by many Kenya farmers. These crops should prove of great economic value, especially to those farmers who are unable to grow coffee. The Institute also has a research programme under way to help Sierra Leone to improve the quality of coffee crops.

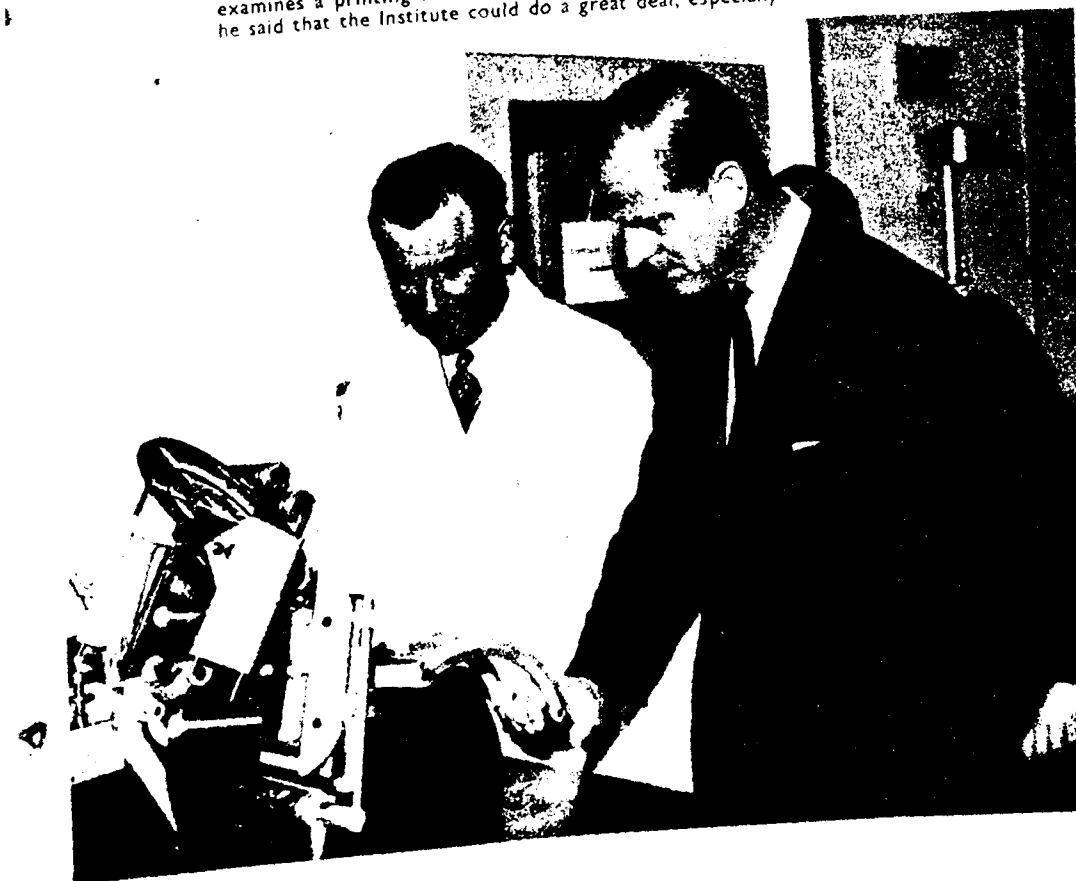
The first Nigerian paper was made from *Gmelina* arborea timber (similar to birch or aspen) which shows great promise as a pulpwood plantation crop, particularly as it will grow in the low rainfall areas of the Northern Region. Production of this paper came after two years of collaboration between the Institute—which has 50 years' experience in assessing the suitability of tropical products for paper making—and the Nigerian Federal Institute of Industrial Research. Mr. Allen Chittenden of the Institute personally supervised the installation of paper-making equipment in the Nigerian laboratory; he started the testing work and trained the staff. Nigerian staff are also attending courses in paper-making technology in London.

Important research is being carried on in the Sugar Esters section of the Institute. The idea is to find uses for sugar other than for food. At present the combined production of sugar-growing countries is far in excess of the world's capacity for consuming chocolate and other sugary foods. The development of non-food uses, including detergents based upon sugar, would expand the sugar trade and help to improve the standards of living in countries (Jamaica for example) which rely very largely upon sugar crops for the livelihood of their people.

In one year the Tropical Products Institute dealt with 900 inquiries from 62 countries.

Continued overleaf

H.R.H. the Duke of Edinburgh opened the Institute's existing premises in 1958. Below: He examines a printing machine in one of the laboratories. In his speech at the opening he said that the Institute could do a great deal, especially for the smaller dependencies.

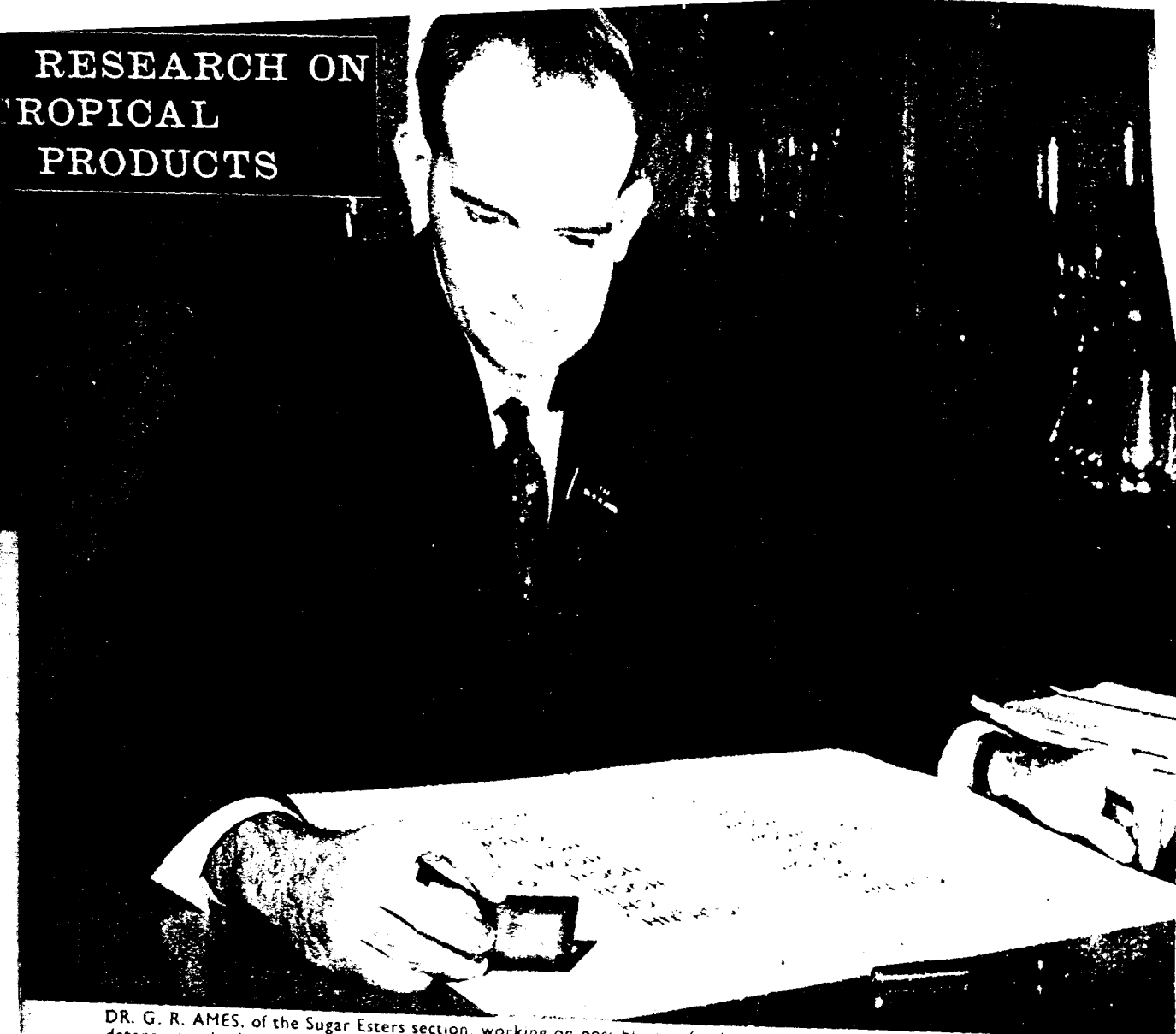


MISS C. CORNET, who works in the fibres laboratory, examines a model which shows the structure of the ultimate coconut husk fibre.

MAIZE is examined for insects (below) by a Scientific Officer. Central and East African territories send in a variety of vegetables.



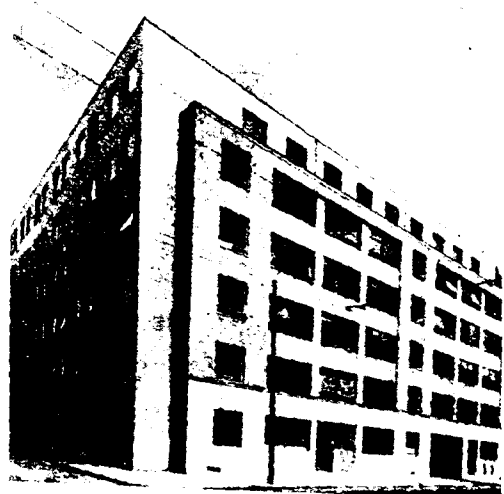
RESEARCH ON TROPICAL PRODUCTS



DR. G. R. AMES, of the Sugar Esters section, working on possible non-food uses of sugar, such as the manufacture of sugar-based detergents, checks a lecture slide with the block of formulae on his desk. A wider market for sugar would help several countries.



MISS FOOKLAW TAI, from Hong Kong, works in the statistical section. She is studying at a London night school.



THIS building in the heart of London is packed with the laboratories of the Institute. Here, in one year, 900 inquiries from 62 countries were dealt with.



MR. J. O. RITIBI, from Ekiti in Western Nigeria, removes a sample of standard sheet from the grid of a paper-making machine. Nigeria is producing paper of her own for the first time.

Continued from page 9

Nearly 100 of the queries meant carrying out research in the Institute's laboratories, of which there are about twenty. In addition, the Institute has sent visiting scientists to 39 overseas territories to meet the demand for trained manpower.

The Institute's History

The origins of the Institute go back to 1893 when the Imperial Institute was opened in London and a Scientific and Technical Department was set up "to provide a scientific advisory service and to spread knowledge about the resources of the British Empire". In 1949 this Scientific Department was taken over by the Colonial Office, and in 1953 the Division dealing with Plant and Animal Products was amalgamated with the Colonial Products Research Council. The present title was assumed in 1957, when the Institute moved to its new six-storey building in Gray's Inn Road. This building was opened by H.R.H. the Duke of Edinburgh in 1958. The following year the Institute became an establishment of the Department of Scientific and Industrial Research.

The Director of the Institute, Mr. E. S. Hiscocks, looks forward to an expansion of facilities, to the establishment, perhaps, of branches in some of the countries of the tropics and sub-tropics. He said, "Technical assistance to the less developed parts of the world is much in the news, and we, in the largest laboratory in Britain devoted primarily to such work, find it a most stimulating and worth-while occupation."



THESE young soldiers who have completed their basic training formed part of the Kenya Regiment's first multi-racial intake of recruits. They are (l. to r.) Manmohan Singh Siyan, John Gledhill, and Samuel Tongoi.



THE COMMANDING OFFICER of the Regiment, Lt.-Col. H. R. W. Vernon, inspects the troops at a parade to mark the end of their basic training.



TWO African members of the Kenya Regiment using Bren guns during weapons training.

Kenya's Multi-Racial Regiment

Training to be Soldiers Together

THE Kenya Regiment, which was all European, is now open to members of all races who can pass the necessary physical and aptitude tests.

Among one recent batch of recruits accepted at the Regimental Training Centre near Nakuru, in Kenya's Rift Valley, there were seven Africans and six Asians. They completed a tough preliminary course of training, and they are proud to wear the green uniform and charging buffalo badge of the Regiment.

The badge is worn in memory of those hunters who were among the first recruits to the Regiment, which was formed in 1937 to defend the country and provide leaders for the King's African Rifles. Both tasks have been carried out with distinction, and during the Mau Mau emergency the Regiment engaged in highly successful campaigns against the terrorists.

All recruits take part in three months of basic training, similar to that in the British Army. It includes many hours of drill and weapons training. Then they take part for a further three months in a series of strenuous exercises on Kenya's mountain ranges, and in bamboo forests.

Major A. H. Athill, one of the regimental officers, said that he has found no difference between any race in the acceptance of discipline. All are equally ready to take the rough with the smooth; all are treated in the same way and provided with the same facilities,

apart from the special food requirements of the Asians. The only noticeable difference in the regimental uniforms is that the Sikhs wear a new-type turban head-dress, instead of the bush hat.

After completing their training, the men serve four years in the Territorial Service, which involves week-end parades and

attendance at a special annual camp.

Speaking at a parade to mark the end of the basic training period, the Commanding Officer of the Regiment, Lt.-Col. H. R. W. Vernon, told the men: "You have proved that the three races can live together in harmony, and that is of the greatest importance to Kenya."

NEGOTIATING an obstacle course, which includes a swinging plank, helps recruits to develop physical endurance and dexterity. After their training the men serve four years in the Territorial Service.



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AN OFFICIAL HANDBOOK 1962 EDITION

Prepared by the Central Office of Information, London

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BRITAIN: AN OFFICIAL HANDBOOK is published annually and this, the 1962 edition, is the thirteenth in the series. It is prepared by the Central Office of Information with the co-operation of other Government departments and many national organisations, and is designed to answer the questions about Britain that are most frequently asked in overseas countries. Both at home and abroad this handbook has won a unique reputation for its accuracy and readability as an outstanding work of reference. The 1962 edition has been completely revised and covers events up to September 1961; it is fully indexed, is illustrated by photographs, maps and diagrams and has a 31-page bibliography relating to each section of the book.

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There is also a paper-bound edition, price Rs. 10.80 postage extra.

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"This annual handbook has a deserved reputation for being an exhaustive prestige guide to Britain but this is likely to be enhanced still further by the quality of the latest production."

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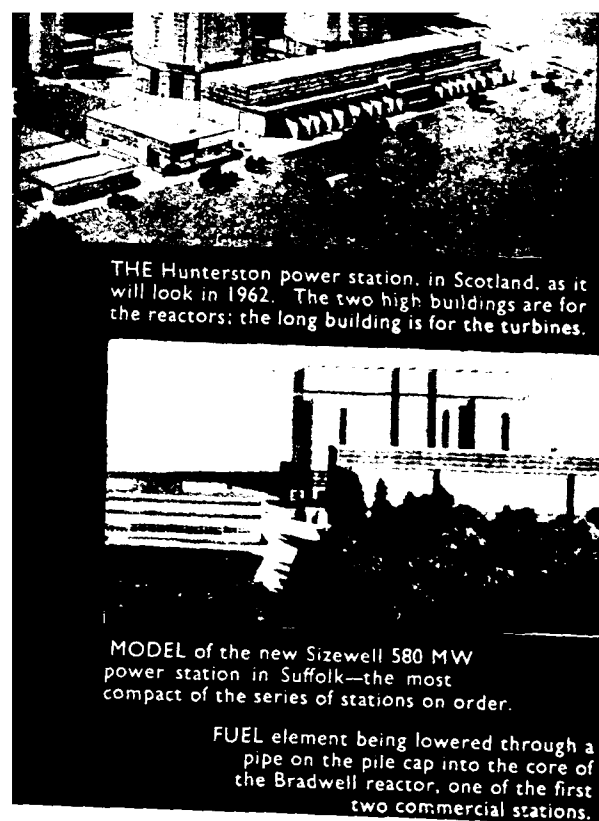
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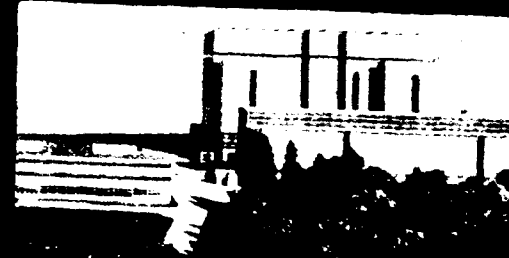
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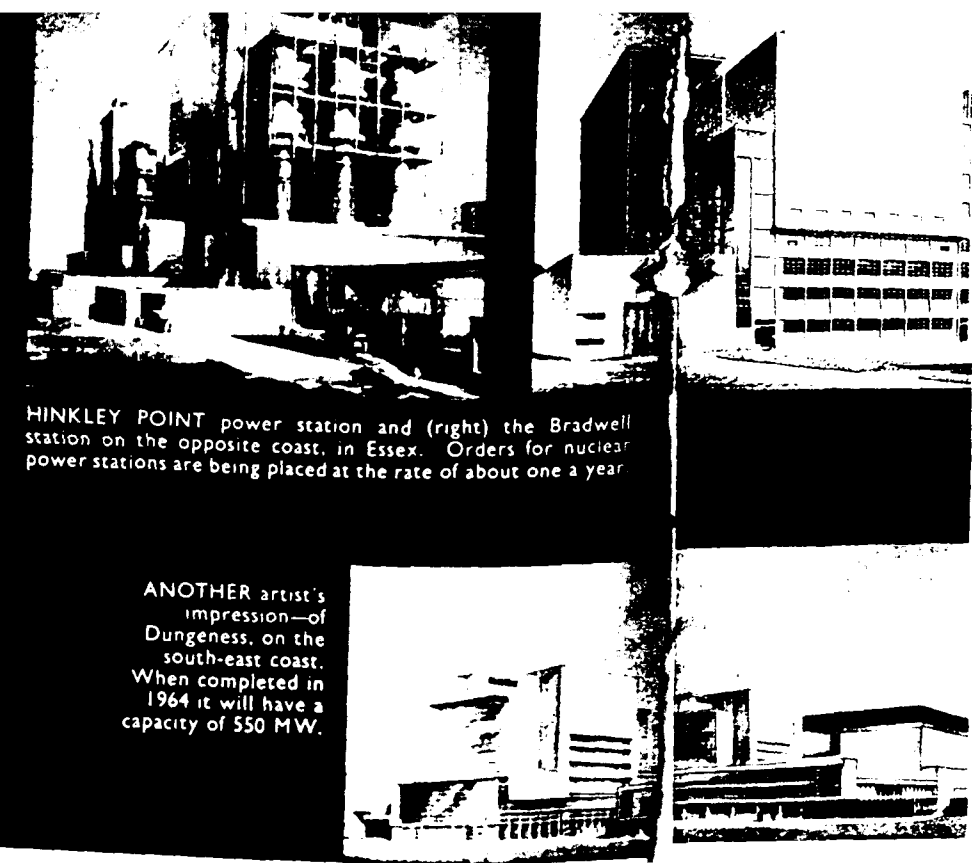


THE Hunterston power station, in Scotland, as it will look in 1962. The two high buildings are for the reactors; the long building is for the turbines.



MODEL of the new Sizewell 580 MW power station in Suffolk—the most compact of the series of stations on order.

FUEL element being lowered through a pipe on the pile cap into the core of the Bradwell reactor, one of the first two commercial stations.



HINKLEY POINT power station and (right) the Bradwell station on the opposite coast, in Essex. Orders for nuclear power stations are being placed at the rate of about one a year.

ANOTHER artist's impression—of Dungeness, on the south-east coast. When completed in 1964 it will have a capacity of 550 MW.

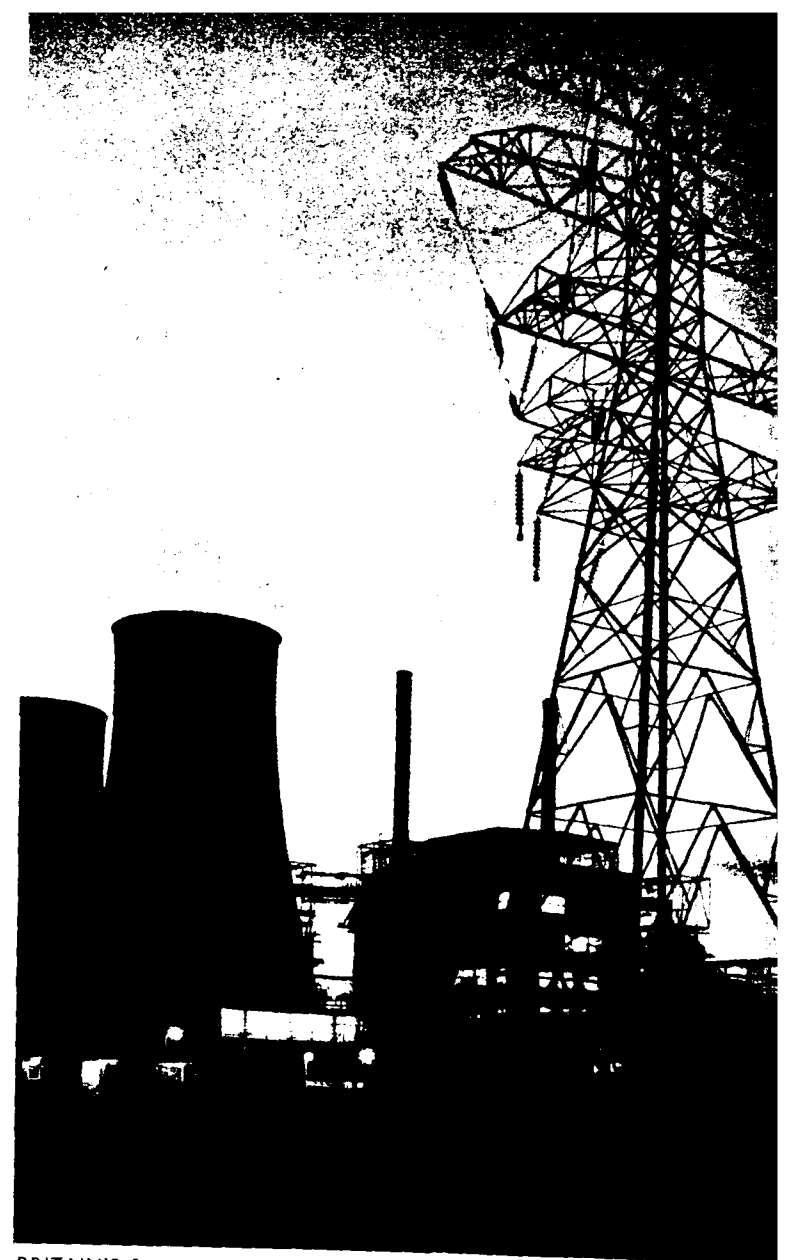


equals 1,000,000 watts), and they are the smallest in the present programme which, by 1965, will represent a total capacity of 3,000 megawatts, or approximately one-tenth of the country's generating capacity. Much bigger stations are now building, including one at Sizewell, Suffolk, of nearly 600 megawatts.

To Britain, these large-output plants are important, for they can operate more economically than smaller units and the electricity requirements of the country are both high and concentrated in a comparatively small area. Requirements in other parts of the world, particularly in the Commonwealth countries, where the transport of conventional fuel is costly, are for smaller stations.

The experience which Britain is now gaining with nuclear generators, therefore, is very important. The present "family" of atomic plants has been developed from the world's first full-scale nuclear power station at Britain's Calder Hall, which has been operating for slightly more than five years, and which has triumphantly upheld the design of

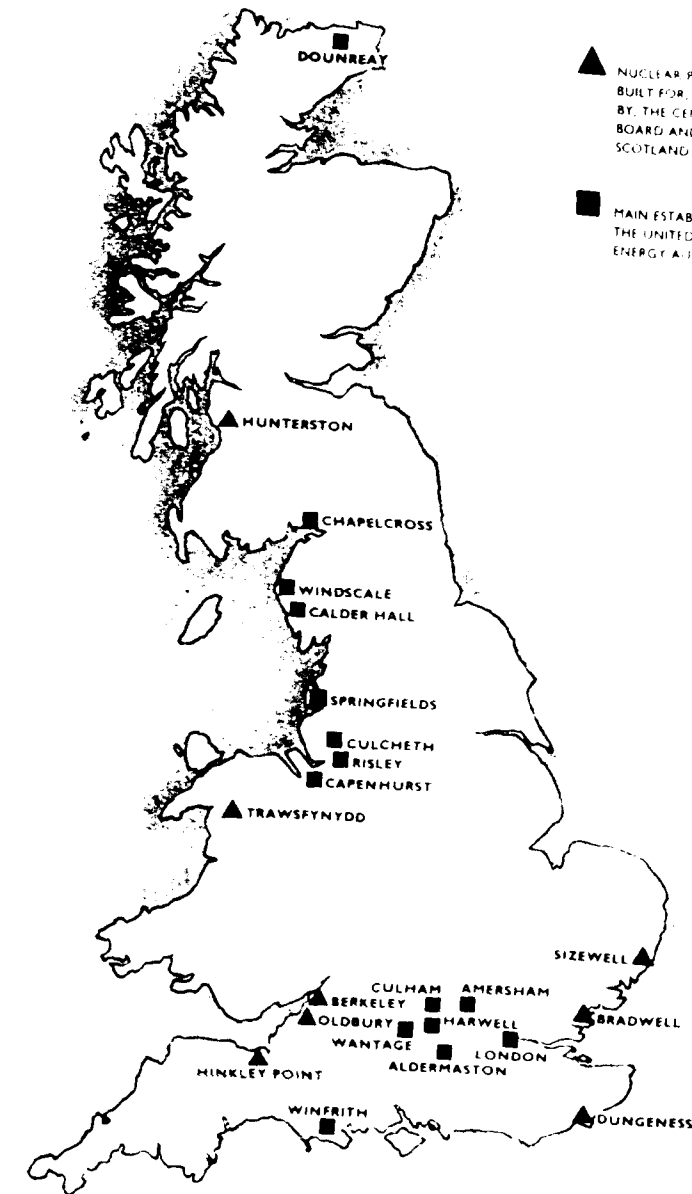
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BRITAIN'S first atomic power station, Calder Hall, in Cumberland. It has been running since 1956, when the Queen opened it.

BRITAIN'S ATOMIC INDUSTRY

World's Biggest Programme Paves the way to Cheaper Power



WITHIN a few months, the first two of the atomic power stations in Britain's big nuclear generating programme will begin to produce electricity. Already the completed reactors are being loaded with uranium fuel in these two stations while work is in various stages of progress at five other important generating plants.

When the first two stations go into full operation, it will mark a significant milestone along the comparatively short atomic power road, for they are the first entirely commercial plants of their type in the world, and on the experience gained by the industrial firms



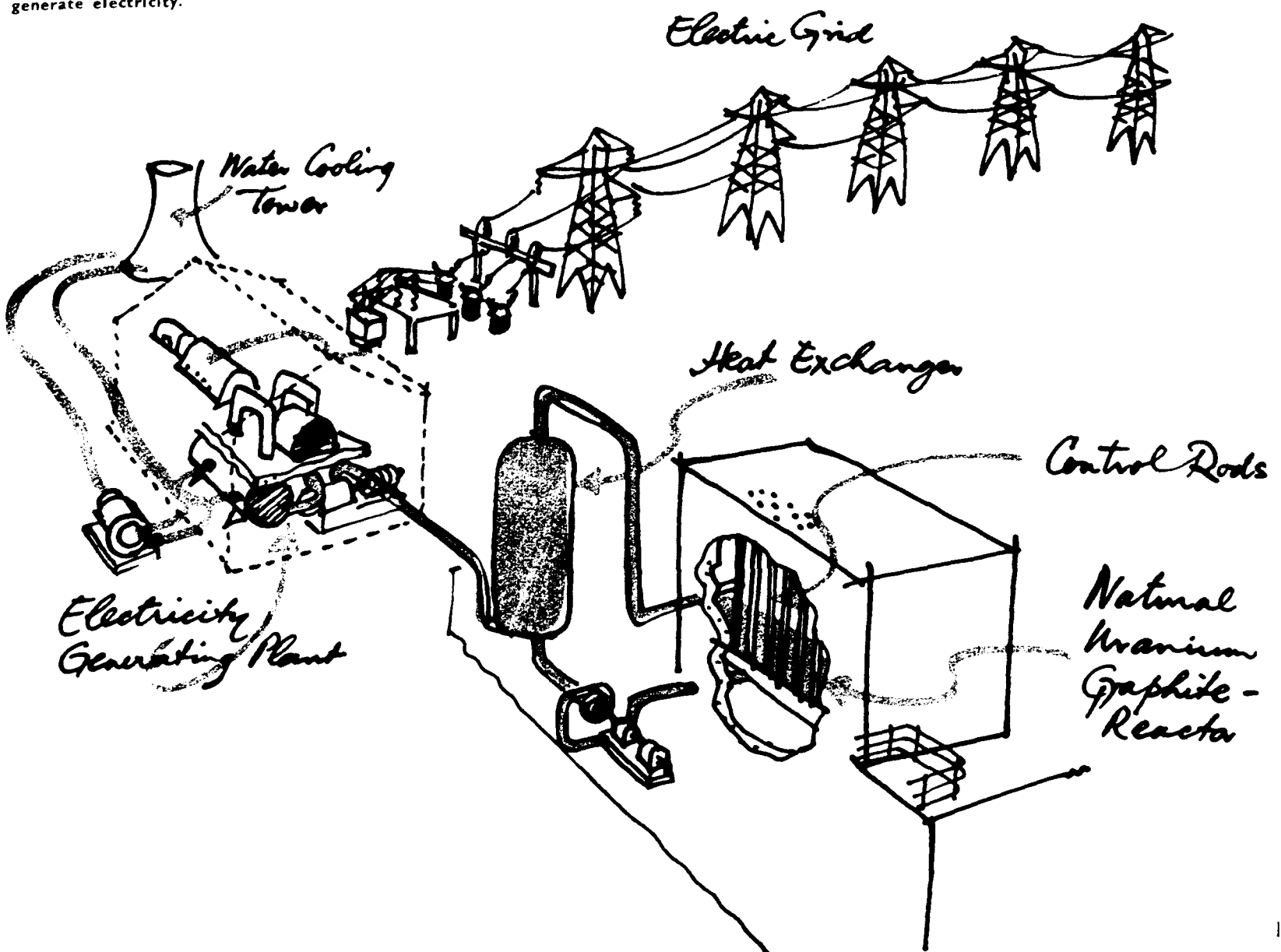
SIR JOHN COCKROFT, the well-known nuclear physicist, winner of the 1961 Atoms for Peace Award.

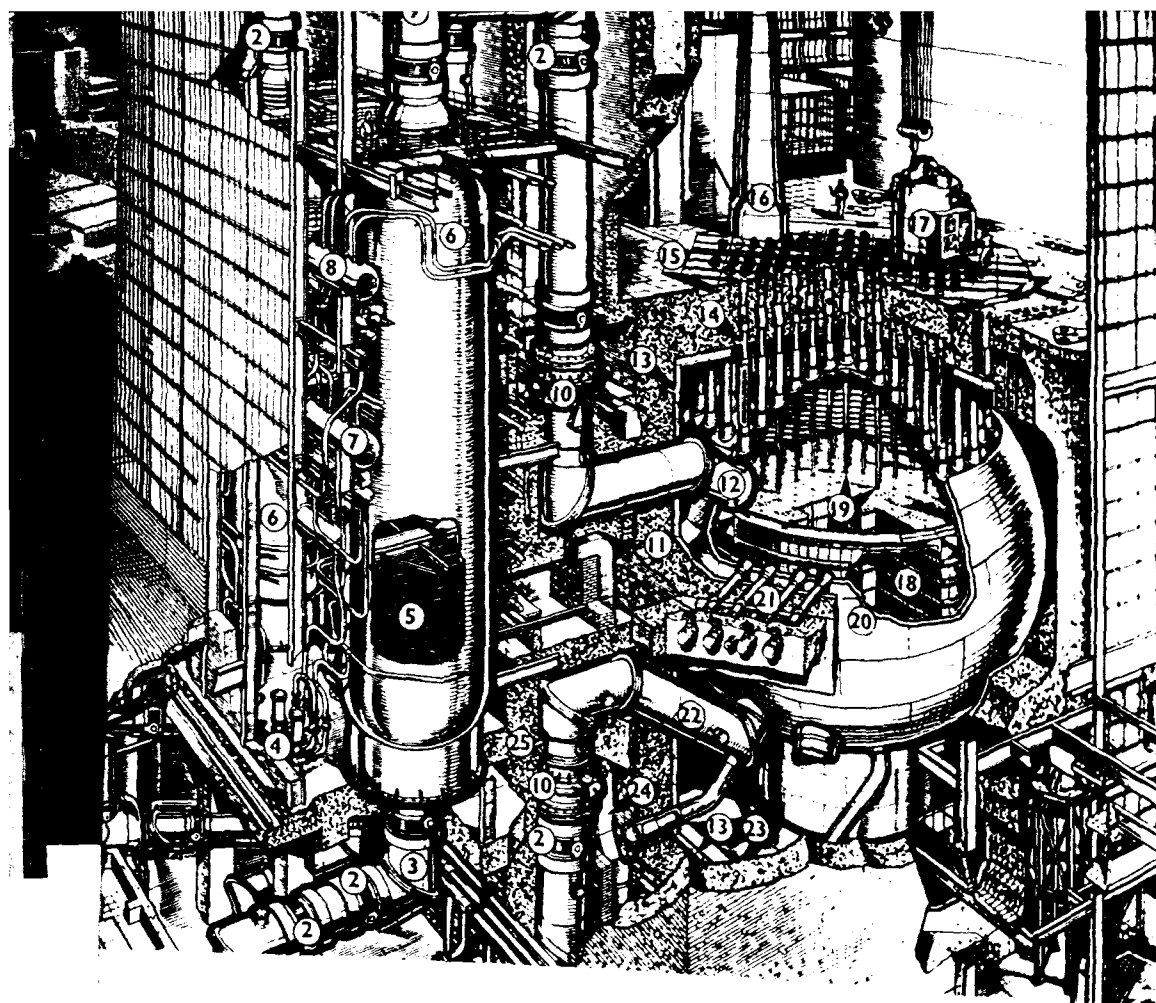
who have built them will be based a great deal of the nuclear engineering work during the next generation throughout the world. They are not experimental; they are economic electricity generating units, built as part of the United Kingdom Central Electricity Generating Board's power programme.

The two stations, one at Berkeley, in Gloucestershire, and the other at Bradwell, Essex, have a combined power output of approximately 650 megawatts—1 megawatt

HOW IT WORKS...

At Calder Hall heat from uranium in the reactor is removed by gas. The gas circulates through a heat exchanger where it produces steam. The steam drives turbines which generate electricity.





CROSS SECTION OF NUCLEAR REACTOR

1. Coolant-gas circulating blowers.
2. Hinged expansion bellows.
3. Cold gas outlet from boiler.
4. Boiler circulating pumps.
5. Boiler tubes.
6. Boilers (six per reactor).
7. Low-pressure steam drum.
8. High-pressure steam drum.
9. Hot gas inlet to boiler.
10. Gas insulating valves.
11. Main biological shield.
12. Hot gas outlet from reactor.
13. Thermal shield.
14. Charge tubes.
15. Charge floor.
16. Hole-preparation machine.
17. Charge and discharge machine.
18. Graphite-moderator.
19. Control rods.
20. Reactor pressure-vessel.
21. Can-failure detection standpipes.
22. Cold gas inlet to reactor.
23. Debris-removal ducts.
24. Shield cooling-air ducting.
25. Secondary biological shield.

Continued from page 13

the particular type of reactor employed—the gas-cooled, graphite moderated reactor. Experience, however, is now showing that considerably more power can be extracted from a reactor of given size than was at first believed possible.

In fact, the Calder Hall reactors are today producing 28 per cent more energy in the form of electricity than was at first anticipated. The new reactors now being built, particularly the latest ones to be designed, are gradually pushing down the capital cost of building atomic power stations to a figure which will make even the smaller—100 megawatt or so—power stations commercially attractive.

The economic difficulty with atomic power is that though fuel costs are relatively low, capital cost is inordinately high, and any saving in the construction of the plant is vitally important. With conventional generating units, of course, the reverse applies: capital costs are of much less consequence than fuel costs.

There is, however, an almost dramatic downward trend in the costs of the new nuclear stations as advanced techniques, improved engineering methods and better fuel burn-up are achieved. For example, the

gross capital costs per installed kilowatt of power output of the first two stations built under the CEBG programme, Berkeley and Bradwell, are estimated by the group of firms building them, the Nuclear Power Group, at £160. Yet the same group estimates that the cost of a third station, Dungeness, in Kent, which will be operational in 1965, will have fallen to £110 per installed kilowatt. Even later designs, in the latest drawing-board stage, will certainly drop the capital cost to below £100 per installed kilowatt.

Higher Temperatures

One of the most important reasons for the reduced cost is an increase in the output temperature of the reactor gas and its pressure. In the short period between the designs of the Berkeley station and Dungeness, for instance, outlet temperature has increased from 345 degrees C. to 410 degrees, with pressure going up from 140 pounds per square inch to 283 pounds. This is achieved by better heat transfer, by new engineering methods and new nuclear “geometry” in the reactors, which allow the fuel to operate at higher temperature. The design of improved materials for use in “canning” the uranium fuel is obviously of the greatest importance.

With all these improvements, however, the atomic power requirements of the smaller nations are not likely to be met immediately, for there are obvious theoretical and engineering limits which can never be improved on with the present design. Fortunately, the industrial effort in building the new stations is backed by an enormous research programme, the majority of which is aimed at the drastic reduction of cost by obtaining greater efficiency.

One important experiment is about to reach the testing stage at Windscale, Cumberland, where the United Kingdom Atomic Energy Authority has built what is known as a second-generation gas-cooled reactor, or AGR—Advanced Gas-cooled Reactor.

The most important difference between the AGR experimental reactor and those used in the present industrial programme is that the fuel used will not be natural uranium but will be enriched by the addition of the fissile isotope of uranium, enabling a greater amount of power to be obtained.

The full potentialities of the AGR type of plant will not be known for some time, but there is every possibility that industrial generators of this type will be available by 1965.

J. STUBBS WALKER



LORD FAULSTICH, British Minister for Science, is talking to Dr. B. Fasehun of Nigeria, in the Isotope School at Warrington research laboratory.

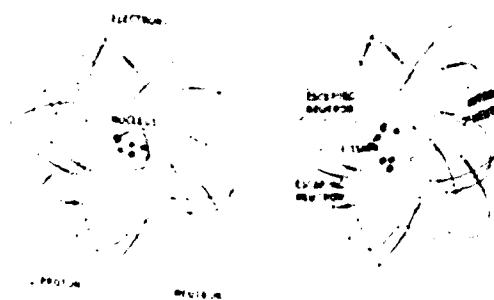


Diagram of an atom. It is not possible here to draw to scale. The nucleus is only one ten-thousandth part of the whole atom. The protons carry a positive electric charge and the electrons in orbit a negative charge. The amounts of charges are equal and cancel each other out. The effectiveness of neutrons in causing nuclear fission is because they are neither repelled by the positive protons nor attracted by the negative electrons.

ELECTRICITY FROM NUCLEAR ENERGY...

THE generation of electricity, together with the associated transmission and distribution systems, has provided the means by which large amounts of power can be made available over wide areas for industrial and domestic uses. It is reasonable to presume that the amount of electricity produced—or the amount of electricity consumed per head of population—is a fair measure of the standard of living in a country; it is certainly an indication of the degree of industrialisation.

Electricity is the medium through which power is made available for use, and it can be produced only by converting energy from fuel or from falling water into a circular motion to drive a machine that is known as a generator.

In a coal-burning power station the chemical process of combustion frees heat in the furnace which makes steam in the boiler. This steam is allowed to expand in a turbine which is linked to the electrical generator. A hydro-electric station obtains energy from water falling from a height through a turbine which drives the generator.

The demand for electricity can be met only by consuming coal or oil fuel or by harnessing suitable rivers and lakes—unless an alternative source of energy is employed. The rate of increase in electricity consumption is so great that it is necessary to find other sources of energy, since a country's supplies of conventional fuels are limited and becoming increasingly difficult to win.

Nuclear fuel, offering an alternative source of power, is the key to abundant electricity supplies and higher standards of living. Some idea of the power obtained from nuclear materials may be obtained by considering that the burning of a substance yields a certain amount of energy, whereas the “fissioning” of an atom produces 50,000,000 times that amount of energy. In practice, the process is not perfect and present-day reactors produce, from the fission of natural uranium, about 10,000 times the heat available from the burning of the equivalent weight of good coal. However, the nuclear reactor is a substitute for the furnace in an otherwise conventional power station.

Nearly all the electricity which is produced by Britain's Central Electricity Generating Board is generated by turbo-alternators. For these steam is required to drive the turbines. In a nuclear power station the heat from nuclear energy is used to boil water and generate steam.

To explain what happens in a nuclear power station many words are used which some of us may not fully understand. Here are some of these words which have been defined so as to give a fair idea of how nuclear energy is used to produce electricity.

Elements are chemical substances which cannot be broken down into other substances. There are 92 natural elements.

Atoms are the smallest parts of an element. They are so small that in a glass of water there are sufficient to provide millions of atoms for every square inch of the land surface of the globe.

Each atom consists of protons and neutrons, constituting the nucleus, which is surrounded at relatively vast distances by electrons.

Proton. One of the particles in a nucleus. It has a positive charge. It determines the chemical nature of an atom, that is, it determines to which element an atom belongs.

Neutron. One of the particles in the nucleus. It has no electric charge, and it determines the physical properties of an atom.

Nucleus. The “core” of an atom, consisting essentially of protons and neutrons. Practically the whole weight of mass of an atom is concentrated in its nucleus.

Electron. The particle which revolves round the nucleus. It is negatively charged.

Fertile Atoms are atoms which can be turned into fissile atoms.

Fissile Atoms are atoms which can be split when their nuclei are hit by neutrons.

Nuclear Fission is the process where a free neutron is made to penetrate the nucleus so that it is caused to break up. This releases other neutrons and energy in the form of heat.

Chain Reaction. As mentioned above, when the atom of an element such as uranium is struck by a neutron and fission occurs, not only is heat energy released, but some neutrons are separated from the protons in the nucleus and some of these fly off in all directions. When they collide with other nuclei, new fissions occur, more heat is released, more neutrons fly out and so on in extremely rapid progression.

Uranium. The atoms of most materials are quite stable, but the nuclei of some very heavy elements are not. If a uranium nucleus is struck by a neutron it is liable to break up completely, and to release two or three free neutrons. If these are slowed down some of them will be caught by other uranium nuclei, which will then break down and continue the process of chain reaction. This slowing down of the freed neutrons is accomplished by using a moderator.

Moderator. This is a material which slows down neutrons without capturing them. Graphite is such a material. Uranium fuel is prepared in the form of rods about one inch in diameter. These are encased in thin metal cans, and they are inserted into holes in the graphite.

Control Rods. It is no good being able to start nuclear reaction and to obtain great heat output unless the process can be controlled. It has been shown how the chain reaction can be started by bringing together a “critical” amount of uranium fuel in a graphite moderator, but there must be at hand a means to reduce the speed of reaction when necessary, and this is done by installing, as part of the reactor, rods of boron steel. Boron has a remarkable capacity to absorb neutrons. When instruments indicate that nuclear fission is proceeding too fast, the boron rods can be dropped into the reactor. They quickly soak up free neutrons, so that the frequency of fission is immediately reduced and a steady rate of operation can be resumed.

Critical Size. The reason for using natural uranium as a fuel is that it is the only naturally occurring material which can produce a controlled chain reaction. Because of the escape of neutrons from the moderator, this process can only take place in a reactor of a certain minimum size. If, in a reactor, the control rods are positioned so that power is neither increasing nor decreasing, the reactor is said to be critical.

Gas. During operation carbon dioxide gas is blown through the moderator holes at high pressure. This transfers the heat of fission from the uranium, through the can into the gas. The hot gas is then blown over thousands of tubes containing water in boilers, where the water is turned into super-heated steam for driving ordinary turbo-alternators.

RADIOISOTOPES FOR THE WORLD



AT THE Radiochemical Centre, Amersham. The remote handling of radioisotopes from behind a lead brick wall and a lead glass window.

IF the number of protons in the nucleus of an atom is changed, then the element is changed (see definitions on this page). If the number of neutrons is changed there will be, of course, no chemical change, for the neutron does not carry a positive charge. But there will be some physical change because, although the atomic number of the atom has not been altered, its mass number has been.

A change of this kind produces an isotope; that is, an atom which is chemically identical to, but physically different from, another atom of the same element. The word isotope means “something in the same place”—the same

place in the periodic table. All the elements have isotopes. Some of these are natural, others are made by scientists.

The isotopes of an element are either stable or radioactive. In a stable isotope the nucleus will not change unless it is subjected to some force from outside the atom. But if the isotope is radioactive it means that the nucleus will change of its own accord. Some radioisotopes change quickly; others take a long time. The system of measurement applied to this change is called the half-life, which is defined as the time taken for the activity of a radioisotope to decay to half its initial value.

Radioisotopes mishandled can be dangerous; but properly used they are valuable tools in fields of activity as different as drilling for oil and sterilising hospital blankets.

Britain's atomic industry supplies radioisotopes to the whole world. The Radiochemical Centre at Amersham is responsible for the sales of radioisotopes, labelled compounds and radiation sources. Demand for these products continues to increase steadily, and the total value of sales rose by about 10 per cent during 1961 to over £1,300,000.

Radioisotopes can be taken into the human body and because of their radiation their movements

can be traced from outside. For example, the amount of iodine that is taken up by the thyroid gland in the human body and the rate at which it is absorbed is an important indication in certain illnesses. If the iodine is made radioactive, precise measurements of the absorption can be made.

Radioisotopes mixed with the mud of a river can be traced so that the tidal movements of silt can be plotted and measured.

The “backscatter” or reflection of radiations can be used to measure the thickness of substances, even the thickness of tin-plating on a sheet of steel.

A booklet prepared by Britain's Atomic Energy Authority, entitled “Isotopes at Work”, lists some three hundred ways in which radioisotopes can be used to help research, industry and medicine. Here are some of the listed uses: measurement of wear in aircraft and car engines; measuring the density and moisture of the soil; sterilisation of drugs; location of gas main leakages; testing iron and steel castings and forgings for faults; changing the physical qualities of plastics; and checking the even packing of cigarettes.

The booklet explains in simple language the various techniques that are employed, with the aim of informing the busy—and often non-technical—executive of ways in which these processes can help him.

BBC television is twenty-five years old



News
 Education
 Children's
 Quiz Shows
 Interviews
 Religion
 Politics
 Travel
 Dancing
 Documentaries
 Concerts
 Art - Science

A TELEVISION studio has a magic of its own. The Producer and his assistants here are at the centre of an electronic web, they are selecting from the screens—each of which represents a camera in action—the picture that will go out to viewers. Above right: The Television Centre in London, which cost £10,000,000.

Great Events Brought to the Living Room

THE visit of H.M. the Queen to the British Broadcasting Corporation's £10,000,000 Television Centre in London, in 1961, marked the 25th anniversary of the first regular high definition television services anywhere in the world. From small beginnings in a service reaching only a few hundred homes, television has developed into one of the most potent forces in mass communication, with its own vivid appeal.

As the senior television authority, the B.B.C. carried into this new sphere a tradition of public service which it had already established as an independent public corporation providing the nation's sound broadcasting services. Since 1955, it has shared the field of television in Britain with the Independent Television Authority, which supplies an alternative service whose programmes are



NO MATTER what a producer wants, to lend realism to a play or musical set, the Prop Department has it. Above: a prop man with a trolley of miscellaneous objects.

provided by contracting companies drawing their revenue from advertisements.

Today about 12,000,000 television sets are in use in Britain. The B.B.C. is linked with Europe through Eurovision, and there are other links with the growing number of television services in Commonwealth countries. The B.B.C. has always held rigidly to its tradition of impartiality and independence. It has become a patron of the arts and has offered the best in light entertainment.

Its broad brief is to provide "information, education and entertainment," and its complete independence has meant freedom from political and economic pressures. The B.B.C. has a Royal Charter and the members of the Corporation are its Governors—appointed by the reigning monarch—who delegate their powers to a Board of Management of

Continued overleaf

One of the BBC's popular shows

DIXON OF DOCK GREEN

Most British people have a great and affectionate respect for their policemen. One of the most popular of the B.B.C.'s television shows is a fictional, but true-to-life, account of a typical police station and the men and women who work there: the station sergeant, the "copper" on his beat, the detectives, the women police, and the local citizens who find themselves in varying degrees of trouble. Every Saturday millions tune in to "Dixon of Dock Green" in rehearsal on the right. The hero, P.C. George Dixon, Jack Warner, is standing against the corner of the desk; the man in the grey sports coat is the Producer, Mr. Douglas Moodie.



BBC tv 25th YEAR

continued from page seventeen



IN 1948 TV cameras were at Wembley for the Olympic Games. Here the British contingent marches past in the opening ceremony.



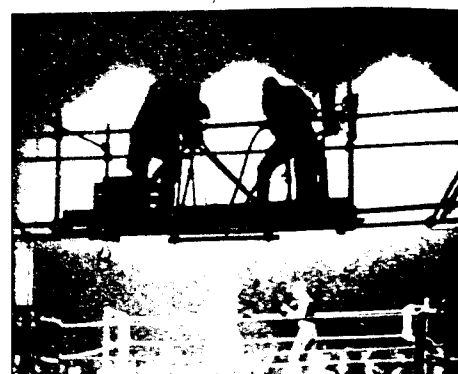
TELEVISION under the sea. This portable Vidicon camera was installed in the control room of one of the Royal Navy's submarines.



MODERN TV techniques reach out over new fields. This "live" transmission was made from the depths of one of Britain's coal mines.



TELEVISION a cello solo (above) with the Royal Philharmonic Orchestra. Below: A boxing match, in the early days at Alexandra Palace.



permanent executive officers, headed by the Director-General.

At an anniversary dinner given by the B.B.C., Britain's Prime Minister, Mr. Harold Macmillan, said:

"This country pioneered television. British television has set standards in engineering and programming which are admired and respected throughout the world. The enthusiasm, the imagination, the determination which have given us this position will, I am sure, maintain it."

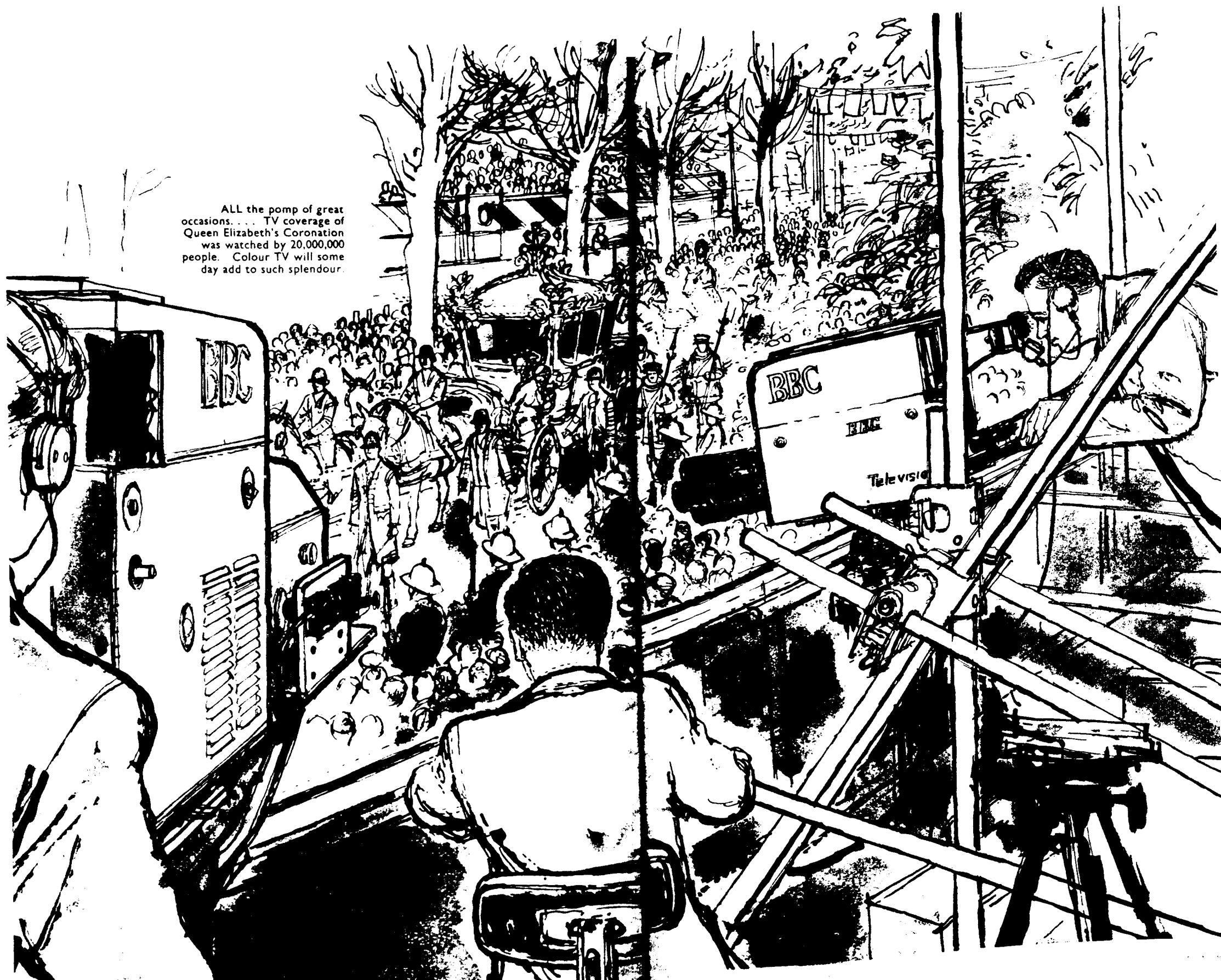
The first broadcasts by the TV service were confined to about two hours a day. Emphasis was placed upon drama and other indoor activities. In 1937, when King George VI was crowned, television cameras went out for the first time into the streets of London, and viewers were able to see part of the Royal Procession on their small



ASIAN CLUB provides an opportunity for Asians in Britain to question men and women from many walks of life about their jobs and their beliefs. The questioner is addressing the guest speaker (not on the picture) who was a docker.



H.M. THE QUEEN with television personality Eamonn Andrews (left) at the Television Centre in London on the 25th anniversary of B.B.C. Television. The Queen's Christmas Message is a big event in the TV year.



ALL the pomp of great occasions. . . TV coverage of Queen Elizabeth's Coronation was watched by 20,000,000 people. Colour TV will some day add to such splendour.

screens. This was a modest effort compared with the coverage of Queen Elizabeth's Coronation on 2nd June, 1953—an event which was watched by 20,000,000 viewers in Britain and Europe. It was, however, the start of Outside Broadcasts, the transmission of great occasions, as they happened, into the homes of the people.

During the war television closed down, and programmes restarted in June 1946. After that progress was rapid (some of the milestones are given on page 20). Ninety-nine per cent of the people of Britain are now within range of transmitting stations, and the new medium has had a considerable effect upon their lives.

Mr. Macmillan said in his speech: "Television has certainly helped us in a dramatic way to escape from our insularity. I am told that at any given moment there are six B.B.C. camera crews on assignment overseas. Then we have Eurovision. Eurovision today has seventeen active members—spectacular progress indeed, since the B.B.C. took an outside broadcast unit to Calais in August 1950. Quite a few prejudices and misconceptions must get abandoned when so many people in so many countries can simultaneously watch the same great events, and share the same entertainments and recreations."

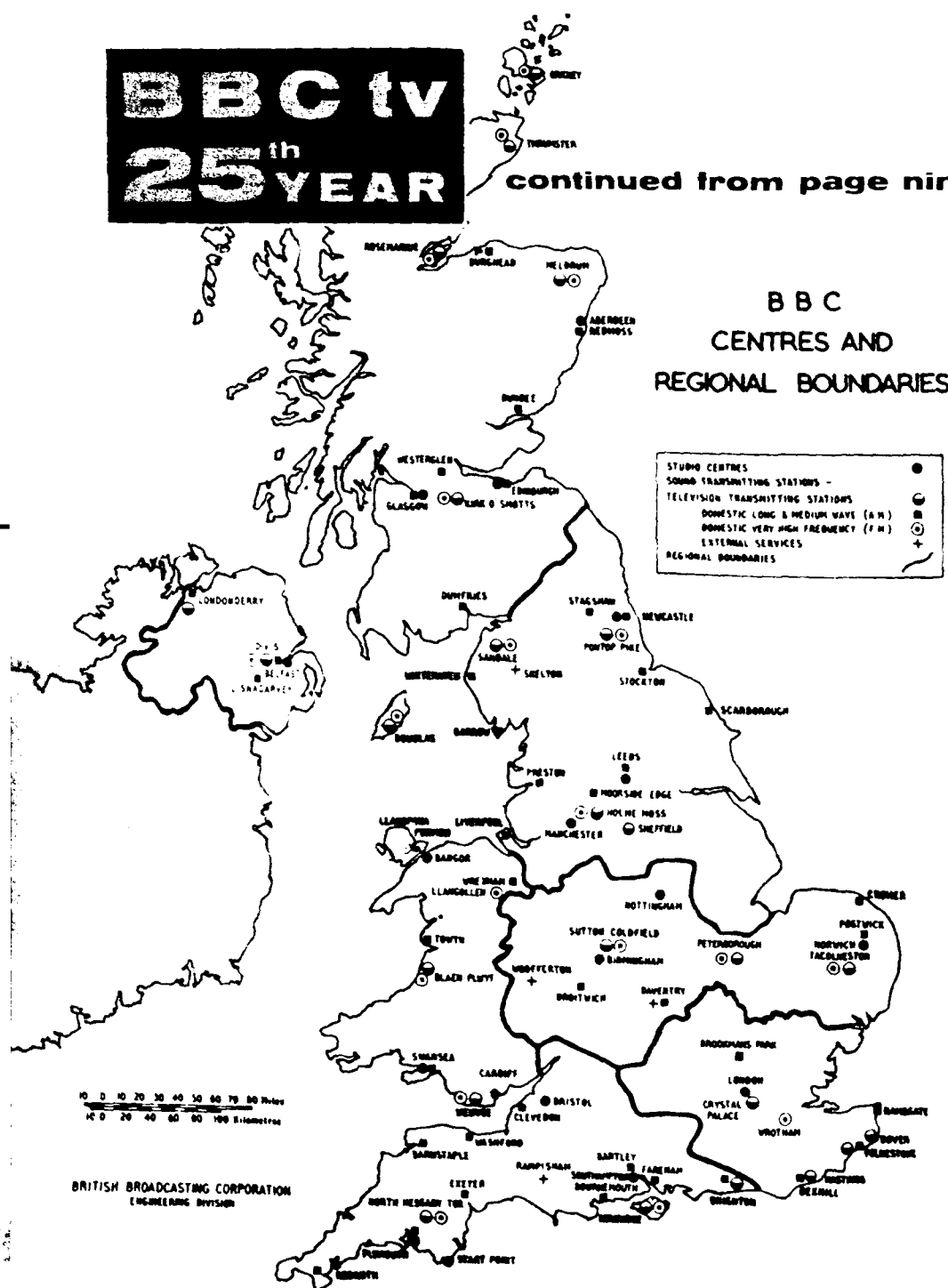
The Prime Minister commented upon the fears of the effect of television upon young children. "Who", he asked, "should decide what is undesirable for children to see? Parents? Or the programme planners? We come back to the enormous power of television and the sobering responsibilities of those who wield it. Nor is it simply a matter of deciding what might be harmful. Rather we should be asking ourselves how television can be harnessed to education."

The B.B.C. believes that TV is primarily "an educative medium", and this point of view will be echoed in many of the Commonwealth countries which have, or are setting up, TV services of their own.

At the time of the 25th anniversary celebrations, the following Commonwealth countries had regular television services on varying scales: Canada, Australia, New Zealand, the Federation of Nigeria, Cyprus, the Federation of Rhodesia and Nyasaland, Hong Kong, and Bermuda. India, Ceylon

BBC tv
25th
YEAR

continued from page nineteen



THESE secondary schoolboys in Kent, England, are watching a Schools TV broadcast in the B.B.C. series "Science Helps the Doctor".



SIR VIVIAN FUCHS, who led the Commonwealth Trans-Antarctic Expedition, stands beside a model of that Continent while he describes the expedition to viewers.

and Trinidad were experimenting with services, and the following countries had services planned: Pakistan, the Federation of Malaya, Ghana, Singapore, Tanganyika, Kenya, Jamaica, British Guiana, Malta, Gibraltar, the Bahamas, Barbados.

The B.B.C. has set up a special department for the promotion of B.B.C. television material overseas, and in 12 months Australia took 330 programmes. Television, in fact, is becoming international.

"Television", said Mr. Macmillan, "has become a great industry

with many by-products and growing exports. It has set up vast factories. I am told that there is room for 3,000 people at the Television Centre alone—a fabulous palace. Many thousands are directly employed, but television has provided also a new outlet for the artistic and creative talents of our actors and actresses, our musicians, our dancers, our artists, our writers."

Television has come a long way in a quarter of a century. Who can tell what marvels of achievement lie ahead?

milestones of BBC tv since the war

1949: The opening of a new transmitter, at Sutton Coldfield, brought television to the Midlands of England.

1950: TV moved from Alexandra Palace to larger studios; the first "live" pictures were sent from the Continent, and the first transmission was made from an aircraft flying over London.

1951: Holme Moss transmitter brought TV to the North of England.

1952: The first television programme direct from Paris; Kirk o'Shotts transmitter brought TV to the Lowlands of Scotland.

1953: The Coronation televised; the first relay from a ship at sea.

1954: Eurovision linked eight countries.

1956: Television from a submarine, and from a helicopter.

1957: Programmes for schools began; the Queen's Christmas Day message was televised for the first time.

1959: Cable film, innovated by the B.B.C., was demonstrated for the first time.

1960: The first programmes from the B.B.C.'s new Television Centre in London, which will be the most modern in the world.

The future: One of the next technical developments may be the spanning of the Atlantic by colour television. Already B.B.C. engineers have devised a system for sending film by transatlantic cable. The next big development may be the use of satellites, circling the globe, to overcome the curvature of the earth in the transmission of television colour pictures.

Swaziland's First Railway

"Great Faith in the Future"

SWAZILAND, that small, mountainous and landlocked High Commission territory in Southern Africa, is to have a railway. It will run across the country for 136 miles, from the iron-ore deposits at Ngwenya, in the west, to the Mozambique border in the east, from where it will link with the existing railhead at Goba.

Basically, the railway, which will cost £9,000,000, was planned to help in transporting the country's considerable iron-ore deposits which were first discovered by the Geological Survey of Swaziland. In 1958 the Anglo-American Corporation formed the Swaziland Iron-Ore Development Company Ltd., and is now finding the bulk of the capital—£3,000,000 directly, and £1,000,000 through associates—to finance the railway. The Colonial Development Corporation will provide £1,000,000, and most of the remaining money will come from contractor finance.

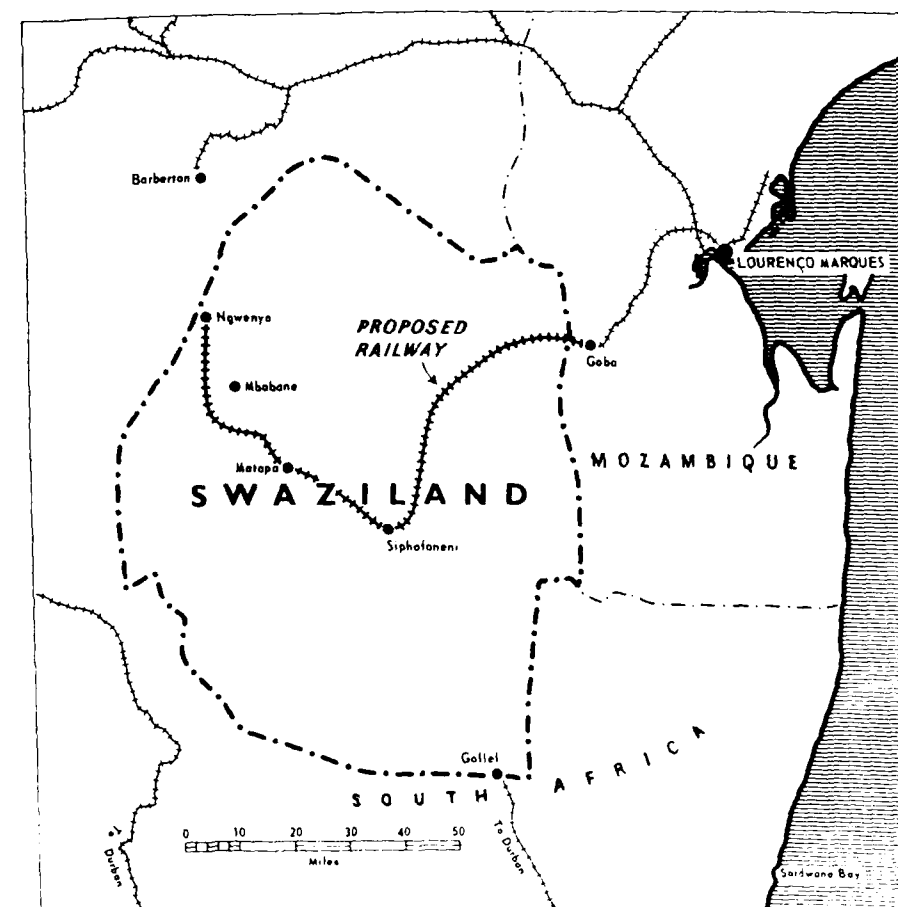
Millions of tons of high grade iron-ore from Ngwenya will flow along the new railway to the coast of Mozambique for shipment overseas. The Usutu Pulp Company and the sugar mills will benefit. So will asbestos, one

of Swaziland's mineral resources, and agriculture. Cotton, tobacco, rice, vegetables, citrus fruits and bananas are promising crops, and animal husbandry continues to contribute much to the country's earnings. The railway will help to solve the transport problems of these industries; it will increase the prosperity of Swaziland and also give a great many more of its inhabitants the opportunity of learning industrial skills.

Swaziland, in fact, faces an exciting period of economic expansion which will tax its

labour resources—the population is only about 265,000—to the limit. At the centre of it all will be the new railway, which will be administered by a Railway Board set up by the High Commissioner for Basutoland, the Bechuanaland Protectorate and Swaziland, and which will probably include representatives of Swazi and local European interests, as well as of the principal users of the railway.

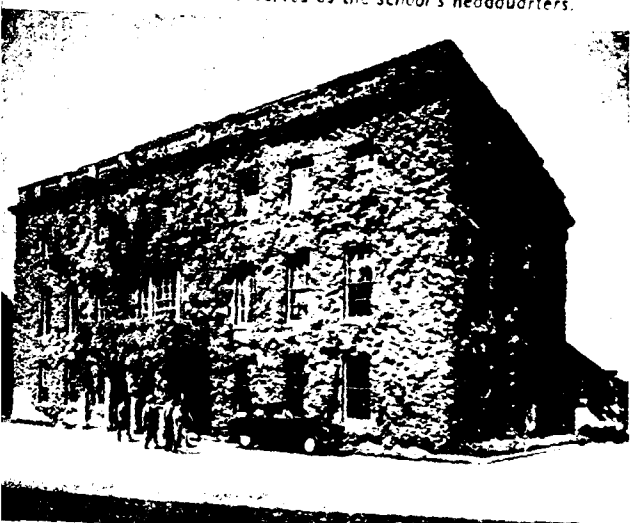
Announcing the railway project, in London, Mr. Bernard Braine, joint Parliamentary Under-Secretary for Commonwealth Relations, said that it was "a happy example of the importance Her Majesty's Government attaches to its trusteeship". He added: "To those who are filled with forebodings about all the stresses and strains in Africa this must seem like an act of faith. That is what it is. In fact we have great faith in the future of Swaziland."



MR. BERNARD BRAINE, M.P. (left), Parliamentary Under-Secretary for Commonwealth Relations, with Sir John Maud, High Commissioner for Basutoland, Bechuanaland Protectorate and Swaziland, after announcing the railway plan.



At Waterperry Horticultural School, near Wheatley, Oxford, a student in the Alpine Nursery examines a few of the 40,000 plants from many parts of the world. Below: The ivy-covered Georgian mansion which serves as the school's headquarters.



Students relax (below) in the lounge at the school. The girl standing by the table is cutting out dress material. She is equally handy with plants. "Women", a horticultural expert has said, "make excellent gardeners."



Mainly for Women

ASSORTED TOPICS AND EVENTS

School for Gardeners

THIRTY-FOUR years ago two young women, Miss Beatrix Havergal and Miss Avice Sanders, invested their capital of £200 in two acres of kitchen garden and a cottage in Berkshire, England. Working long hours, they grew flowers, fruit and vegetables, which they sold from a stall at a neighbouring market, and made plans to found a horticultural school to teach others the craft of gardening.

Today they are Principals of the Waterperry Horticultural School, near Wheatley, Oxford, where 24 girl students, aged about 18, are taking a two-year residential course in horticulture with special emphasis on practical outdoor work. Ex-pupils are employed, often in important botanical posts, all over Britain and in many places overseas. Many are teachers in schools and colleges, for the principals place "teaching future teachers" high on the list of aims of their college.

Waterperry, which covers 82 acres and has a fine 42-room Georgian mansion, was offered for its present purpose by Magdalen College, Oxford, in 1932. Friends and supporters helped to decorate and furnish the mansion, and painstaking work over the years, by students and staff, has turned what was almost a wilderness into an exquisite garden. It includes flower, vegetable and fruit gardens, 13 glasshouses, and an Alpine Nursery with 40,000 plants from many parts of the world.

Waterperry Diploma

Small groups of girl students spend one week at a time in each section. Lectures, on subjects such as plant physiology and pathology, the use of machinery and fertilisers, and the planning of flower gardens, continue all year.

Practical and theoretical examinations are held twice a year, and in their second year the students sit for the Waterperry Diploma, which is highly regarded by horticultural authorities, and for the Royal Horticultural Society's general examination. Some graduates stay on for a third year for experience as junior staff members. Others go elsewhere to specialise in a particular branch of horticulture or to study for the higher qualification of the National Diploma in Horticulture.

"Although we have made much progress", Miss Havergal said, "and I now have a well-known horticultural school, with a staff of 15 women and seven men, I am not satisfied. This is a life's work. We want to expand—to add new buildings, take more pupils, and see our methods of teaching more generally adopted."



A student in her room makes notes (above) of some of the day's lessons. Twenty-four girls aged about 18 take a two-year residential course in horticulture at the school, where they study for the Diploma.

This is the ambition of a woman who had the rare distinction of receiving two different honours in a single day. In the morning she was appointed a Member of the Order of the British Empire, at Buckingham Palace, and in the afternoon she received from the Royal Horticultural Society a gold Veitch Memorial Medal for her services to horticulture.



Miss Beatrix Havergal, one of the two founders and principals of the school, gives practical advice to students on the use of a rotavator for turning the soil.



The Gambia's first draughtswomen, Miss Harriet Macauley and Miss Amie Fye (right), both from Bathurst, are working in the map section of the Directorate of Overseas Surveys in Surrey, England, under the guidance of Superintendent T. J. Whittemore.



Miss G. Fatima Khakher, a Sister Tutor of the Karachi Civil Hospital, Pakistan, presents flowers to the Dowager Duchess of Northumberland, at a Nursing Exhibition, London.

NADA has been celebrating the centenary of birth of E. Pauline Johnson (1861-1913), the poet and champion of the Canadian Indians. This year, the memory of Pauline Johnson ("Tekahion-ke", to the Iroquois Indians) was marked by the 13th annual festival of the Six Nations Reserve, Brantford, Ontario.

A pageant there was held in an open-air forest theatre, and the Indians made a special pilgrimage from their reservation to Vancouver, carrying with them a token of soil from Pauline Johnson's birthplace to sprinkle upon her memorial plot in Vancouver's Stanley Park.

A special commemorative stamp was issued by the Canadian Post Office—32,000,000 copies in sheets of 100 each. The monthly magazine, "The Native Voice", published in Vancouver, produced a special edition devoted to facets of Pauline Johnson's life.

Known as the Princess of the Mohawks, Pauline Johnson was born in the Six Nations' Territory in the house, "Chiefswood", built by her father for his English bride, Emily S. Howells, a relation of the novelist, W. D. Howells. She was the youngest of four children. Her father, Head Chief, G. H. M. Johnson, was the son of John Smoke Johnson who, at the age of 17, led his own brigade of Indians at Queenston Heights, in the war of 1812, and was decorated by the British.

Pauline Johnson began writing poetry at the age of 12, but her writings were not offered for publication until after her schooldays. Her first poems appeared in New York and Toronto, to be followed by many other publications in Canada, United States and England. For 16 years she made recital tours, fascinating her audiences with dramatic presentations of her work.

Soon after her last visit to England in 1907, with failing health, she settled in Vancouver near her friends and the coastal Indians. There, between the blue waters of the Pacific and the giant cedar and fir forests of British Columbia, she passed her remaining years. Her body was cremated, at her own request, and buried near Siwash Rock, Stanley Park, where there is a monument to her.

In Vancouver her friends formed a trust to



Malay student teacher Tan Eh Lang moulds a vase in the pottery workshop of the Federation of Malaya Teachers' Training College at Kirby, near Liverpool, England. She will return to Malaya, after her two-year course, to work as a teacher.



Three girls from Sierra Leone, chosen from 300 applicants by British United Airways as air hostesses for the new Britannia services between London and Freetown, learn how to lay out a meal tray during their training. They are (l. to r.) Miss Nanette Davies, 27, from Kissey; Miss Victoria Dave, 20, and Miss Shirley Barnett, both of Freetown.

Practising artificial respiration on two "patients" are Mrs. Tewa (left) and Mrs. Aziz, both from Tanganyika. They were attending a household management course run by the Young Women's Christian Association at the Overseas Centre, London. The first-aid instructor is Mrs. Dillon, of the St. John Ambulance Brigade.

E. PAULINE JOHNSON

A Canadian Centennial



Pauline Johnson, wearing a necklace made from bear claws. She devoted most of her life to the honour of the Red Indians.



This reconstruction of a scene from the early life of Canada was part of a pageant which was held in Ontario to celebrate the centenary of Pauline Johnson's birth.

the melody of the verse but also the harsh reality of the tales they tell. The bravery of her Iroquois brethren, the savagery of the Hurons, the myths and legends of the Pacific tribes, the settlers and their trials, were an inspiration to the facile pen of Pauline Johnson.

Her works include: "Flint and Feather", a collection of her poems, which has outsold any other book of collected verse by a Canadian; "Legends of Vancouver", stories and myths told her by Chief Joe Capilano of the Pacific Coast Chinooks; "The Moccasin Maker" and "Shaganappi". Here is a good illustration of her poetic imagery, a verse from the poem, "Dawendine":

There's a spirit on the river, there's a ghost
upon the shore,
And they sing of love and loving through
the starlight evermore,
As they steal amid the silence,
And the shadows of the shore.



Miss Gladys Fernandes, art student from Bombay, India, is sketching in London's Trafalgar Square. She is working with other Commonwealth students on a four-year course at the Hornsey School of Art, London.

"Miss United Kingdom" became "Miss World, 1961" in the annual international beauty contest. She is 18-year-old Miss Rosemarie Frankland, from Lancashire. This picture was taken of her soon after she had been crowned Miss World.





A GREAT inside-left in action. There's magic in the feet of Johnny Haynes as he strives to outplay an opponent.

Johnny Haynes

CAPTAIN OF ENGLAND



AS England Football Association team which toured South and Central America in 1959 was defeated in three successive games. Some of the England players were criticised in the British Press, and several papers suggested that John Norman Haynes, a brilliant inside forward who had seemed to lack sparkle on the tour, should be omitted from the side due to play Russia at Wembley Stadium, in London. The board of selectors, however, decided to keep him in the side.

Consequently, Haynes played at Wembley, and shortly before the interval, when the scoreboard showed England 0 Russia 0, he took a return pass from winger Tom Finney who is now retired from the game and drove the ball into the net. Midway through the second half he collected a weak Russian clearance and scored again. Then ten minutes before the end he scored a third goal. England beat Russia 3-0.

This was a performance completely out of character, for Johnny Haynes has built his reputation as a distributor of the ball—as a goal-maker rather than a scorer. But it silenced his critics. There were no more demands for Haynes to be dropped, and soon afterwards he was appointed captain of England.

What is the secret of Haynes's success? What is it that makes this quiet, thoughtful young man, who at the age of 27 has played for England in 50 or more senior internationals, the master of mid-field play on any soccer arena in the world?

A Born Soccer Player

A man well qualified to give an opinion is the England team manager, Mr. Walter Winterbottom: "Haynes can pinpoint passes that destroy opposing defences. He can, by his use of the ball, alter and dictate the tactics of a game. It is a natural ability."

A similar opinion is expressed by Mr. Frank Osborne, General Manager of Fulham F.C., the London First Division club which pays Haynes £100 a week to play for them in Football League matches. "Johnny seems to have built-in radio antennae, which receive signals telling him what to do with the ball. Most first-class players run with the ball and then pause, momentarily, to get their bearings and decide where to pass it. But not Johnny Haynes. He knows instinctively. He sprays out passes as quick as a flash, where they will do most good; and few go astray."

Haynes has been making the football do his bidding since the age of seven, when he played in the streets of Kentish Town, the district in north London where he was born. His father, who is a Post Office engineer, used to take him on Saturdays to see famous London clubs, Arsenal and Tottenham Hotspur, in action. Very soon young Haynes began to live for football, and equally quickly he showed a natural aptitude for the game. He played for his school, then his district, county, England schools. His first experience of Wembley came as an England schoolboy international when he helped England to beat the Scottish boys 8-2. He gave a sensational

performance, and professional football clubs queued to sign him on.

It is typical of Johnny Haynes—"the boy with his head screwed on the right way", as he has been described—that he turned down offers from the most glamorous clubs and joined Fulham F.C., who were then in Division 2. He chose Fulham partly because he liked the club, with its homely ground in west London near the river Thames, and partly because a friend of his, Trevor Chamberlain, had joined the club.

"Haynes was slightly built in those days", Mr. Osborne, the General Manager, recalled. "He was only about five feet tall and we used to measure him rather anxiously, every week, against the wall in the secretary's office."

The move to Fulham did not disturb Haynes. At the age of 17 he played in the club's First Eleven; he was chosen to represent England in under-23 and then "B" internationals; at 19 he achieved his first England "cap" as a full international; and five years ago he was appointed Fulham's captain. Under the spur of his playing genius the club gained promotion to the top Division of the Football League, where it has remained.

Highest Paid Footballer

Haynes, the highest-paid footballer in Britain, is a bachelor who lives with his parents in Epsom, south of London. But success has not spoiled him, and when friends call the captain of England is always ready to entertain them, and he likes nothing better than to kick a ball around in his own back garden, or on Epsom Downs.

He is no longer worried by lack of physical stature, for his height (5 ft. 9½ in.) and weight (11 stone 10 pounds) are just about right for an inside forward who has to cover more ground, during a match, than any other player on the field.

His playing style makes him a vital component in the 4-2-4 playing formation currently favoured by England. Under the

HAYNES, as captain of England, exchanges a shield for a pennant before the start of an international match in a qualifying round of the World Cup soccer competition, at Wembley.



old, so-called "W-M", formation (see diagrams) the centre-forward was the man chiefly responsible for scoring goals, the centre-half played well back, and there was a mid-field link-up between Nos. 4, 6, 8 and 10. This system proved in practice to have some disadvantages, and less than two years ago England adopted the 4-2-4 tactical system.

Under this system there are four potentially dangerous forwards, who interchange positions; four defenders in addition to the goalkeeper; and two mid-field specialists, one of whom—in the England side—is Johnny Haynes at inside-left. He acts as the "link man" between the defence and the attack, and is in an ideal position to initiate attacks and generally to dictate the pattern of a game.

His Advice to Youngsters

To do this for 90 hectic minutes a man has to be extremely fit. Haynes is. He has great stamina and his legs are immensely strong. Yet he has no fads—no training "gimmicks"—like some athletes and sportsmen. He does not smoke, but enjoys a quiet pint of beer after a match. He does not keep particularly early hours, but when he trains he does so with single-minded devotion and almost always with a ball at his feet.

His advice to Commonwealth youngsters who want to get ahead with the game of Association football is simple: "Enjoy the game—if you ever feel bored you might as well give up. Keep fit, and for preference practise with a ball at all times. Above all, don't practise the things you do well, but those you are not so good at."

Haynes himself is a perfectionist who loses his calm self-control only if—which is very seldom—he gives a bad pass, or if a colleague muffs a scoring chance. Then he may be seen to mutter or show disgust; "but this", he said, "is directed more at my own incompetence than at the faults of others."

As England's captain he is greatly respected by his colleagues and has a vast knowledge of footballers and football teams in all parts of the soccer-playing world. He knows the strengths and weaknesses of any opposition that England can meet, and is always ready to modify the pattern of a match in order to meet a challenge.

All being well, Johnny Haynes, who was born in the same year (1934) that Stanley Matthews made his debut, will captain England in the World Cup series in Chile in 1962. Win or lose he is one man, of the 23 (including the referee) on the various fields of play, who is certain to enjoy every minute.

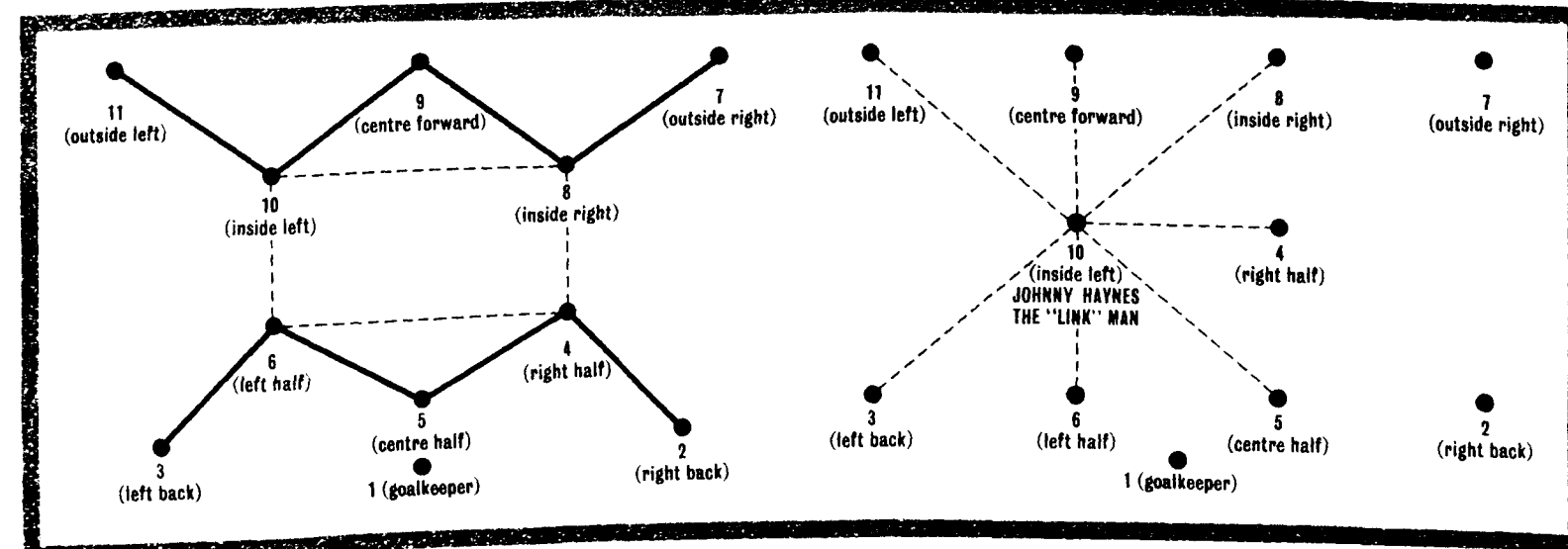


Diagram 1. This is the "W-M" formation (see the text) with the forwards forming a W and the defence an M. Under this system the vital mid-field link-up, which initiates the majority of attacking moves, is between the wing halves (Nos. 4 & 6) and the inside forwards (Nos. 8 & 10).

Diagram 2. Here is the 4-2-4 formation, with four forwards and four defenders in addition to the goalkeeper. Under this system the inside-left (No. 10) plays well back and tends to become the master tactician, who receives passes from all directions and distributes the ball as he sees fit.

PEOPLE AND EVENTS



SIR GEOFFREY DE FREITAS, who became Britain's new High Commissioner in Ghana in succession to Sir Arthur Snelling, is seen here with his wife in their garden at Cambridge, where he used to farm. Born in April 1913, he went from Haileybury College to Cambridge University, where he became President of the Union Debating Society, and won a blue for representing the University at athletics. He is a barrister and was Chairman of the Society of Labour Lawyers. Sir Geoffrey was Labour Member of Parliament for Lincoln from 1945 until 1961. He served as Parliamentary Private Secretary to the Prime Minister, Mr. Attlee, and in May 1946, at the age of thirty-three, became Parliamentary Under-Secretary for Air. Sir Geoffrey and his wife have a daughter, who is at Oxford University, and three younger sons.



AT THE opening of Tanganyika's University College, Dar es Salaam, Mr. Julius Nyerere (right), Prime Minister of Tanganyika, was made the first Honorary Fellow of the University College. Here Mr. Nyerere (he is a graduate of Edinburgh University) is being congratulated after the presentation of his scroll by Mr. A. Y. A. Karimjee, Chairman of the Provisional Council of the University College and Speaker of the National Assembly.



DURING his recent tour of Commonwealth countries in Africa, Sir Saville Garner, Permanent Under-Secretary of State for Commonwealth Relations, visited Mahera in the Kaffu Bullom Chiefdom of Sierra Leone. There he met Paramount Chief Bai Sherbro Komkanda II, whose domain lies across the estuary from Freetown. Sir Saville Garner is photographed here with the Paramount Chief and his wife, and (right) Mr. W. A. Wallace, District Commissioner, Port Loko.

PAKISTANI decorations were awarded to Pakistanis and Britons at the Pakistan High Commission in London. Seen here after the investiture are, below left: Mr. A. Gaitskell, former Adviser for the Food and Agricultural Commission in Pakistan (who received the Sitara-i-Pakistan); Lieutenant-Colonel M. R. Mahmood, retiring Medical Adviser to the Pakistan High Commission, London (Tamgha-i-Pakistan); Professor Charles Alexander Wells, Professor of Surgery at the University Medical Reform and former member of the Pakistan Medical Reform Commission (Sitara-i-Pakistan); Sir Henry Holland, the famous "Frontier Doctor" and mission surgeon in Pakistan (Sitara-i-Khidmat); Lieutenant-General Mohammed Yousuf, the Pakistan High Commissioner; Mr. R. D. Howe, former Census Commissioner in Pakistan (Sitara-i-Quaid-i-Azam); Mr. Choudhury Zaman Ali, Pakistan businessman (Sitara-i-Khidmat); Mr. Azam Khan, former world champion professional squash player (President's Medal for Pride of Performance for Services to Sport); and Mr. Iftikar Ali, the Deputy High Commissioner.



A GROUP of overseas students in Britain take a look at the map to decide "where next" in their tour of the English Lake District. With them are members of Kendal Rotary Club with whom the British Council arranged a week's holiday in the Lake District. L. to r.: Mr. Geoff Gawith and Mr. John Geary, both of the Rotary Club; Mr. L. R. Brunet, Mauritius; Miss E. S. Brauchmann, Argentina; Rotarian Malcolm Snaith (at rear); Mr. A. Mohabeer, Mauritius; Mr. M. K. Shah, Kenya (at front); Mr. J. W. Fuller, California, U.S.A. (at rear); Mr. S. O. Akaiku, Nigeria; Miss I. Gaber, Sierra Leone; Miss Mioka Shinboba, Japan. The students stayed as guests in the homes of members of the Kendal Rotary Club, and took part in various social functions in the area.

THREE young farmers from Surrey, England, drive their British Land Rover Series II fully loaded into deep water to test its water-proofing at the Army Fighting Vehicles testing ground, Surrey. The farmers, Paul Lamb, 20, John Du Vallon, 22, and Geoffrey Burgess, 19, are members of the Federation of Young Farmers' Clubs, and they are taking a two-year trip round the world to study agriculture and visit young Farmers' Clubs in other countries. Their journey will take them across Europe into Turkey, Iran, Pakistan, and India. From Calcutta they will go on to Burma, Thailand, Malaya and across the sea to South America, then into North America and New York, from whence they sail for home.



MR. ALVIN MARRIOTT (above), West Indian sculptor and former student of Camberwell School of Art, London, has been specially commissioned by the Committee of the Caribbean Games to make a more than life size statue to decorate the Stadium in Jamaica. The statue will be finally cast in aluminium which has been donated by Aluminium Jamaica Ltd. Incidentally, the Eros statue in Piccadilly, London, is also made of aluminium, which has withstood the test of time very well. The features of the runner are based on those of the Jamaican Olympic Gold Medallist, Dr. Arthur Wint, who is now practising medicine at Altrincham, Cheshire, England.



MR. R. S. S. GUNewardene, who has been appointed Ceylon's High Commissioner in Britain in succession to the late Mr. Gunasena de Soysa. Mr. Gunewardene is one of Ceylon's most experienced and distinguished diplomats. He has held high office both in Ceylon and abroad. He was a member of the Cabinet in the first post-independence Government of Ceylon, and has been Chairman of the United Nations Human Rights Commission and a Vice-President of the United Nations General Assembly. He was Ceylon's Ambassador in Washington for seven and a half years, and has been Ambassador in France since July 1961. He will be accredited to Paris and Berne while serving in London.

Books

TWO MEN closely concerned with books. . . . On the left is Mr. R. C. Gowers, who is Assistant Secretary in charge of Exports, Publishers' Association of Great Britain. He is talking with Mr. John Hampden, who is Book Adviser to the British Council and Joint Secretary of the Norrington Committee on Low Price Books for Overseas. The occasion was a Reception given to mark the publication of the book, *The Queen's Visit to India—Elizabeth II in India and Pakistan*, by Asia Publishing House, London. The book was introduced at the reception by Mr. Bernard Braine, Joint Parliamentary Under-Secretary of State, Commonwealth Relations Office.

THE EVER-CHANGING COMMONWEALTH

Few human institutions have seen so many changes, and have incorporated so much diversity, as the Commonwealth in the last 15 years. Sir Ivor Jennings, Master of Trinity Hall, Cambridge, has now published *Hutchinson & Co.*, 12s. 6d.) the fifth revised edition of his book, *The British Commonwealth of Nations*, which explains in detail the intricate, differing relationships between the member countries of the Commonwealth as it existed at the end of 1960. Five editions—almost entirely rewritten—since 1948! No wonder that Sir Ivor states: "The Commonwealth changes so rapidly that it is difficult for an author to keep pace with it."

He begins his first chapter: "Whatever be their defects, the British people have a remarkable capacity for constitutional innovation. They make no attempt to force governments into a rigid classification; on the contrary, they adapt institutions to suit the environment. The result is not only a great variety of forms of government at any given time, but also a constant process of change."

This is the theme which pervades the pages of Sir Ivor's book. He deals in turn with the European, Caribbean, Asian and African peoples of the Commonwealth, and continues with chapters on Responsible Government, Free Association, what he calls "A Digression About Laws", and Consultation and Co-operation.

Cultural Links

In the last of these chapters he writes: "The foundation on which the Commonwealth rests is seldom mentioned. It is community of culture. . . . Of the sixteen Prime Ministers in the Asian countries of the Commonwealth between 1947 and 1960, eight had been educated at Cambridge and two at Oxford. Most of the others had been educated at Indian universities founded on English models."

"The most important element in the common culture is the English language. Though a great many other languages are spoken and great efforts are being made to stimulate the development of the Asian languages, English is the usual language of administration in the Asian countries and the only language of administration in the African countries. French-speaking Canadians are bilingual. Except in Quebec, India and Ceylon, most secondary education is in English. Except in the French-speaking universities of Canada nearly all university courses are in English."

Even in this question of a common culture, however, Sir Ivor sees the Commonwealth as fluid and liable to change. "Independent peoples", he writes, "will not be able to retain their place in the world unless they share in the common culture

of intelligent and educated men; but they need not follow the English in particular, and though there will be relics of British rule for centuries, each of the countries will no doubt develop its national characteristics out of its own experience and its peculiar relations with other countries."

MEMORIES OF CEYLON

Another autobiography which covers a limited period of years is called *Growing* (The Hogarth Press, 25s.). It is written by Leonard Woolf, a master of English prose, and covers the years from 1904 to 1911 when the author was a civil servant in Ceylon. "One of the charms of the island", he writes of Ceylon as he knew it, "is its infinite variety. In the north, east, and south-east you get the flat, dry, hot, low country with a very small rainfall which comes mainly in a month or so of the north-east monsoon. It is a land of silent, sinister scrub jungle, or of great stretches of sand broken occasionally by clumps of low blackish



shrubs, the vast dry lagoons in which, as you cross them under the blazing sun, you continually see in the flickering distance the mirage of water, a great non-existent lake sometimes surrounded by non-existent coconut trees or palmyra palms. That is a country of sand and sun, an enormous blue sky stretching away unbroken to an immensely distant horizon."

"But over a very large part of Ceylon the country is the exact opposite of the sandy austerity of Jaffna and Hambantota in which I spent nearly six years of my Ceylon life. It is as in so many other places, mainly a question of rain. In the hills and mountains which form the centre of Ceylon and in the low country of the west and south-west the rainfall is large, or very large, and the climate tropical. In this zone lies Anuradhapura and nothing in the universe could be more unlike a London street than the bund of the tank in Anuradhapura. Evergreen shrubs and glimmers in the fierce sunshine, the great sheet of water, the butterflies, the birds, the bodies of the people bathing in the water or beating their washing upon the stones, their brightly coloured cloths. Along the bund grow immense trees through which you can see from time to time the flitting of a brightly coloured bird, and everywhere all round the tank wherever you look are shrubs, flowers, bushes and trees—tree after tree after tree."

Such evocative writing, so vivid and exact, makes the reading of *Growing* a sequel to *Somerset*, by the same author, a delight.

Recollections of an African Boyhood

Kossoh Town Boy (Cambridge University Press, 12s. 6d.) is the boyhood story of the first African to be elected a Fellow of the Royal College of Surgeons of England—Robert Wellesley Cole. It is written by himself, and takes the reader from his birth at No. 15 Pownall Street, in the Kossoh Town district of Freetown, the capital city of Sierra Leone, through infancy and pre-school years to the exciting world of school life. He describes how "that boy, with his rough edges, his foibles and nuances, his grimaces and gaucheries", is moulded by his parents and teachers until, in his final years at school, he had developed qualities of leadership and group responsibility.

Typical of his simple and often amusing style is his description of how, almost as soon as he was born, his grandmother, sitting in the middle of a room full of relatives and neighbours who had come to pay their respects, gave him his first drink in this world. It was of *agbo*, a herbal infusion. He writes:

"She heaves in a quantity of the concoction smartly as I open my mouth to cry. I choke, swallow instinctively, take a good breath and open wide for a tremendous yell. But she is ready, and immediately I receive another quota into the back of my throat. I splutter, shut my eyes tight, kick out, go rigid with rage, and open wide for a truly nasty yell of protest; but again she is ready and heaves in the right quantity of *agbo* with practised aim. So the duel continues, each yell throttled at birth by a quaff, followed by a swallow, a holding of the breath, and an attempt at an even louder yell, which meets with the same inexorable fate, until the gourd is empty."

He was given the Christian names (he came from a middle-class Christian home) Robert Benjamin Wellesley Ageh—and was nicknamed, when he went to school, Bob "British West Africa" Cole, from his initials. But he loved school; indeed, he loved his life in all its aspects. He concludes his colourful and entertaining book with these words: "One day I woke up to find that that cocoon of a boy, with which we started at Kossoh Town, was gone. When it happened I do not know. But I am glad to have been that boy."

Books in Brief

BRIDGE CHURCH AND PALACE

John Murray, 28s.) gives, combined in one volume for the first time, an account of the three greatest of London's vanished structures—Old London Bridge, which was considered one of the wonders of the medieval world; Old St. Paul's, which was once the largest cathedral in Christendom; and Old Whitehall Palace, where King Henry VIII attended Wolsey's banquets, and where King Charles I was taken on the morning of his execution. This is a fascinating book of great interest both to the architecturally minded and the general reader.

TOPOLSKI'S LEGAL LONDON

published by Stevens and Sons for "The Lawyer", 31 guineas) is a large and lavish publication of drawings and text which captures and records both the common scenes and the brilliant ceremonies of London's legal year. The penetrating drawings are done, in his inimitable style, by Felix Topolski, and include such events as the Judges' procession, a Court hearing, a scene in the Temple, students at a lecture, and at the culminating ceremony of their training. The text is by Francis Cowper, the historian of Gray's Inn.

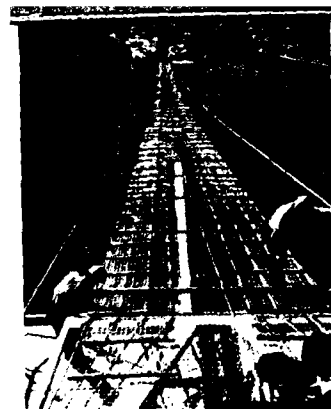
B.-P.'s SCOUTS

(Collins, 21s.) is an official history of the Boy Scouts Association and has three authors: Henry Collis, Fred Hurrell, and Rex Hazlewood. The first of the many illustrations—"1907, the beginning", as it is captioned—shows the Founder, the late Lord Baden-Powell, at Brownsea Island, where he first tested out his methods. The narrative will be of particular interest to the 9,000,000 Scouts of the world, and it is interesting to see, from a census taken in October 1960, that Indian Scouts (505,980 strong) are almost as numerous as Britain's (588,396). Every Commonwealth country adds its quota, but alas, the 22 Scouts of Tristan da Cunha—evacuated in 1961 after a volcanic eruption—will have to do their Scouting elsewhere.

H.M. STATIONERY OFFICE

booklets published fairly recently include "Commonwealth Development and its Financing". This is the first of an interesting series of studies dealing with Commonwealth economic development and financial affairs with special reference to Canada (booklet No. 1, 8s.), the Federation of Rhodesia and Nyasaland (7s.), and Pakistan (8s.).

Another booklet, "Road Progress" (2s. 6d.), is issued on behalf of the Ministry of Transport. It is a popular edition of the official report on the progress of Britain's four-year road-building programme, which was launched in 1958, and deals with short-term measures to relieve road congestion, medium-term expenditure and long-term planning.



HIGH above the Firth of Forth, Scotland, men build catwalks during the construction of the longest suspension bridge in Europe.

MACHINING in progress, at a factory in Manchester, England, on a 300 MW generator for Lake View Power Station, Ontario, Canada.



TRADE WINDS

Commonwealth Industrial Notes

Two large diesel-driven pumps capable of handling 167 tons of water a minute are being made by a British (Lincoln) firm for the Tapakuma drainage and irrigation project in British Guiana.

Tanganyika Electric Supply Company Ltd. has ordered equipment worth about £300,000 from English Electric Company Ltd., for an underground power station at Hale, on the Pangani river upstream from Tanga. Cost of the total scheme will be about £5,000,000.

A printing and book production factory costing £1,075,000 has been opened in Ibadan, Nigeria. It is a joint venture involving the Western Nigerian Government and a large group of British printers and stationers, and it will enable educational and scientific books hitherto printed and published in Britain to be produced on the spot.

Turbo-generators and associated plant worth more than £1,000,000 are to be supplied to Australia by C. A. Parsons & Co. Ltd., of Newcastle upon Tyne, England. They are for a power station on an open-cast coal field near Collie.

One of the largest dry docks in the world is under construction at Greenock, on the river Clyde in Scotland. It will be 1,000 feet long, 150 feet wide, will hold 6,000,000 cubic feet of water at high tide, and will accommodate ships of up to 100,000 tons dead-weight. The cost: £4,250,000.

A natural gas field discovered at Kapuni, in the Taranaki province of the North Island of New Zealand, promises to yield 100,000,000 cubic feet of gas daily, when fully developed. Light oil can be separated from the gas, which may also be used along with New Zealand's iron sands, to start a local iron industry.

Four top-flight engineers seconded from Britain's Central Electricity Generating Board, under the U.K.-Ghana Technical Co-operation Scheme, are working alongside Ghanaian engineers in the planning and commissioning of new power stations, and the development and maintenance of these and existing stations.

In 1960 Britain bought 19 per cent more from Canada than in 1959, and Canada bought 3 per cent more from Britain.

A £127,000 factory to be built at Bhopal, India, will manufacture a range of densified wood laminates for industrial purposes. The project is the result of co-operation between two British firms and the Indian Plywood Manufacturing Company Ltd., and Wallace Flour Mills Company of Bombay.

The Universities of Colombo (Ceylon) and Hong Kong have both ordered "baby" gas turbine instruction sets from Perkins Gas Turbines Ltd., of Peterborough, England. The turbines, which are of 50 h.p., are among the smallest in production anywhere in the world.

NIGERIA

Stamp Corner



ONE of the most attractive series of stamps being used in the Commonwealth at the present time is that of the Federation of Nigeria. There are thirteen stamps in the series, ranging from 1d. to £1, and their designs afford glimpses of the arts and industries of Africa's largest nation.

Groundnuts are one of Nigeria's main crops and the 1d. stamp, printed in emerald green, shows a groundnut plant. The nuts, popularly known to British children as "monkey-nuts" or, when shelled, as "peanuts", are clearly to be seen on the roots for, unlike most nuts, they grow underground.

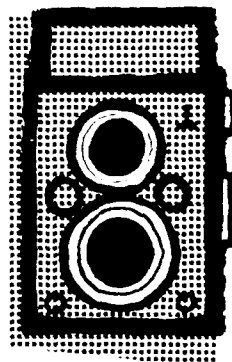
Nigerian craftsmen are world-renowned and several stamps pay tribute to their skill. Pottery-making is featured on the 2d. stamp, wood-carving on the 3d., and raffia-weaving on the 4d. value. An even older craft is represented by the Benin mask on the 6d. stamp, for these masks and the bronze heads found in the ancient Negro kingdom of Ife date back many centuries. The 5s. stamp has a view of the new Nigeria Museum, where many of these art treasures are housed. Typical of the exhibits is the bronze head of a Portuguese soldier shown on the stamp. Such figures were made in the fifteenth century by Nigerian sculptors who were impressed by the first Europeans they had ever seen.

The other high value stamps also show well-known buildings in Nigeria. On the 10s. stamp is a view of Kano Airport. The £1 stamp, in a simple yet effective design, shows the new Railway Station at Lagos, the capital of the Federation. All these Nigerian stamps have been printed in bright colours by the London firm of Harrison and Sons, using paper specially watermarked F.N. for the Federation of Nigeria.

C. W. HILL.



READERS' PICTURES



YOUTHFUL DIGNITY. A good portrait of a youthful sitter.

From Sule Omachonu,
P.O. Box 11,
Idah,
N. Nigeria.



PLEASING PROSPECT. An against-the-light photograph with finely rendered tones.

From R. D. Ahmad, Artist,
Forest Research Institute,
Abbottabad,
Pakistan.

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.



EXPECTANCY. The graceful lines of spotted deer in their zoo enclosure have been well caught.

From L. R. Grover,
Indra Bhawan,
Rahtak (Pb),
India.



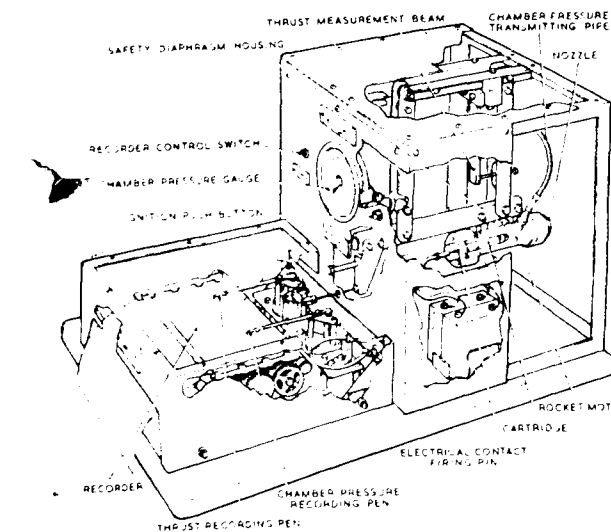
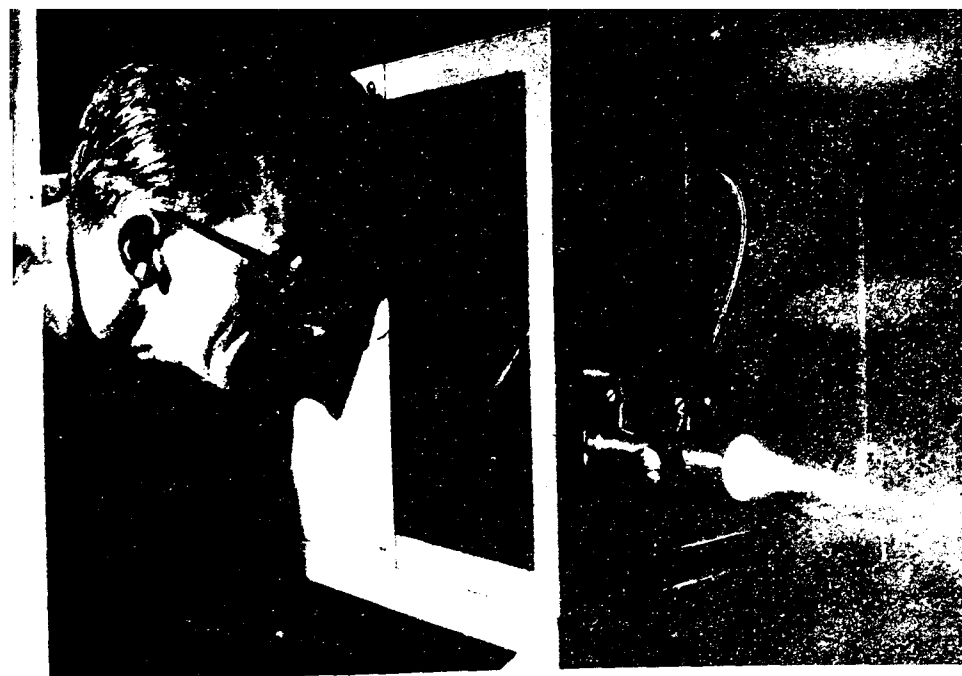
KING-SIZE KEYHOLE. A glimpse of the railway station at Kuala Lumpur, the capital of the Federation of Malaya.

From Bro. Lewis, F.S.C.,
St. Michael's Institution,
Ipoh—Perak,
Malaya.



O-O-O-P-S! "Tarzan," one of the most lovable and efficient of the Cyprus Police dogs, obliges his trainer.

From Jack G. Jackovides,
P.O. Box 543,
Water Board of
Nicosia,
Nicosia,
Cyprus.



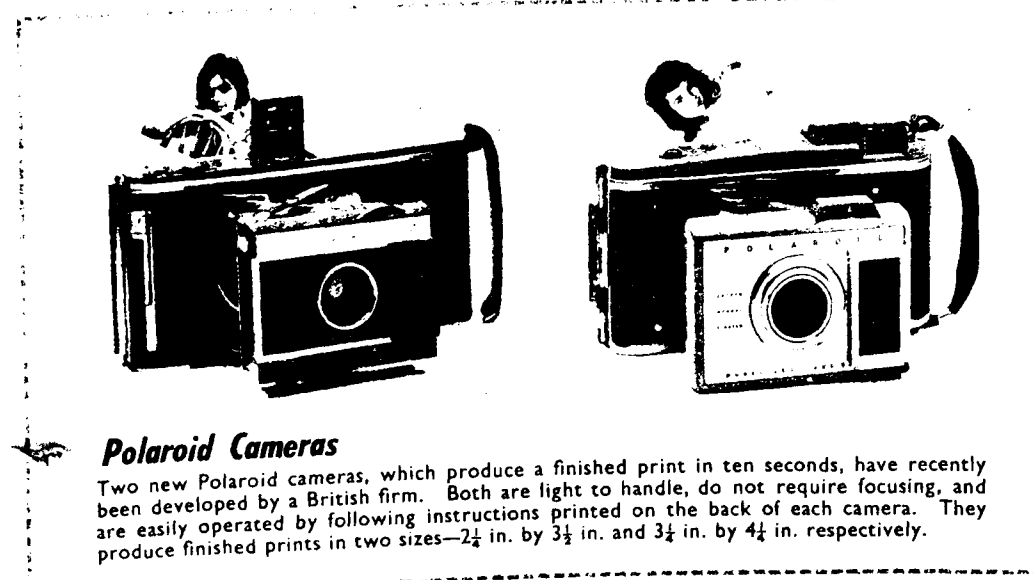
Solid Propellant Test Rig

Produced by a British engineering firm, this miniature rocket test rig, small enough to be used with safety in any laboratory, has been developed for technical training purposes. The device, which will enable students of applied thermodynamics to investigate problems concerning rocket propulsion, is fired by a special cartridge in a chamber. The resulting impulse and pressure generated are automatically recorded on a chart. The unit is economical to run, and is 15 in. by 15 in. and 28 in. high.



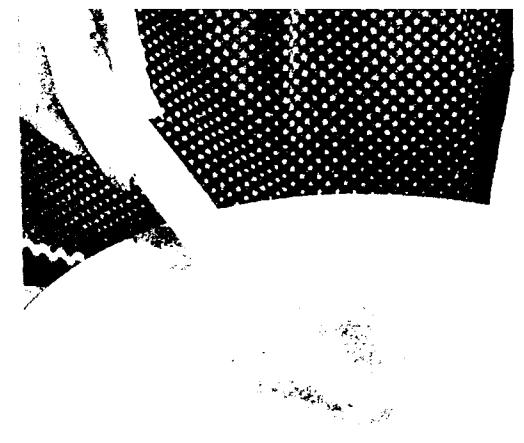
Horticultural Sprayer

A new lightweight, pneumatically operated hand sprayer has been produced by a British manufacturer. The sprayer's working parts are of brass, and the one and a quarter pint container is of Polythene. It is claimed that it will withstand corrosion by horticultural insecticides, and that it is easily operated with one hand, an advantage when spraying a plant. A filter gauze is included in the design to prevent blockage by sediment.



Polaroid Cameras

Two new Polaroid cameras, which produce a finished print in ten seconds, have recently been developed by a British firm. Both are light to handle, do not require focusing, and are easily operated by following instructions printed on the back of each camera. They produce finished prints in two sizes—2½ in. by 3½ in. and 3½ in. by 4½ in. respectively.



Flickstick

A solid detergent in a rigid plastic cage is the latest product to be marketed by a British company. Named "Flickstick", it is an efficient, economical and convenient aid to housewives. The cage itself, which is strong and colourful, is not affected by the action of the detergent.



Battery Operated Vacuum Sweeper

Recently marketed in Britain is this efficient battery-powered vacuum sweeper. It can be used for hotels, hospitals, schools, industrial and commercial premises, the cleaning being done without the problem of trailing cables, and without increasing fire risks. The machine has revolving brush, vacuum and propulsion devices.



The Masfield-BEAGLE B.206. Designed to fit the particular needs of business executive air travel, it is simple to operate and maintain.

BRITAIN'S aircraft industry has produced the smallest fully equipped aeroplane available anywhere—a specially designed light aircraft for business executives. Powered by two Rolls-Royce Continental G 10-470-A engines, the Masfield-BEAGLE B.206 can fly over 1,000 miles in comfort in all weathers,

day and night, at an economical cruising speed of 228 miles an hour. The range with a maximum payload (1,000 lb.) is 1,150 miles and the maximum fuel range is 1,720 miles. The aircraft is simple to operate and maintain and the price is said to be "under £30,000".

The interior of this low-wing monoplane is one of the most attractive ever seen in an aircraft of this type; it is the only one of its size with full toilet and washing amenities. The aircraft can be modified to take six or seven seats; to take a five-seat couchette, or two stretchers and two sitting passengers.



WITH the B.206 aircraft here are (left) Mr. John Nicholson, Flight Operation Manager of the Beagle group, and Mr. Peter Masfield, Managing Director of the firm. The plane is 32 ft. 7 in. long; 12 ft. 3 in. high; span 38 ft.; track 14 ft.; and weight empty, 4,003 lb.; and equipped, 4,234 lb.



The Queen in Sierra Leone

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Speaking of the Commonwealth

FAITH in the future of the Commonwealth and the part it can play in maintaining world peace was underlined by Mr. Julius Nyerere, former Prime Minister of Tanganyika, in an article he wrote in *Commonwealth Journal*, the journal of the Royal Commonwealth Society in London.

Describing the Commonwealth as a club "with virtually no written rules but which assumes basic friendship between its members," Mr. Nyerere said that for Tanganyika membership of the Commonwealth meant association with other friendly States and co-operation on the basis of equality without any sacrifice of their own sovereignty. "The value of such an association," he added, "is obvious. Common services can be established in economic, social and research fields and use can be made of each other's facilities—for example, in foreign representation. But most important the common membership of this association implies the ability to have frank and friendly discussions on all sorts of matters both through formal conferences and through diplomatic relations, which are yet more informal than those between other powers."

"The Commonwealth," Mr. Nyerere said, "is an association of equals having no struggles among its members for domination. In other words, the Commonwealth is in practice a great champion of the principles of the United Nations. . . . The existence of the Commonwealth in its present form and its possibilities as a factor in world peace are a result of its flexibility of organisation as well as its implied attitude of international friendship based on equality."

Sir James Robertson, Chairman of the Governors, the Commonwealth Institute, London, in a letter to *The Times*, pays tribute to the generosity and co-operation of all those who have contributed to the new Commonwealth Institute, to be opened later this year. He places on record his gratitude to the Governments of all the nations and dependencies in the Commonwealth, as well as to the public bodies, industrial and commercial firms, and private persons who will have given nearly £200,000 in money and materials towards the new building which is being provided by Britain, and towards its permanent exhibitions depicting the political, social and economic features of all the Commonwealth countries.

It is gratifying, Sir James says, to have such close and active co-operation in the efforts made by Britain to spread knowledge of the Commonwealth and to foster understanding among its peoples.

The end of colonialism had created a new, important force in the world, said Sir Hugh

Foot, the British representative in the United Nations Trusteeship Council, when he addressed a United Nations Association meeting at Toronto, Canada.

He said that of all the people in the Commonwealth all, except five per cent, lived in independent countries, and that in this generation three times the population of the Soviet Union had gained independence.

Britain's Commonwealth Weeks scheme has been an immense success. During the last two years it has been keeping Britons up to date with the rest of the Commonwealth by means of special functions and entertainments linked with a touring exhibition.

Since November 1959, the Commonwealth Weeks were held in fifteen major centres of Britain: Liverpool, Leeds, Birmingham, Norwich, Cardiff, Leicester, Tynemouth, Edinburgh, London (city), Belfast, Blackburn, Hove, Bristol, Barking and Bournemouth. The Exhibition had 889,179 visitors, of whom at least half were children. Full support in the programmes organised were received from Commonwealth Governments and voluntary societies as well as from the civic authorities.

There were organised school parties, Commonwealth film shows and lectures, sales of Commonwealth publications, window displays, and over 380 separate gifts were presented to visitors.

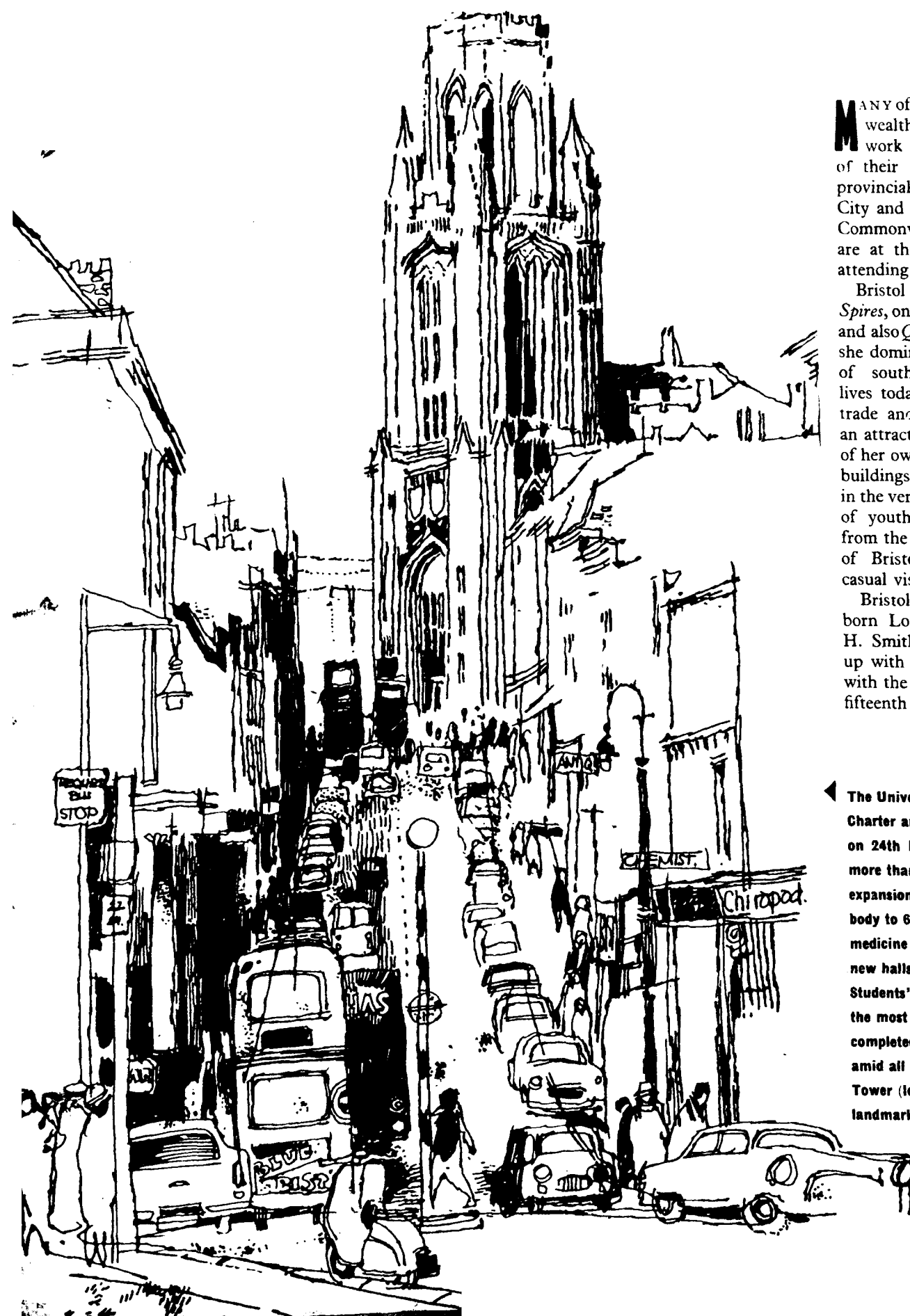
Supporting activities in each of the centres included civic luncheons, church services, dances, stamp and photographic exhibitions, sales of Commonwealth products, and concerts in which Commonwealth artists and composers were featured.

One of the lessons learned was that the extent and enthusiasm of local help showed that, in the centres visited, there is a wide field of voluntary activity which, used properly and fostered, can provide what is perhaps a more permanent sphere of influence than that created by the holding of a temporary event like the Commonwealth Weeks and Exhibition, however successful this was.

A most important gathering of Commonwealth business interests will take place in London on 21st May when H.M. the Queen will open the 21st Congress of the Federation of Commonwealth and British Chambers of Commerce. Some 300 delegates are expected to attend this four-day Congress where decisions will be taken on steps to promote and expand Commonwealth trade.

The Chairman of the Congress will be Lord Lloyd, a Director of Lloyds Bank, and among the honorary delegates will be senior Government representatives from Commonwealth countries. The Congress is held every two years, and the next one will be held in Rhodesia.

Commonwealth Students in BRISTOL



MANY of the 36,000 overseas Commonwealth students in Britain live and work in London; but thousands of their compatriots are studying in provincial cities and towns such as the City and County of Bristol, where 148 Commonwealth young men and women are at the University, and others are attending a variety of training colleges.

Bristol has been called the *City of Spires*, on account of her many churches, and also *Queen City of the West*, because she dominates in regal splendour much of southern-western England. She lives today, as she has in the past, by trade and industry; and yet she has an attractive and distinctive personality of her own. The beauty of many of her buildings and open spaces; the port in the very heart of the city; the feeling of youth and energy which radiates from the University; these are aspects of Bristol which impress the most casual visitor.

Bristol, in the words of her Canadian-born Lord Mayor, Alderman Charles H. Smith, is "an historic city, bound up with the past; and yet she moves with the times". She was a port in the fifteenth century, when the explorer

◀ The University College of Bristol received its Charter and became a fully fledged University on 24th May, 1909. Today it has more than 3,000 students, and ambitious expansion plans which may raise the student body to 6,000 before the 1970s. New schools of medicine and chemistry are to be built; many new halls of residence are planned; and a new Students' Union costing £750,000 will be the most modern in Britain when it is completed in about four years' time. But amid all the change the University's Tom Tower (left) will remain as a Bristol landmark; and students will continue to sit or stand on the refectory steps (above right) to make plans and to discuss the events of the day.



BRISTOL



THE peaceful scene at the city centre.

Continued from page 3

John Cabot sailed west, in a Bristol ship with a Bristol crew, and discovered Newfoundland; she is still a port—highly mechanised and modern, as subsequent pages will describe—in 1962, and has an extensive Commonwealth trade. She has the oldest working theatre in Britain—the Theatre Royal, which was opened in 1766; she also pioneered the first Department of Drama to exist at any British University. She has a church, St. Mary Redcliffe, which was described as "the fairest, the goodliest, and the most famous parish church in England" by Queen Elizabeth I; she also has a modern University engineering block that was opened by H.M. Queen Elizabeth II.

Most of the newly arrived overseas students are helped to settle down by several organisations including the Bristol branch of the British Council, which has its headquarters in a solidly built house that was once the home of a well-to-do Bristol merchant. Here, any day of the week, students from many parts of the world can be found talking, relaxing, taking part in organised activities, or seeking help and information.

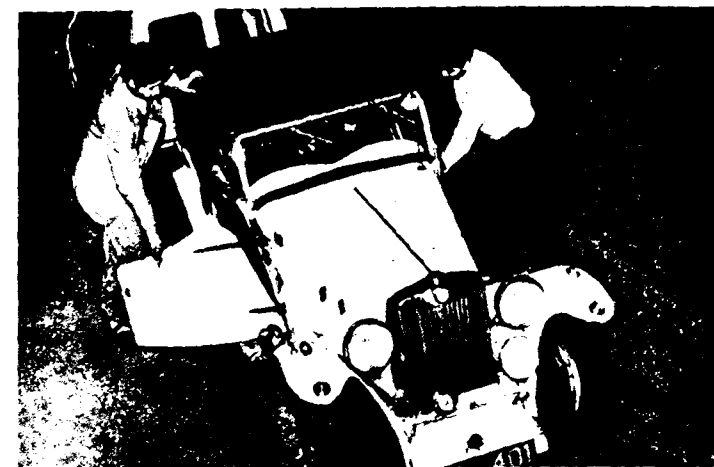
Clubs and Societies

The University Students' Union, where students meet socially, has about 100 societies. Hobbies such as aeromodelling are catered for, but many of the clubs have a more serious purpose. The Tiddlywinks Club raises money for charity; the Arab Society strives to promote "a better understanding of the Arab world and its culture among people in Britain"; the Canada Club, Caribbean Students' Association, Indian Students' Association, and the International Society, are thriving concerns; there is also an organisation called "War on Want" which raises money for the relief of poverty and distress anywhere in the world.

Away from the University there are the attractions of a city of nearly half a million people—the quaint old public houses, the cinemas, the dance halls, the opportunities for sport and the pursuit of the arts, and many places of historic interest to visit, including the Cabot Tower—a memorial to the great explorer—and the world-famous Clifton Suspension Bridge, which still spans the Avon Gorge as gracefully as on the day when it was opened, in 1864. To most Commonwealth students Bristol is, above all, a homely place—a good place to live in.



TALK—animated, uninhibited talk—is one of the joys of University life. Amrit Dawe (left) and Vijay Chaddah enjoy talking until the early hours—discussing every subject under the sun.



TIME for an evening out in a 1936 M.G.



LEAVING a Bristol cinema, with girl friends.

TWO YOUNG MEDICAL STUDENTS RELAX...

THEIR names are Amrit Dawe and Vijay Chaddah. They are both Indians with homes in Kenya, and they take their final examinations in medicine in June 1962.

How well have they settled down in Bristol, where they share a flat within easy walking distance of the University? Very well indeed! "We are enjoying ourselves," Amrit said.

At heart they are serious young men, who give much thought to many problems and know, from personal experience, the difficulties which inevitably face Commonwealth students in Britain.

"There are three chief ones," Amrit said. "First, the loneliness... Loneliness is unavoidable, but it can be overcome—the more speedily with the help of organisations such as the British Council.

"When I arrived in Britain—in London—the British Council put me through a short course to introduce me to the ways of the country. Later, when I moved to Norwich in East Anglia, to study for two years for my General Certificate of Education, a Council representative met me at the station and helped me to settle down in the city.

"In Bristol also, when I arrived here four years ago, the British Council introduced me to people. Later I became

completely independent and set up on my own.

"The second problem is the weather, which takes a bit of getting used to, especially in the winter. Even the British Council can do nothing about it.

"Finally there is the comparatively minor problem of food. When I came to Britain I ate vegetables only, on religious grounds, and found my choice of meals somewhat limited. I kept it up, however, and I have remained fit and healthy."

Amrit, who is 25, comes from Nakuru, Kenya. He attended the Duke of Gloucester's School, Nairobi, where at an early age he wrote an essay, "My Aim in Life," in which he stated that he wanted to be a doctor. Like his friend Vijay, he is attached to the Bristol Royal Infirmary, where he is working in the wards and gaining practical experience.

When the young "medics" are not studying, talking, or entertaining guests in their flat, which has Renoir prints and African drums on the walls, they climb into their 1936 M.G. sports car, which they bought for £50, and enjoy themselves in and around Bristol. They both play squash, and Vijay likes a game of bridge and plays the guitar.

When they have qualified, the young doctors will return to Kenya to practise medicine.

Sir
Philip
Morris

VICE-CHANCELLOR
UNIVERSITY OF
BRISTOL



"I have visited every University in Canada, Australia, New Zealand, India and Pakistan, and a high proportion of those in other Commonwealth countries. Many of these Universities set very high standards, and I would like to see more British postgraduates, especially going out to work in Commonwealth Universities."



"I believe in the community type of University, which integrates with the life of its parent city. You must get your University 'mucked in', and I'd rather be tight for space in the right place, as we are in Bristol, than have ample space and work in an atmosphere of splendid academic isolation."



"I am a great believer in the younger generation; they are learning a lot. Commonwealth students in Britain are rather older than run-of-the-mill British undergraduates. They settle down and then they tend to congregate together, but we are the last people who should criticise them for that."



"In Britain we are providing many more University places. The maintenance of high standards depends upon the wherewithal being found for sufficient tutors of the right calibre. I have devoted my life to education and never regretted it. My recreations? They include piano playing and reading detective stories."

Sir Philip Morris was born in 1901. He was educated at Tonbridge School and St. Peter's, York, and then studied at Trinity College, Oxford, where in 1923 he took Modern Greats. He was appointed as the Vice-Chancellor of Bristol University in 1946, and a list of

educational appointments, including the Chairmanship and Vice-Chairmanship of a great variety of bodies, fills more than half a column in "Who's Who". He was Chairman in 1959 of the Commonwealth Education Conference at Oxford, and he is

Chairman of the Commonwealth Education Liaison Committee, which was set up as a result of the Conference. He is also a member of a committee of experts which is due to report before the end of 1963 on the future of full-time Higher Education in Britain.

BRISTOL

A Trinidad Family in **BRISTOL**

...Play the drum like daddy...

LITTLE Helen-Ann was born in London one and a half years ago. Now she lives in Bristol with her parents, plays with English children, watches television, and learns to thump her father's *thumba* drum, which cost 12 guineas and is played with the flat of the fingers.

Her father is Mr. Garnet D'Abreu, who is

studying at the Bristol College of Commerce and hopes to become an Associate of the Institute of Cost and Works Accountants. He plays cricket for the College and leads the steel band which is the pride of the West Indian students in Bristol.

Helen-Ann's mother, Helen, is taking a correspondence course, hoping to qualify as a

company secretary. What does she miss in Bristol? "Why," she said, "the West Indian sunshine, of course! And also the absence of shower baths in British bathrooms." "But on the whole we are happy here," she added. "Bristol is a friendly place."

The D'Abreu's social life revolves around the University and the other West Indian students in Bristol. Every so often a neighbour comes in to "baby sit" for them, and Helen returns the compliment when she can.

When they have finished their studies the D'Abreus intend to return to Trinidad, where his father owns a laundry and her father used to be the Government printer.

A PLEASANT spot above the Avon Gorge. The famous Clifton Suspension Bridge in the background is 702 feet long, weighs 1,500 tons, and is 245 feet above the River Avon at high water.



The Bristol Caribbean Steel Band

This little band has become famous in Bristol, where it is in great demand to play at social functions. It consists of four sets of steel drums, made from oil drums like the one in the picture, and a rhythm section of four—maracas, high hat (that is, cymbals on a stand), conga drum, and claves (wooden sticks). The students pictured above are Melvyn Sankies (British Guiana), Venty Louisy (St. Lucia), Carmen Beckford and Shirley Stone (Jamaica), and Garnet D'Abreu. Louisy, who is in his fifth year as a medical student, is President of the Caribbean Students Association in Bristol. He plays rugby football for United Bristol Hospitals, speaks wittily in Union debates, and organises social events. He has worked during his holidays as a dishwasher in a London cafe for 2s. 6d. an hour; as a presser in a blackcurrant factory (3s. 6d. an hour); and as a night watchman in a nurses home. "That," he said with a smile, "was the best job of all."



A post-graduate couple from Ceylon

MR. and Mrs. Ashley Halpe, from Colombo, are graduates of the University of Ceylon. They are living in Bristol while he takes a post-graduate course in English and she studies privately for her Licentiate of the Royal Academy of Music.

They have a second-floor flat consisting of a bedroom, kitchen, and a living room, which they decorated themselves. It is a colourful room enhanced by some of Mr. Halpe's vivid oil paintings and built around the baby grand piano which Mrs. Halpe bought in England for £250.

One of Mr. Halpe's paintings, called *Juxtaposition*, was hung in the 1961 exhibition of the West of England Academy.

MRS. HALPE plays a composition by Debussy (left) watched by her husband, who is also her sternest critic. Her favourite Western composer is Mozart. Below: The Halpes, who lead a gay social life, with other Commonwealth guests at a party given by the Bristol branch of the Royal Commonwealth Society.

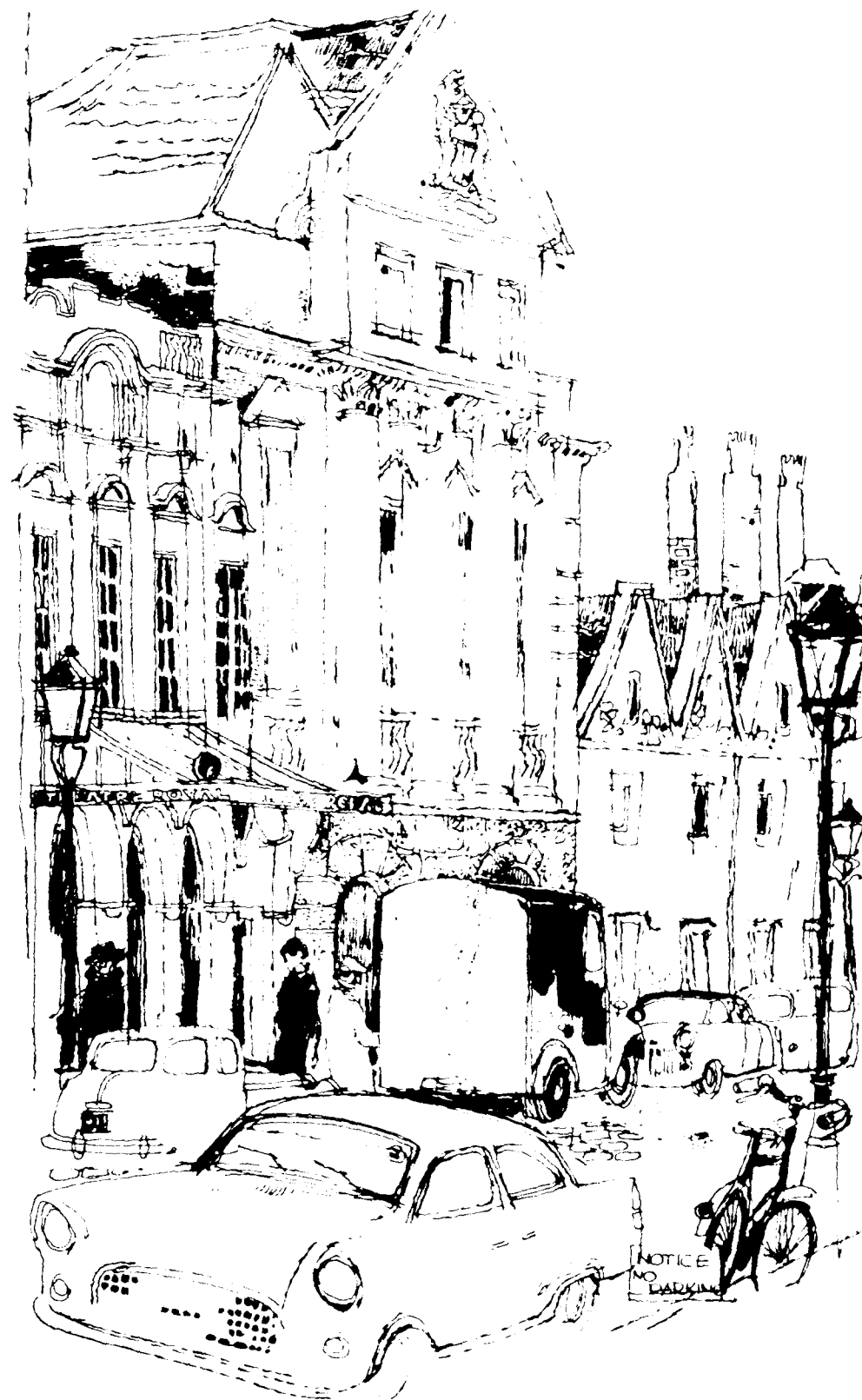
AT THE INTERNATIONAL HOUSE

The day's work is done, and now these African girls relax in their room at the Methodist International House in Bristol. They are Theresa Mbamali (reading the book) from Onitsha, Eastern Nigeria, who is studying to be a Health Visitor; and Annabel Kinjanyui, from Nairobi, Kenya, who is on an Education course. There are 26 students at the hostel, which, although it is run by the Methodist Church in the city where John Wesley, the founder of Methodism, established his first Chapel, is open to students of all faiths. The residents include Anglicans, Roman Catholics, Baptists, Hindus, Sikhs, and Moslems, and they come from Britain, India, Pakistan, Nigeria, Sierra Leone, Kenya, Uganda and Hong Kong.



BRISTOL





The Theatre Royal—Established 1766

ONE of the centres of the lively artistic and intellectual life of Bristol is the Theatre Royal, which opened on 30th May, 1766, in a fashionable residential part of the city, and was narrowly saved in 1942, by the Society for the Preservation of Ancient Bristol, from the fate of being turned into a warehouse. In 1946 the Arts Council took a lease on the building and invited the London Old Vic to form a company to live and work in Bristol. The Theatre Royal has never looked back. . . . It puts on plays old and new, most of which are as beautifully staged as they are performed. The Drama Department of the University is closely linked with the theatre, and—with the support of the City's Education Department—large parties of schoolchildren attend the matinees.



YOUNG people from the Commonwealth gather at the Bristol headquarters of the British Council to discuss the play they are about to see. Britain, Nigeria, Rhodesia, Jamaica, and Barbados are represented.



BRISTOL has the oldest active theatre in Britain. In the crowd entering (above and below) to see the first performance in Britain of a new French comedy, "The Flanders Mare" by Jean Canolle, are several Commonwealth students, and teachers studying in Britain on Commonwealth bursaries.



The Port of BRISTOL

TOBACCO . . . sugar . . . cocoa . . . oil . . . phosphates . . . bananas . . . coffee . . . aluminium. These are just a few of the natural products of the Commonwealth which enter Britain through Avonmouth Docks, one of the three dock systems operated by the Port of Bristol Authority.

Day after day, year after year, the cargo ships from Africa and Asia, Australia and the Americas, nose up the Bristol Channel, pick up their pilots and their businesslike tugs, and slip without fuss through the 875-ft-long entrance lock into Avonmouth Docks.

Here is the *City of Poona*, from East Africa with Uganda coffee; here the *Kandaw* from West Africa, with timber and 2,000 tons of Ghana cocoa beans; here the *Sunrana* from Canada, unloading aluminium into a lighter alongside.

Stevedores descend upon the ships in gangs of 80 or 90 men. They rip the covers from the holds and set to work. Cranes whirr, bucket elevators shovel out ores, suction elevators suck out grain, pipelines sprouting from oil tankers empty a tanker dry within hours—enough petroleum spirit, from an average ship, to drive a car for a hundred million miles.

A truck trundles along the quay with tins of stewed steak from Tanganyika. A crane swings Canadian paper ashore. . . .

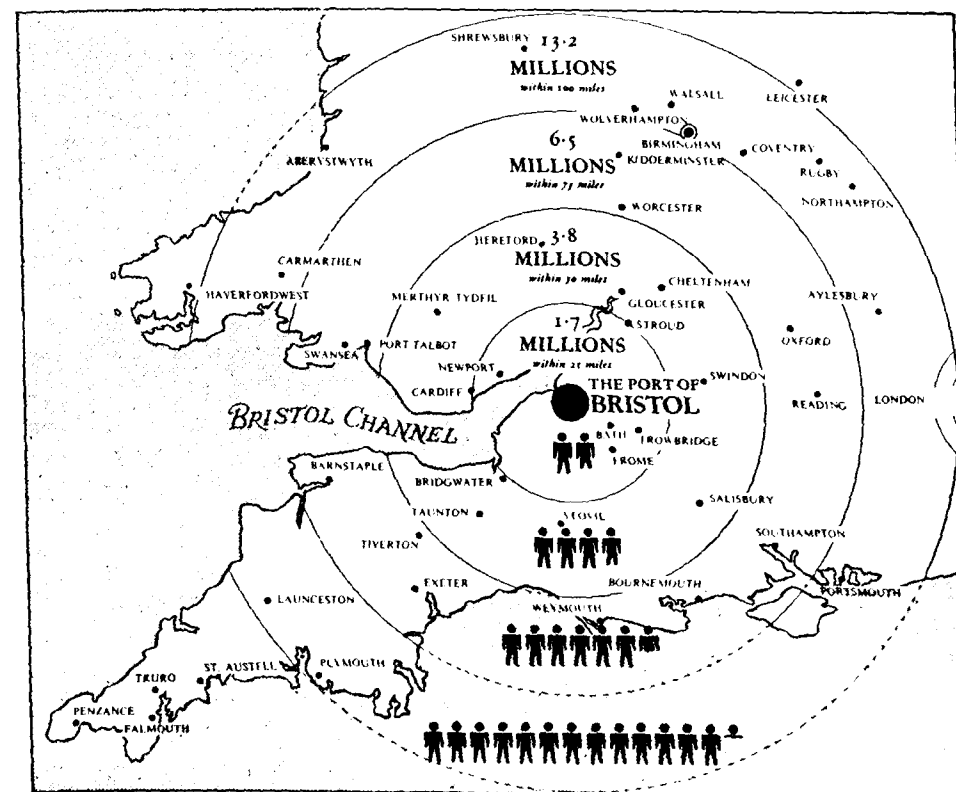
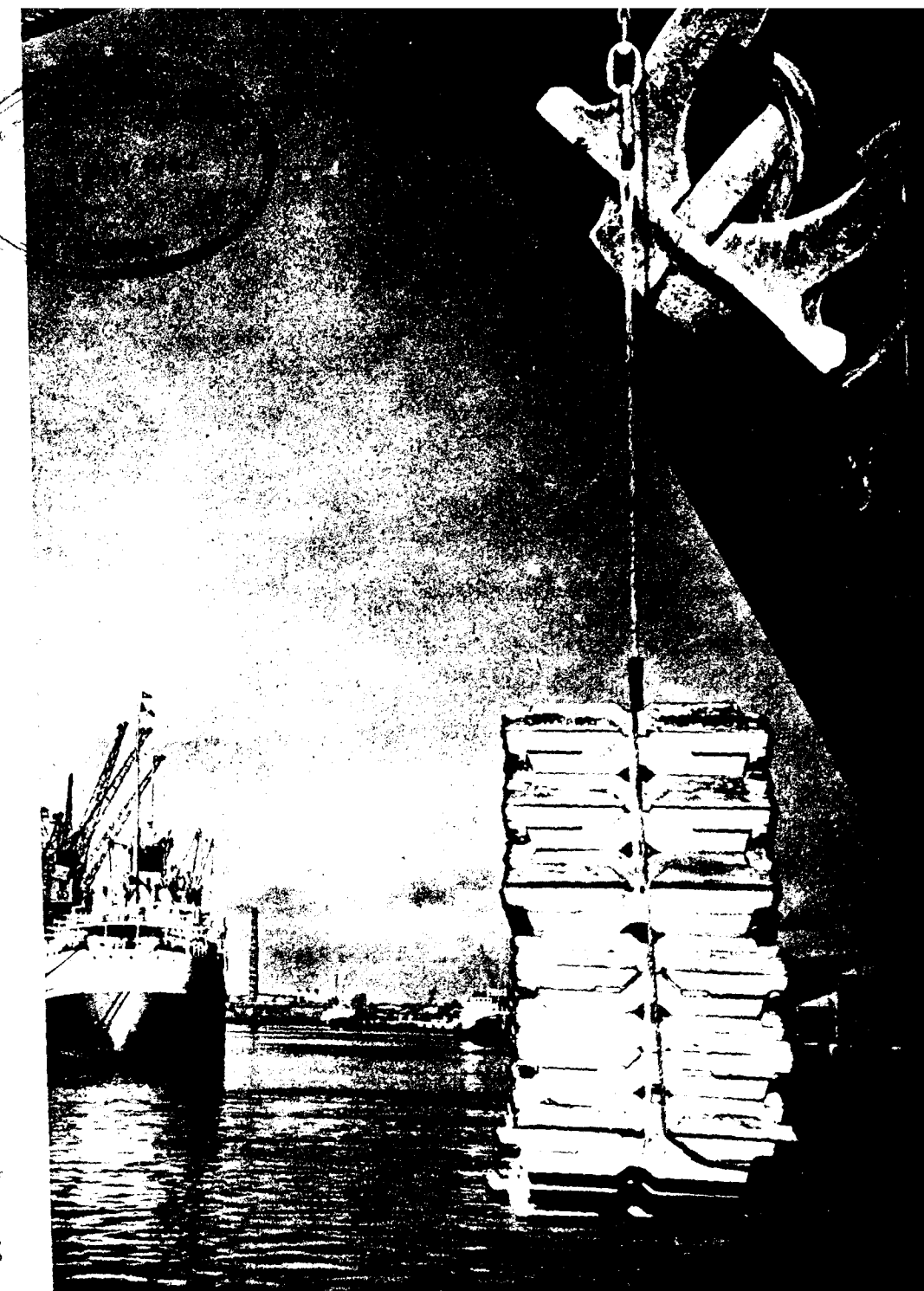
Some of the Bristol cranes have been working since 1908; others are new. Avonmouth has 100 cranes, and their drivers, you feel, are expert enough to rest a three-ton load on an egg without cracking the shell.

The cranes lift a cargo—New Zealand cheese, perhaps; or tinned Australian pears—from the hold of a ship, swing it high in the air and lower it through the open skylight of a warehouse. There it is grabbed by a machine called a fork-lift truck and transported to the storage space allotted to it.

The Bristol docks—City Docks, which handles Continental

Continued overleaf

ALUMINIUM from Canada is unloaded (above right) at Avonmouth, and in return (below) Mini cars are loaded for export. The map gives an indication of the millions of people served by the port

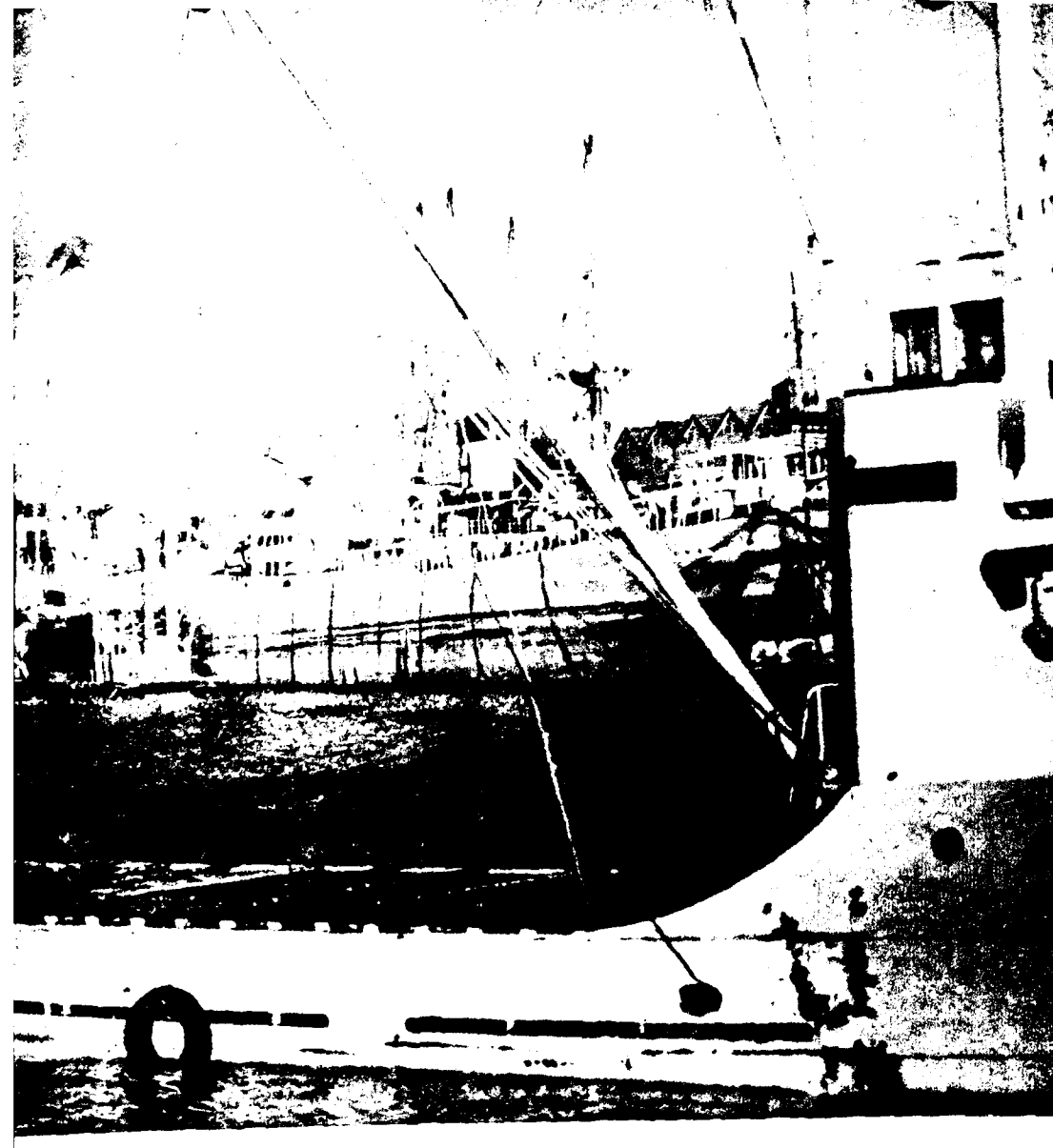


REPRESENTS ONE MILLION PERSONS

The Port of BRISTOL

The gift of being near ships, of
seeing each day
A city of ships with great ships
under weigh ;
The great street paved with water,
filled with shipping,
And all the world's flags flying
and seagulls dipping.

—John Masefield,
Biography.



MR. ROLAND WOODALL, the Docks Superintendent at Avonmouth. The cards turned downwards on the board indicate that a ship has sailed or is about to sail.

The Port of BRISTOL

Some Facts and Figures

Britain's docks are owned either by the British Transport Commission, Public Trust, or municipal or public companies. The Port of Bristol is the largest municipally owned dock undertaking in the country.

The largest vessel yet to enter the Avonmouth Docks had a gross register tonnage (equivalent to 100 cubic feet of space) of 24,149, and a net register tonnage (earning carrying capacity) of 15,056. The average size of vessels from overseas using the docks is about 4,000 net register tons, and tonnage dues payable to the Port range from 1s. to 4s. 6d. a ton.

On an average about 6,000 people work at Avonmouth each day. They include registered dockworkers, employees of the Port Authority, stevedores, employees of oil companies and ship-repairing firms, mill workers, ships' crews, and lorry drivers.

Twenty-two tugs, 89 barges, and 33 Channel pilots, are licensed by the Port and ply its waters. The difference between high and low tide at Avonmouth can be as much as 48 feet, which gives it a tidal range second only, in the world, to the Bay of Fundy, Nova Scotia.

Avonmouth uses as much electricity as an average town of 35,000 inhabitants. It has a Graving Dock which was used by 55 vessels in 1960-61, and in the same year there were 5,547 arrivals at the docks. The City of Bristol has 114 arrivals and 102 arrivals at Portishead.



SACKS of Ghana cocoa are weighed in a warehouse, where they have been delivered by crane direct from the hold of a ship. Below: Dockers finish a lunch break; theirs is thirsty work!



Continued from page 9

and coastwise traffic; Portishead (coal, timber and chemicals); and Avonmouth—are among the most highly mechanised in Britain. They have to be, for Bristol, in respect of Commonwealth and foreign imports handled, is the fifth largest port in the country. She is first for barley and zinc concentrates; second for animal feedingstuffs, aluminium and cocoa; third for oats, maize, oilseeds, frozen meat, wine, tobacco and woodpulp; and fourth for wheat, oilnuts, bananas, cheese, synthetic rubber, petroleum, and paper.

Petrol is quickly discharged, but bananas from The West Indies or the Cameroons are a lengthier job, and in spite of mechanisation 300 men or more are required to unload a banana ship.

Zinc concentrates from Australia are carried by overhead ropeway direct from the ships to a smelter a mile away. Phosphates from the Gilbert and Ellice Islands also go by aerial ropeway—to the premises of a fertiliser firm where, with the help of sulphuric acid produced at the zinc works, they are turned into super-phosphates.

Not all the cargoes which come through Avonmouth can be used so quickly. Bristol is one of the places where Sir Walter Raleigh is reputed to have smoked the first pipe of tobacco in England. Whether or not this is true, it is a fact that Bristol today is one of Britain's most important tobacco centres. Tobacco from Canada, India, and the Federation of Rhodesia and Nyasaland, is shipped to Bristol.

An eight-hundredweight cask of tobacco—enough to provide a smoker with 25 cigarettes a day for 50 years—is worth about £500 but carries approximately £2,500 in duty. It has

to be left to mature for 18 months or 50, before it can be used to make cigarettes; so the Port of Bristol provides "bonded warehouses" where the tobacco is stored until it is needed. Not until it is taken out of bond have the tobacco companies to pay the duty.

Cocoa, wines and spirits also have duty on them and are placed in bond. Avonmouth has a Wet Bond with accommodation for 2,000 hogsheads of wine, much of it from Australia.

Bristol has been a port since the early Middle Ages. In 1239 quays were built along the river Frome in the area which now forms the City Centre. The works cost £5,000 and probably represented the most ambitious civil engineering project of their age.

The famous Society of Merchant Venturers, which was founded in 1551, built up Bristol's trade—especially to North America, the Caribbean, and West Africa. Bristol, however, remained dependent on the tidal waters of the Avon (the City Docks are eight miles from the sea) until, in the nineteenth century, adequate docks were built on the Channel coast at Avonmouth.

They were not adequate for long. In 1908 the Royal Edward Dock was opened alongside. It is 4,620 feet long, has a water area of 73 acres, and 12,320 feet of quay. With the old Avonmouth dock, and various other installations including a giant graving dock, it comprises the present Avonmouth dock system.

During the last ten years the amount of goods handled at the Port of Bristol has increased from 5½ million tons to over 7½ million tons. The Authority has a £5,000,000 development scheme which will help Bristol to keep her place among the leading ports of Britain.



NEW ZEALAND lamb (above) and boxes of apples (below) at Avonmouth. The lamb is going into cold storage (nearly 2,000,000 cubic feet of Cold Stores, publicly or privately owned, are available at Bristol docks). The apples are being loaded on to railway trucks for speedy transport to the cities of the Midlands. There are 87 miles of private railway track, and 20 miles of roads, at Avonmouth.





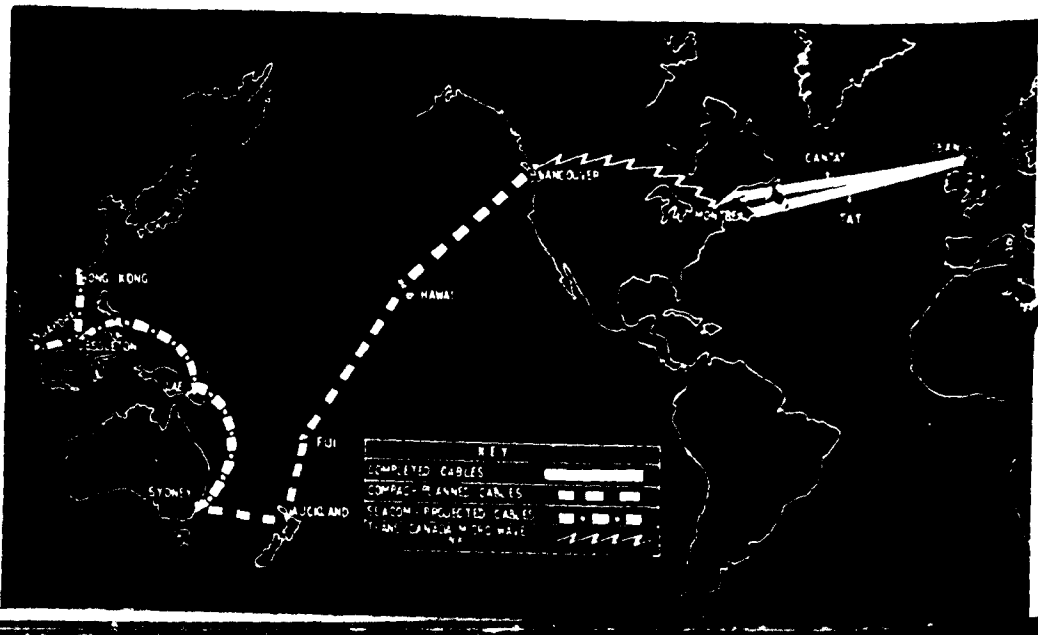
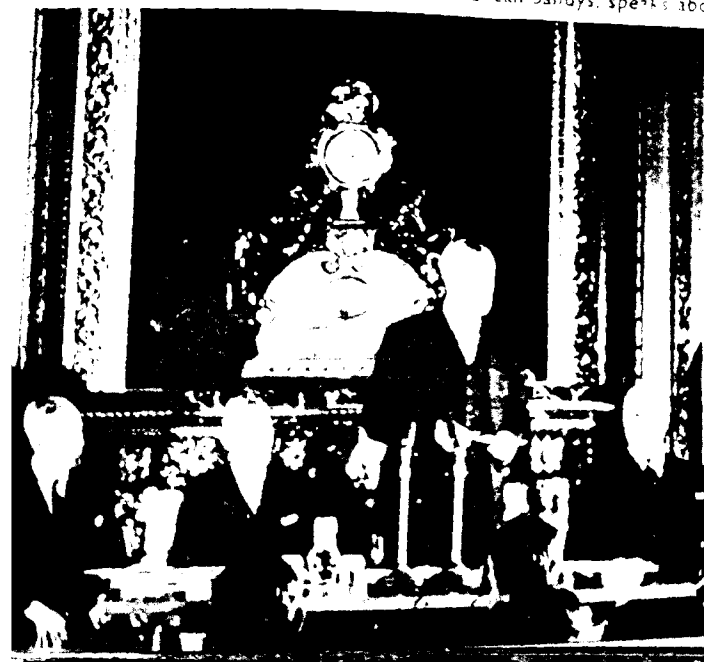
H.M. THE QUEEN, at Buckingham Palace, London, speaks with the Prime Minister of Canada, Mr. John Diefenbaker, in Ottawa. The event marked the completion of the first section of the projected round-the-world Commonwealth cable.

Calling Canada...

*The Queen Inaugurates a
New Transatlantic Cable*



IN OTTAWA 150 guests listened-in to the conversation (above). The women sitting together (front table) are Mrs. Diefenbaker and Mrs. D. F. Bowie, wife of the President of the Canadian Overseas Telecommunication Corporation. Below: Britain's Secretary of State for Commonwealth Relations, Mr. Duncan Sandys, speaks about the cable in London.



London and Ottawa the guests were assembled. At Lancaster House, London, Britain's Secretary of State for Commonwealth Relations, Mr. Duncan Sandys; the High Commissioner for Canada, Mr. George Drew; and the Postmaster-General, Mr. Reginald Bevins, were connected by land-line telephone service to Buckingham Palace. In the Canadian capital 150 guests were provided with their own individual telephones, on which they eavesdropped, as it were, on an historic event.

This event was a telephone call put through by H.M. the Queen, from Buckingham Palace, direct to the Prime Minister of Canada, Mr. John Diefenbaker—a call that inaugurated a new transatlantic telephone cable, called CANTAT, which has the longest single submarine section in the world, equipped for two-way operation.

CANTAT—the Anglo-Canadian Transatlantic Cable System, to give it its full name—is the first completed link in a Commonwealth telephone system that will girdle the world. It stretches between London and Montreal and comprises four main sections: London to Oban, in Scotland (550 miles on carrier and coaxial underground cables); Oban to Corner Brook, Newfoundland (2,400 miles by submarine cable); Corner Brook to Groses Roches on the Canadian mainland (470 miles on a second submarine system); and Groses Roches to Montreal (425 miles on Canadian micro-wave radio relay links).

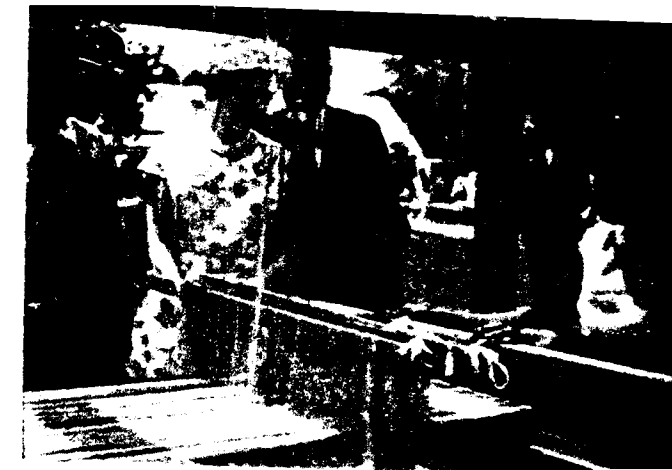
It is the third telephone cable to be laid across the Atlantic, and doubles the number of public telephone circuits between London and Montreal. The cost of a three-minute telephone call between the two cities, during weekdays, using the CANTAT system, is £3.

Telecommunications in general, between Commonwealth countries, have been greatly expanded in recent times.

Recent improvements have included a new radio-telephone service between Colombo, in Ceylon, and Hong Kong, and the establishment of new telex services between Britain and India, and Britain and Pakistan. Rapid progress is being made in the provision of a Pacific Ocean telephone cable, SEACOM, which will connect Vancouver, in Canada, with New Zealand and Australia via Hawaii and Fiji. Orders have been placed with British firms for 8,700 nautical miles of submarine telephone cables and 335 submarine repeaters, which will be used in this project. Much of the raw materials will be supplied by Canada and Australia.



AT THE Tamale durbar. The Queen said: "As the north is so different from the southern part of Ghana, I would have counted my visit incomplete if I had not been able to come here."



AT THE University of Ghana, Legon, Accra. There are about 700 students in residence and about 160 are on the academic staff, and one-quarter of these are Ghanaians.



COLOUR and music for the Royal visit. "We have had moments of solemnity, of tradition and of absorbing interest and," the Queen added, "we have also had fun."

MEETING PEOPLE IN GHANA

FAREWELL handshakes at Kumasi airport after attending a durbar. "I have been deeply touched," the Queen said, "by the warmth of the welcome my husband and I have received everywhere from the people of Ghana—driving around the cities and towns. . . . My husband and I wish every citizen of Ghana all success and happiness and a great future for your country."





AT THE unveiling of Tanganyika's Independence Monument, Dar es Salaam.

TANGANYIKA

A Valuable New Influence on the African Continent

THE Commonwealth has been further strengthened by the entry into its ranks of Tanganyika, the newest African sovereign State. This newly independent country, about the same size as Nigeria and with a population of 9,250,000, is not only beautiful and exciting but is also go-ahead and hard-working.

Widespread rejoicings over independence rapidly gave way to the more sober thoughts of the tasks that lie ahead. For the new Government, led by the former Prime Minister, Mr. Julius Nyerere, lost no time in showing how determined it is to keep the realities of independence before the eyes of the people.

Mr. Nyerere spoke of his Government's great responsibility in raising standards of living in the country. The aim, he said in a broadcast to the nation, was to ensure that no citizen was burdened with preventable disease, or with extreme poverty, or had not had an opportunity to develop his mind for the service of the country.

In her message during the independence celebrations, H.M. the Queen said: "I am confident that your country, standing firmly by ideals of unity and co-operation and principles of tolerance in human relations, all of which are so evident in your national life today, will make a worthy and significant contribution to the future of the great continent of which you form a part."

Similar sentiments were expressed by leaders and other prominent people in many parts of the Commonwealth. As the Duke of Edinburgh said on the same occasion: "In this company (the Commonwealth) you will find yourself among friends of a very special kind, not held together by fear or greed, but simply by affection and a sense of common purpose. You will find a comradeship of kindred spirits, all striving in their own ways for peaceful progress and the development of their peoples."

Along with the pride which Tanganyikans feel in their independent status goes their avowed friendliness not only to Britain alone, but to all who show goodwill. Two nations outside the Commonwealth—the United

States and West Germany—have already shown their trust in the future of the country by offering large loans—£3,600,000 and £3,200,000 respectively. These loans will make a further contribution towards the £24,000,000 three-year development programme, which is a modest, practical and flexible one. The British Government made it clear that financial aid from Britain would not cease with Tanganyika's independence. In August 1961, proposals for grants and loans totalling £20,000,000 in the next three years were made by Britain, who has also entered into a technical assistance agreement with the Tanganyikan Government.

Tanganyika has an economy in which agriculture accounts for about 45 per cent of the total output. The chief objectives of the programme are, therefore, the development

1,000 teachers within the three-year period. The expansion of the formal education system will take place within the framework of a simple system of education for students of all races.

The development of a University College of Tanganyika, which may eventually form part of a University of East Africa, began with the opening in the autumn of 1961 of a Faculty of Law. The College, to be ready by 1966, will accommodate from 500 to 600 students.

One-quarter of the estimated expenditure by the agricultural department during the period of the three-year plan will be devoted to education, training, research, surveys and investigations, and substantial sums have been allocated for disease control and the development of domestic water supplies, as well as for plans for starting farm institutes, where

farmers can benefit from short practical courses of instruction. More than 60 per cent of the £24,000,000 is for economic development. Social services account for 20 per cent, and the remainder is distributed mainly to essentials, such as defence, the foreign service and government buildings. Encouragement to trade and industry will be provided by the Ministry of Commerce and Industry by giving direct financial assistance through a Development Corporation.

Tanganyika's plans for the future have been made with characteristic vigour and goodwill. This is what Mr. Duncan Sandys, the Secretary of State for Commonwealth Relations, said about the country after his return from the independence celebrations:

"I came away very much encouraged. I was very much

struck by the wonderful atmosphere of harmony between all races there—African, European and Asian—and the extreme friendliness towards Britain; and what is perhaps most important of all, the general confidence of all those I met in the future of their country. My

belief is that they are going forward under sane, wise and balanced leadership, and I have every belief that Tanganyika will make good for herself and also be a valuable new influence on the African continent."

of the agricultural and livestock industries, which are linked with the supporting tasks of water development and irrigation, of developing the road system and developing secondary education.

Secondary education is to be expanded and the plan aims at increasing the number of School Certificate candidates nearly threefold in four years. Sixth form courses leading to the Higher School Certificate have recently begun, and a large expansion is planned. Plans for teacher training are also to be expanded, aiming at an annual output of over



MR. JULIUS K. NYERERE, former Prime Minister of Tanganyika, addressing the United Nations General Assembly, New York. Tanganyika became the 104th member of the United Nations.



H.R.H. THE DUKE OF EDINBURGH with Mr. Nyerere at the celebrations. The Duke, representing H.M. the Queen, handed over copies of the Constitutional Instruments conferring independence. A photograph of the new Prime Minister appears on page 27.



AERIAL VIEW of Dar es Salaam, the capital and chief port. Tanganyika, which has a coastline of 500 miles, has a population of some 9,000,000.



OPENING a road bridge. Road development in Tanganyika includes the building of a grid of four trunk roads from north to south and three from the coast westwards.

TANGANYIKA'S MAIN PRODUCTS



COFFEE is an important export. Here coffee beans are sorted on a conveyor belt at Moshi in the Northern Province. Below: Cotton growers watch their produce being weighed at a co-operative society post in the Lake Province.



SISAL FIBRE drying on an estate in the Eastern Province. Tanganyika is the world's largest sisal-producing country. Below: A tea plantation on the Usambara Mountains in Tanga Province.



THE Royal visit to Sierra Leone—and later the Gambia—was an outstanding success, and it served to strengthen the Commonwealth spirit. The Queen and the Duke were given the opportunity to see for themselves the steady progress that is being made in development programmes, industrial and social schemes.

In Sierra Leone the Royal visitors as well as the people enjoyed themselves thoroughly in a relaxed atmosphere, with the minimum of formality, and as the Government intended, the Queen and the Duke saw people and their conditions as they really were.

During this visit of a reigning sovereign to what had been the oldest of the West African colonies, there were the customary civic welcomes, receptions, garden parties and parades. The tour included a visit to the site of the Guma Valley Dam, a £4,500,000 project that will increase water supplies; a visit to the alluvial diamond workings, and one to a rice research station.

The Queen and the Duke visited centres in all the Provinces, met all the Chiefs—150 of them—talked with hundreds of Sierra Leoneans and saw the Kenema Show. This is a popular, annual, agricultural event. It began in 1949 to help increase the quantity and quality of cocoa production. Kenema, almost in the centre of the cocoa and coffee growing area and near a main palm kernel area, has the produce necessary to make a show of this kind a success. Prizes are offered for displays of the best agricultural produce during the three-day show.

Another unusual event for the Royal visitors was the durbar at Bo, the first big durbar to be held in Sierra Leone. The organisers, using their own ideas, not only staged displays of costume, music and dancing, but arranged that each of the 51 Chiefdoms should, through mime, tell the spectators something of the chiefdom's life.

The Queen met the academic staff of Fourah Bay College, the University College of Sierra Leone, heard of the election of Vice-Principal Dr. Arthur Porter, a Sierra Leonean, to the

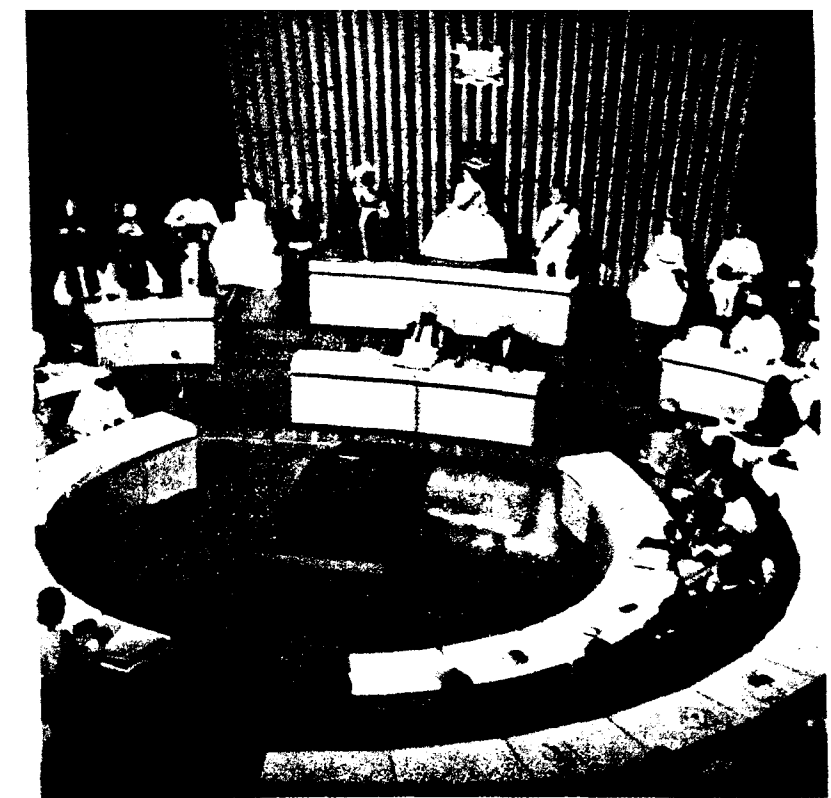
Continued on page 18

The Royal visit to Sierra Leone and the Gambia

H.M. THE QUEEN speaking at the State Banquet at Freetown, capital of Sierra Leone. Among other Royal engagements on the same day were a children's rally and citizens' parade, and a State Ball



THE QUEEN with Sir Milton Margai, the Prime Minister of Sierra Leone, at the State Ball. Apart from a crowded programme in Freetown, the Queen and the Duke visited centres in all the Provinces of Sierra Leone.



IN THE House of Representatives. Sir Milton Margai referred to this as "an occasion of special significance since it is the first time in Africa that Your Majesty has presided over the Parliament of an independent country."



IN THE GAMBIA. At Jowarra, on the Senegal border, the Queen watches people drawing water, and saw donkey loads of groundnuts arriving at a buying station. Right: Watching village crafts at Brikama, one of the main towns in the Protectorate.



AT BO SCHOOL, in Bo, one of Sierra Leone's inland towns. Instead of a parade at the school the Queen saw a representation of a day in the life of a pupil. At Bo the Royal visitors also attended a durbar of Chiefs of this Southern Province.



H.M. THE QUEEN addresses graduates of the University College of Sierra Leone, Fourah Bay, after personally conferring degrees and diplomas on about fifty of them. Her Majesty was presented with an encased collection of learned articles and books written by members of the College staff.

THE ROYAL VISIT TO SIERRA LEONE AND THE GAMBIA

newly created Chair of African Studies, and also heard of Fourah Bay's close connection with other countries in Africa. For Fourah Bay has found places for many non-Sierra Leoneans, including Nigerians, and there are plans for taking East Africans.

Before leaving the country the Queen—as Queen of Sierra Leone—attended a ceremony in the House of Representatives, the Parliament of Sierra Leone, and delivered an

address. The Governor General was not present on that occasion, since his function of representing the Queen had temporarily disappeared. In his welcoming speech in the House, the Prime Minister, Sir Milton Margai, reminded the gathering that the constitution, the Parliament of Sierra Leone, consisted of "Her Majesty and a House of Representatives".

He said that it was "the first time in

Africa that Your Majesty has presided over the Parliament of an independent country. It is also the first time that our own Parliament may be said to be fully constituted" Sir Milton went on to welcome the Queen as Head of the Commonwealth.

"It was with no spirit of arrogance or false pride", he said, "that we entered into our new status, and we are fully aware that the modern world is a cold place for a newly

independent state to venture in alone." Sir Milton spoke of the "appreciation for the confidence placed in us by the other members of the Commonwealth in accepting us as an equal. We know that the recognition enabled us to be admitted into the United Nations.

"The discharge of obligations to the Commonwealth is by no means the only task with which we are confronted, for our responsibilities to our own country and to our sister African States are of great and pressing importance. Indeed, we cannot hope to advocate in international affairs the high social and spiritual ideals for which the Commonwealth stands unless we see to it that these ideals are practised in our own country.

"This task is made easier", Sir Milton said, "by the legacy which we have inherited from Britain with her traditions of fairness and honesty in administration, adherence to the rule of law and the practice of moderation in political strife."

Glorious Ideals

The Queen paid a tribute to the people of Sierra Leone. She spoke of the warm welcome she had received throughout the country, and of the social and economic progress she had seen. She recalled the glorious ideals on which the former colony originally grew as a home for Africans freed from slavery and said: "No city has ever been founded on higher social or spiritual ideals than Freetown. The preservation of these ideals, and the tolerance and moderation which Sierra Leone has shown in her progress towards independence, have made a valuable contribution to the peace and stability of the whole of Africa."

The Queen also paid a memorable tribute to Sir Milton Margai. At the State Banquet she said in effect that if only Sierra Leoneans worked and served as Sir Milton had done, the country would have nothing to worry about. Turning to him, she said: "Yours is a record of selfless service and singular achievement. . . . Sierra Leone can count herself truly fortunate that while gaining her independence she has found a leader wise, experienced and devoted."

Gambia's Welcome

In the Gambia there were no big state occasions but there was many a gay spectacle. The Queen received the Gambia's 35 Chiefs and spent much time on the river. For Gambia is the river and the river is the Gambia.

Gambia's Chief Minister, Mr. Pierre S. N'Jie, referred to the Duke's visit to the Gambia nearly four years ago.

"During these four years," he said, "and with the help and goodwill of Your Majesty's Government, Gambia has moved forward on the historic path to self-government. Next year the Gambia will be called upon to stand on its own feet and we feel that Your Majesty's presence among us today is an assurance that, whatever future lies before us as a free member in the fellowship of African peoples, we may continue to count on the comity and support of the Commonwealth, the Commonwealth of which Your Majesty is the distinguished Head."

IN A LAND-ROVER, the Queen and the Duke cover rugged ground at Marampa, where they inspected the Iron Ore Mine and Concentrating Mills of the Sierra Leone Development Company.



THE QUEEN is in a happy mood as she walks between girl guides and boy scouts at Port Loko, Sierra Leone, where she also inspected a military guard of honour. With her is the Resident Minister, Northern Province, Mr. Mahmoud Ahmed



DURING her West African tour the Queen took advantage of an invitation to visit the Republic of Liberia. Above: The Queen and the Duke leave the quay in Monrovia, the capital, with President Tubman and Mrs. Tubman.

IN SIERRA LEONE the Vice-President of the Federation of Women's Organisations, Mrs. Marie Zubairu, handed the Queen an address of welcome (below). Her Majesty had attended a Service at the Cathedral, Freetown.



UNION JACKS and school caps combined to make a colourful show when infant-school children marched past the Royal visitors in MacCarthy Square, Bathurst, Gambia. Here there were no big state occasions but many charming encounters.

THE QUEEN visited the alluvial diamond workings at Hangha, Kenema, in the South-Eastern Province of Sierra Leone. Below: the Assistant Director of the diamond mines, Mr. David Fraser, explains how diamonds are sorted.



OOD OF MAN

A high-contrast, black and white photograph showing a massive crowd of people gathered in front of a large, modern building. The building features a prominent curved facade with a series of vertical architectural elements. The crowd is dense, filling the foreground and middle ground, with many individuals looking towards the camera. The image has a grainy, high-contrast quality, with deep blacks and bright whites, giving it a dramatic and somewhat abstract appearance. The title 'OOD OF MAN' is printed in large, bold, black capital letters across the top left of the image.

A high-contrast, black and white photograph capturing a large-scale funeral procession in an outdoor courtyard. In the center, a group of men in light-colored shirts and dark trousers are carrying a dark, rectangular casket. A large, ornate floral arrangement is positioned in the foreground, partially obscuring the view. The courtyard is filled with a dense crowd of people, mostly men, who are observing the procession. In the background, there are buildings with arched doorways and windows, and a few vehicles are visible on a street level above the courtyard. The overall atmosphere is somber and formal.

That is what the Prime Minister of the Federation of Malaya, Tunku Abdul Rahman Putra, said in his opening address at the 13th Consultative Committee Meeting of the Colombo Plan, held in its 10th year, at Kuala Lumpur, Malaya.

"The more I think about the history of the Colombo Plan," the Tunku said, "the more I am impressed by the spirit of practical help and co-operation which it has generated. One aspect of its achievements has touched me most. This is the growth of self-confidence among the developing countries themselves. This trend is indeed highly commendable for it is stimulating a sense of 'working together' in mutual help to realise their common economic and social objectives."

"The world," Lord Lansdowne continued, "was fortunate in having men of vision such as Percy Spender of Australia and Ernest Bevin of my country, and others who both saw the need and set out to do something about it. So the Colombo Plan was born and, of course, its task has proved far more difficult than was ever expected. For instance, the population of the region has increased at nearly double the rate forecast. But perhaps it is this challenge which has brought out the best in the 21 countries who are members of our club. In these ten years, as the report tells us, countries outside the area have provided almost £3,571,000,000 of aid. Training has been given to over 31,000 trainees and the services of over 14,000 experts have been provided to countries in the area by members of the Plan and by the United Nations and its specialised agencies. Of this total, members of the Colombo Plan provided 26,373 trainees and 4,755 experts.

economic planning and to the help both material and technical which countries can give to one another. In place of distress and confusion we now have hope and purpose. The countries of the regions have produced not only paper plans, but much more important, the administrative framework needed for planned economic growth, and they have made real progress.

"I am very happy to say," Lord Lansdowne continued, "that during the past year my Government have once again substantially increased the contribution which we are making not only to the Colombo Plan regions

"We have been able, in spite of our difficulties, to continue our aid to the Colombo Plan countries. In order to facilitate the planning of recipient countries we give them information as far in advance as possible of the aid which we hope to offer. In the year ending June 1961 our total expenditure on capital and technical assistance to these countries was nearly £36,000,000. This was higher than ever before. So was the rate of new capital investment by United Kingdom firms. The amount of such capital known to have been transferred to this area in 1960 alone was about £32,000,000, and we estimate that the rate of this new investment was almost doubled in the last three years."

Lord Lansdowne said that it was indeed good news to find that more and more of the recipient countries were joining the ranks of the donors. That was exactly what the Colombo Planners envisaged from the start; "all of us here are members on equal terms, asking our colleagues for help when we need it, giving that help when we can."

UNDER THE PLAN

Australia

Burma

Cambodia

Canada

Ceylon

India

Indonesia

Japan

Laos

The Federation of Malaya

Nepal

New Zealand

Pakistan

The Philippines Republic

Singapore

Thailand

The United Kingdom

North Borneo

Sarawak

The United States of

America
The Republic of Vietnam

Also present at the 1961 annual meeting at Kuala Lumpur, were observers from the United Nations Economic Commission for Asia and the Far East, the International Bank for Reconstruction and Development, the United Nations Special Fund and United Nations Technical Assistance Board, the Colombo Plan Bureau, and the Republic of Korea.

The Consultative Committee welcomed the invitation of the Australian Government to hold the 1962 meeting in Australia.

DELEGATES to the 13th Consultative Committee Meeting of the Colonibo Plan rise as the Prime Minister of Malaya, Tunku Abdul Rahman Putra, enters the Tunku Abdul Rahman Hall in Kuala Lumpur for the inaugural meeting. Above, right: The entrance to the Exhibition held in the Chinwoo Stadium, which is situated on a hill in the heart of the capital. At night the building with its large sign was floodlit.

MALAYA said it graphically during the Colombo Plan Conference, and this bird's-eye view gives an idea of the many exhibits in the Exhibition Hall. Below: At the dinner given to Colombo Plan delegates during the Conference the leader of the British delegation, Lord Lansdowne, is seen on the left. In the centre is the Deputy Prime Minister of Malaya, Tun Haji Abdul Razak, and on his left is the Indian Deputy Minister of Finance, Mr. Tarakeshwari Srinivasan.

A black and white photograph of two men in suits standing in a doorway. The man on the left is holding a book and looking at the man on the right, who is looking back at him. A suitcase is visible on the floor next to the man on the right.

ENCHE RAJA MOHAR BIN BADIOZAMAN,
Chairman of the 13th Consultative Committee
Meeting and Leader of the Malayan delegation,
meets the Alternate Leader of the British
delegation, Mr. A. H. P. Humphrey.

Mainly for Women

ASSORTED TOPICS AND EVENTS

Travelling Adviser on Education

WOMAN Education Adviser to Britain's Department of Technical Co-operation, Miss Freda Gwilliam, is one of the world's great travellers. For 15 years she has spent from a third to a half of her time travelling, and she enjoys it.

She describes herself as a news carrier: "I move from country to country, seeing what they are doing to develop their educational services; sometimes I am able to make suggestions based on what I know, what I have seen elsewhere".

It sounds so simple, but Miss Gwilliam, a silver-haired woman with shrewd eyes and a powerful personality, carries with her on her travels great practical experience of education, a knack for making and keeping friends, and an untiring zeal for her job.

In 1961 she flew from Britain to Singapore and later visited the Federation of Malaya, Hong Kong, Borneo, Sarawak, Sierra Leone, Gambia, Kenya, Tanganyika, Zanzibar, the Solomon Islands, the New Hebrides, Fiji, Western Samoa, the Bahamas, and the U.S.A. Everywhere she went she won friends and influenced people. "A great deal depends", she remarked, "upon personal relationships. One act of discourtesy, one humiliating remark, can undo the patient, loving work of years".

Strength and Solidarity

She was Consultant to the South Pacific Commission, which helps to foster help and medical care, economic and social development, in a large area of the world; she attends seminars organised by the United Nations Status of Women Commission, which is part of the Human Rights Commission; she was the British Observer at a seminar in Addis Ababa in 1960, and stated that, amid the uproar of a revolution in the streets outside, "the women sat quietly in candlelight; one could sense a strange mood of strength and solidarity".

Although her job is concerned with education in general, and not with the education of women and girls in particular, Miss Gwilliam is deeply involved with the affairs of her own sex. She is realistic about it. "It is too easy", she said, "to make out a special case for female education and then to put it aside as a soft option. Women and girls only need special attention to bring them up to the same starting line as the boys".

She finds inspiration in the way in which women throughout the world have accepted the challenge of working with, and raising up, the less fortunate members of their sex.

Women Pioneers

"The business of getting women into a position to make a greater contribution to society was pioneered in the Western world. In America there was the tradition of the woman behind the man behind the gun, standing by him and sharing his hardships. In Britain during the first world war women emerged as workers in fields hitherto reserved for men, and then, of course, there was the suffragette movement.

"Eastern women to a large extent took over positions already won by battles in the West, and have carried on from there. So the women in one region of the world make progress and pass on the torch to women in another region.

"The pioneering is done by an elite group, but it is vital that the elite keep in touch with the millions of women behind them".

Miss Gwilliam developed an interest in education, and a strong sense of social responsibility, in her childhood. Her father, Mr. Frederick William Gwilliam, who is now 85 and lives in Dorset, was

the first housemaster of the original Borstal Institution for young offenders, and later became a Governor of prisons. Her mother was also actively engaged in social work.

Educated at Rochester Grammar School and Notting Hill High School, Miss Gwilliam read history at Girton, Cambridge, and then for seven years was a schoolteacher. She became interested in teacher-training, took a short course at Oxford and for six years was the Principal of a Teacher-Training College at Brighton, on the south coast of England. In 1947 she joined the Colonial Office as an Education Adviser, and when the Department of Technical Co-operation was established in the summer of 1961, she continued her work with the new organisation. "We act", she said, "as a clearing house for information—as a catalyst to facilitate co-operation".

She has an office in Carlton House Terrace with one of the finest views in London—facing across The Mall to St. James's Park, the buildings of Whitehall and the distant spires of Westminster. But she is seldom in London to enjoy it.

Many items in her office remind her that tomorrow, or the next day, she will be off to attend some meeting in a distant place. Draped over a mirror is a string of shells presented to her by children in Melanesia; on the mantelpiece is a model of a hunter which reminds her of a village jamboree she attended in Eastern Nigeria; and on the book-case is a model of a lion standing proudly on a rock—a gift from the African who drove her for hundreds of miles in Northern Rhodesia.

When she is in Britain she works with Training Colleges and Institutes of Education to suggest programmes for overseas students; she co-operates closely with the Churches, who still do so much for education overseas, and with the women's voluntary services; she also gives talks to a variety of organisations, "doing public relations work", as she puts it, "for the Commonwealth".

She believes, with many of her women friends in all parts of the world, that the greatest need is to spread an awareness of human dignity. "If only this awareness can be strongly established, many of the problems of the world would be overcome".

THE NEED FOR GOOD DESIGN

MISS ELEANOR MACDONALD, of Kingsway Stores, the United Africa Company's retail chain of stores in West Africa, is seen in the picture (on right) at a reception given in London by Britain's Council of Industrial Design. The reception is held each year to report on the services provided by the Council to representatives from buying houses, overseas and British banks, chambers of commerce, and others. With Miss MacDonald is Mr. James White, the Deputy Director of the Council.

Earlier, the Council held an International Congress which was attended by more than 200 delegates. The title of the Congress was "Design Policy for Corporate Buying", and the delegates listened to 26 speakers—architects, designers, manufacturers and representatives of Government Departments in Britain.

Mr. Paul Reilly, the Director of the Council of Industrial Design, said at the Congress that there was a good deal of evidence in industry and the public services that people responsible for commissioning, equipping and refurbishing such buildings as hospitals, colleges and universities, airports and hotels, as well as ocean liners and vehicles of all kinds, were today much more aware of the value of good architecture and design.

The general feeling of designers at the Congress was that industry and the great agencies should more willingly take on the functions of patron.

London's Design Centre, organised by the Council of Industrial Design, is a permanent yet changing display of well-designed British goods. It is said to be the only one of its kind in the world, and is visited every day by well over 2,000 people.

Its great success is due, in a large measure, to Sir Gordon Russell, a former Director of the Council, which he joined in 1944. Sir Gordon says that art and design, if the terms are used in the widest way, affect the whole background of our lives. At the Congress he said in his paper: "Good design means nothing unless it is associated with good workmanship and good materials and these naturally—initially—cost rather more than poor workmanship and poor materials".

The Council's aim is to raise the standard of design in every possible sphere—household goods, industry, architecture, street furniture, and agricultural buildings, and its only means of doing this are by persuasion and education—persuading and encouraging manufacturers to provide good design and arousing the public to demand it.



Miss Gwilliam is one of the world's great travellers, spending from a third to a half of her time "on the trot", as she puts it. Above: She meets some charming young ladies at a girls' school in what is now the Republic of Somalia. In the New Hebrides a teacher told her that some of the children thought she was the Queen.



Sports Day at the Malay Women's Training College, Malacca, Federation of Malaya. Miss Gwilliam presented the prizes; she has a great interest in teacher-training.



Eggs Flamenco

2 leeks 1 clove garlic
1 lb. tomatoes Parsley
Salt and pepper ½ lb. sausages
2 tablespoons butter

Clean and cut leeks into slices. Chop garlic. Fry leeks and garlic in butter. Peel and chop tomatoes and add to leeks. Cook for 30 minutes. Add chopped parsley and season with salt and pepper. Cut sausages into slices and add to sauce. Break 2 eggs into frying pan and cook over slow heat until eggs are set. Serves two.

PICTURE PARADE



AUSTRALIAN-BORN artist, Patricia Target, discusses one of her paintings, "Zanzibar Waterfront", with Sir Arthur Kirby, East Africa's Commissioner in Britain, at the Commonwealth Institute, London. Mrs. Target is the wife of Mr. Brian Target, of the Colonial Legal Services. This painting was commissioned for the Zanzibar display in the Exhibition Galleries of the new Commonwealth Institute, which will open in the autumn of this year.



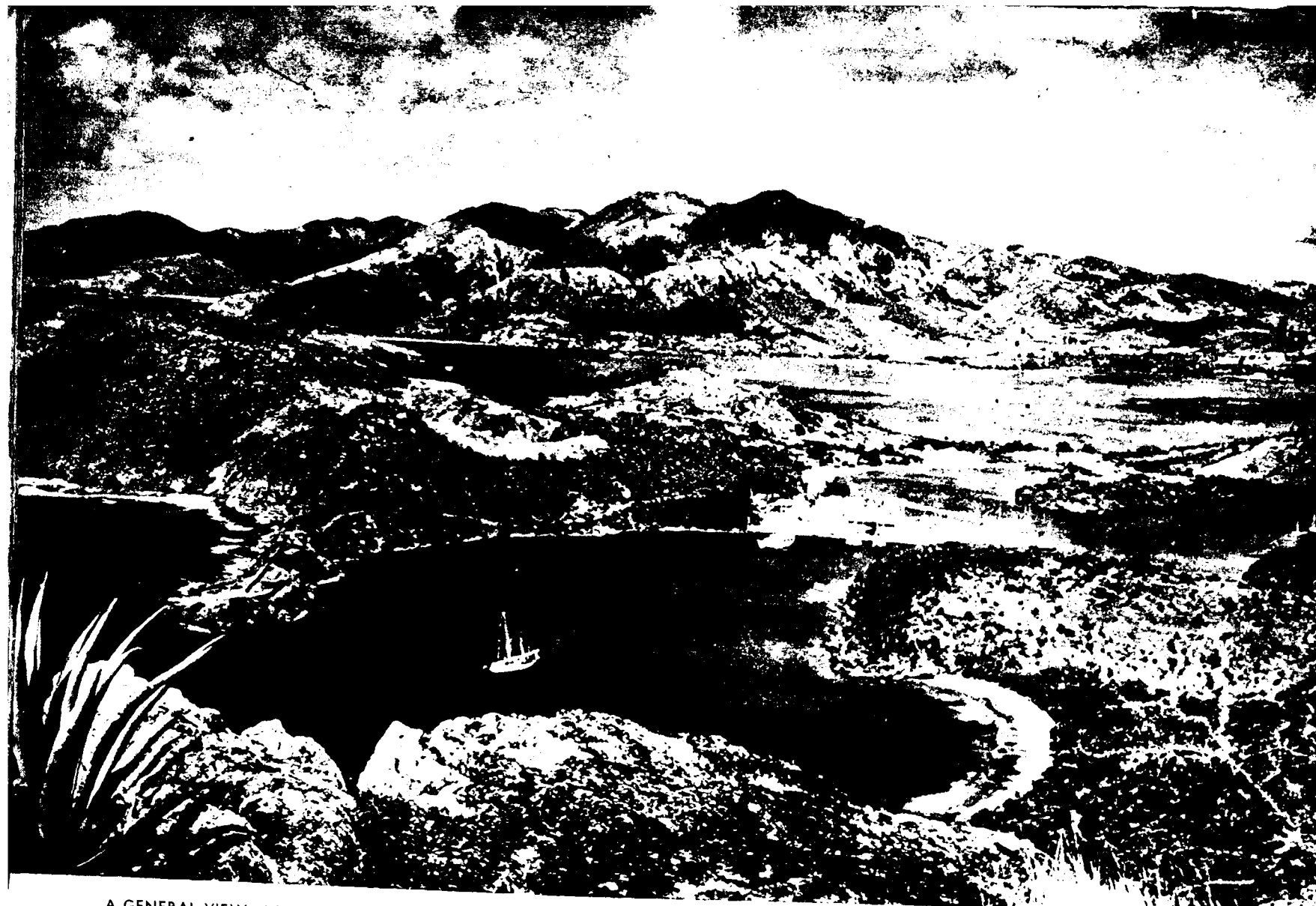
COOKERY lessons are organised by Britain's Women's Corona Society. Here, in the home of Lady Martin (extreme right), whose husband is Sir John Martin, Deputy Under-Secretary of State for the Colonies, are (l. to r.): Miss Graham, a voluntary worker for the Corona Society; Mrs. Sheppard who used to live in Nigeria; Mrs. Chege from Kenya; Miss Hettie Foster from the Gambia—a nursing sister; Mrs. Anita Dey, member of the Society from India; Mrs. G. E. Dove-Edwin, Sierra Leone, and wife of a Puisne Judge in Nigeria.

CATHERINE EVANS (right) has the honour of being the first mounted policewoman cadet in Britain. She spent half-a-crown on her first ride eleven years ago, and developed a love of horses which led her to become a groom at a Cheshire hunting stables. After she joined the Manchester City Police Force, in March 1961, she volunteered as a mounted policewoman cadet and was introduced to her police horse, "Pickwick", with which she trains.



WEEKLY Road Safety Lessons. A woman police constable with the aid of "Billy Beacon"—a road safety device which contains a loudspeaker linked to a microphone by which the policewoman gives instruction—shows children the correct way to cross a road. This picture shows a constable explaining the right way to ride a bicycle. It was taken in the yard of a Gravesend, Kent, police station. There the police hold road safety classes every Saturday morning in co-operation with the Gravesend Road Safety Committee.





A GENERAL VIEW of English Harbour as it is today. The yacht in the foreground is sailing through Freeman's Bay and will shortly pass the site of an

old fort (left centre). During the eighteenth century a boom made of heavy chains was run across the harbour to prevent any surprise attack



THE DOCKYARD area (above) where pleasure yachts berth. When Nelson was in command, from 1784 to 1787, this was a busy Naval station. Its restoration has cost £50,000.

A YACHTSMAN sits sewing sails near one of the great wooden capstans that were used in Nelson's day to keel over ships, so that their wooden bottoms could be scraped, caulked and painted.



"AN INFERNAL HOLE" was Nelson's description of English Harbour. Now the old fears have been conquered, the sun shines, and the yachtsmen and their families certainly would not agree with the famous admiral. Above: Yachts moored at the Dockyard.

Nelson's Dockyard in Antigua is in use again



THIS VIEW of English Harbour was first published in 1827. Each hilltop had its battery of cannon, and the Harbour was impregnable to an enemy assault.

English Harbour Restored

THROUGH most of the eighteenth and nineteenth centuries ships of the Royal Navy in Caribbean waters made use of English Harbour, a safe and easily defended anchorage in Antigua, one of the Leeward Islands. Work on building a dockyard there began in 1726, and many famous British sailors, including Hood and Nelson, visited the Harbour with their ships in the course of a long and exciting struggle for supremacy at sea.

It wasn't until 1899 that English Harbour, too small for modern ships of war, and superseded by other bases, was finally abandoned by the British Admiralty. Rapidly the dockyard facilities went to rack and ruin, but the natural merits of the harbour remained.

Writing in a 1925 issue of *The Mariner's Mirror*, the journal of The Society for Nautical Research, a visitor to English Harbour stated: "In the Dockyard it is easy to appreciate the extraordinary security of the place. It is so completely landlocked that one seems to be in the deep crater of an immense volcano with the hills forming the crater lip towering all round. Everywhere a dense scrub has grown up to hide the

masonry of ruined fortifications, barracks and houses. But sufficient remains for one to see that each hilltop had its battery, and with Forts Barclay and Charlotte on either side of the entrance, no 'cutting out' expedition could ever have had any chance of success, while the natural features of the place would prevent any but the most exceptional of hurricanes from causing much damage to the ships in harbour."

That was in 1925 . . . Today, after ten years of work by a body known as The Society of Friends of English Harbour, the place has been restored very much as it used to be.

More than £50,000, raised by subscriptions from many interested organisations and people, including H.M. the Queen and H.R.H. the Duke of Edinburgh, has been spent in overcoming the ravages of time, termites, and the elements. The work was facilitated by the discovery, in Admiralty archives, of plans of English Harbour covering the years from 1727 to 1858. Charts indicated the position of old hurricane moorings, and scale drawings made it possible to restore many of the buildings accurately.

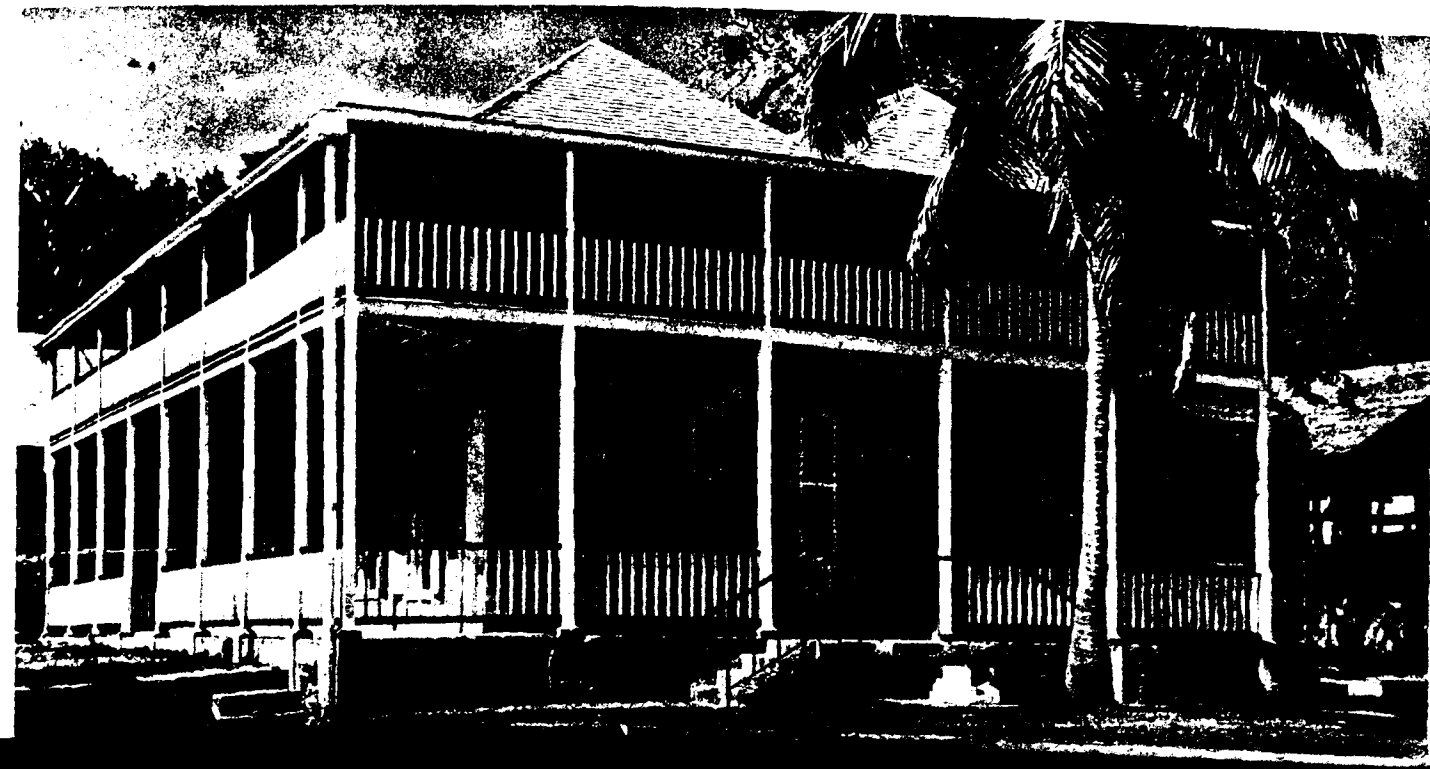
The Admiral's House in the Dockyard has

been completely rebuilt, and the lower half has been turned into a museum. The Canvas and Clothing Store has been converted into a locker room for the use of yachtsmen, and the Galley and the old Paymaster's House are in use as offices for yacht chartering. The Officers' Quarters were fairly intact and have been used for some time by the skippers, and their families, of yachts chartering from English Harbour. The harbour has become a yachtsman's paradise, and the slender masts of a variety of pleasure craft have replaced the multi-sparred masts of stately men-o'-war.

When the harbour was officially reopened by Lord Hailes, the Governor-General of The West Indies, towards the end of 1961, yachts raced across the blue water, fireworks exploded, and West Indian experts skimmed along on water skis.

It was appropriate that among those present was the Governor of Jamaica, Sir Kenneth Blackburn. When he was stationed in Antigua, as Governor of the Leeward Islands, he helped to found The Society of Friends of English Harbour, whose work made the transformation possible.

ADMIRALTY archives show that the Admiral's House (right), once thought to have been occupied by Nelson, was not built until the 1850s. The lower half is now a museum.



Books

THE LIVING COMMONWEALTH

ONE of the most comprehensive and readable books about the Commonwealth to be produced in recent years is called *The Living Commonwealth* (Hutchinson, 50s.). It has a foreword by H.R.H. the Duke of Edinburgh, is 200,000 words long, well illustrated and printed, and edited by an expert—Mr. Kenneth Bradley, the Director of the Commonwealth Institute in London. In his foreword, Prince Philip compares the Commonwealth with U.N.: "The United Nations Organisation is a deliberate creation with an immense and complicated machinery which exists for a well-defined purpose. The Commonwealth has a much greater personal significance. Membership of the Commonwealth gives people a sense of sharing something in common."

Powerful Influence

"This mutual confidence may sound a bit vague but it exerts a very powerful influence in the relations between individuals, from Prime Ministers to schoolboys. I have noticed this over and over again; with High Commissioners and students, with scientists and soldiers, with public servants and professional men."

The Living Commonwealth is divided into four parts—"The Story Begins," in which two different authors write, respectively, of "The Growth of the British Empire" and "From Empire into Commonwealth"; Part 2, "The Independent Nations," each of which has a chapter to itself written by a national of the country concerned, or by a British expert; "The Dependencies" (five chapters by various authors); and "The Living Commonwealth," in which Mr. Bradley examines "The Problems of Freedom" and gives a final factual account of "The Commonwealth Today."

He begins this last chapter with quotations from two great men, one an Englishman, the other an African . . .

"The bonds which unite us, though supple as elastic, are stronger than the tensest steel" (Winston Churchill, 1943).

Working for Peace

"We believe that the evolving form of the Commonwealth is an institution which can work profoundly for peace and international co-operation" (Dr. Kwame Nkrumah, 1958).

The preceding 491 pages of the book testify to the truth of both these statements.

The Commonwealth continues to evolve and to play a leading part in world affairs. New ground in this respect was broken at the last meeting of the Commonwealth Prime Ministers, when a united appeal was made for total disarmament and the creation of a

world authority to exercise inspection and control over armaments.

The diversity of the backgrounds of the contributors to the book in itself guarantees the freshness of its approach. The section on Canada is written by Irene M. Spry, who is Chairman of the Executive Committee of the Associated Countrywomen of the World, and a Governor of the Commonwealth Institute; India is described by Khushwant

future hopes, without losing sight of the general framework of the Commonwealth as a whole. The texts are supplemented by about 150 well-chosen illustrations and maps which convey a great deal—the beauty, for example, of the Mountains of the Moon on the western border of Uganda; the old-world picturesqueness, which seems to reflect a way of life, of the pottery market in Bridgetown, Barbados; and the striking contrasts which exist in India and Pakistan—the tramcars jostling with bullocks in a New Delhi street, and the slender steel framework of a gas test well in a Pakistan desert.

As the Editor says in his preface, *The Living Commonwealth* was not written for the expert "but rather for Commonwealth citizens of all ages who have some knowledge of history and the world today, and who would like, without too much labour, to know more about the heritage we share."

The World of Science

Two valuable books for those who are interested in science—and who is not?—are *IGY—The Year of the New Moons* (Michael Joseph, 30s.), and *The Royal Society Tercentenary*, which is issued by The Times Publishing Company Ltd.

In the first of these books J. Tuzo Wilson, a distinguished Canadian geophysicist, interweaves the story of his own adventures as a scientist abroad with a comprehensive survey of what the International Geophysical Year (hence the letters "IGY" in the title) revealed about the world we live in.

From mid-1957 to the end of 1958 the scientists of 67 nations co-operated, pooling their resources, techniques and energies to observe the earth and its environment. They sent up satellites to study space; probed the ocean depths; photographed the sun's flares; observed the aurora (the Northern Lights); climbed glaciers and volcanoes; obtained new data on cosmic rays; developed theories of the origin of mountains; and made major discoveries concerning gravity and the weather. As another scientist, Lloyd V. Berkner, says in his foreword to the book: "The IGY was perhaps the most ambitious and at the same time the most successful co-operative enterprise ever undertaken by man."

The author of this well written and illustrated book was born in Ottawa in 1908. He studied at Trinity College, Toronto; Cambridge University, England;

and at Princeton, U.S.A., and is now Professor of Geophysics at the University of Toronto. Contrary to the common image of a scientist as a rather desiccated figure, poring over test tubes, Tuzo Wilson has great physical vigour. He is an explorer and mountain climber, and has travelled extensively in many countries, including China.

The second of these scientific books is compiled from a special supplement which was published in *The Times* of London, in July 1960, in connection with the tercentenary celebrations of the world-famous Royal Society. It contains short but authoritative articles, by Fellows of the Royal Society and others, concerning the past, present, and possible future, of science in many different fields, and begins appropriately with portraits of famous past-presidents of the Society—Sir Isaac Newton, Lord Brouncker, Sir Joseph Banks, Sir Christopher Wren, Thomas Henry Huxley, Sir Humphry Davy, Lord Lister, Lord Kelvin, Lord Rutherford, and Sir Cyril Hinshelwood. Like Tuzo Wilson's book, it demonstrates the international aspect of science, and records: "Perhaps the nicest incident in the history of the Society is the fact that Sir Humphry Davy, when President, should have been given permission by Napoleon to travel in Europe at a time when France and England were at war and the toast of the Society drunk in Paris in his honour."

"In particular, we have thought of those millions of young people who leave school each year without any real knowledge of how the Commonwealth came into existence, how it functions, or what it stands for in the world. Many of these children are the leaders of tomorrow, and it is important that they should know these things."

"Here stands an urgent challenge to all of us, and especially to educationists in every one of the member nations of the Commonwealth and their Dependencies. This book is offered to teachers in particular as one of the tools they need."

Books in Brief

A small but informative book, *H.R.H. Prince Philip Duke of Edinburgh*, by George Baker (Casell, 7s. 6d.), gives details of the background and career of "probably the best-known man in the British Commonwealth, perhaps in the whole free world". The chapters deal with his life in chronological order, and the illustrations—Prince Philip as a Naval officer, playing polo, driving the Hovercraft—show the range and variety of his interests. This is not an exhaustive book, but a handy little work of reference.

Aristocrats of the South Seas, by Alexander Russell (Robert Hale, 21s.), tells how the Polynesians, from their original home on the island of Hawaii, Samoa, spread out over the Pacific to become the Hawaiians, the Tahitians, the Tongans, the Maoris, the Marquesans, and the Samoans themselves. The book shows how the long separation affected legends, sports, religion, character, and indeed every aspect of life, and provides a fascinating insight into peoples many of whom are members of the Commonwealth family.

Patrick White, the Australian writer, was proclaimed by one reviewer, in the B.B.C.'s Home Service, to be "one of the great novelists of the century", after publication of his latest novel, *Riders in the Chariot* (Eyre & Spottiswoode, 21s.). The novel concerns the lives of four people and the impact they have on one another, and is set in a kind of dream landscape, somewhere inland from Sydney, which is characteristic of the author's novels. Patrick White was born in England of Australian parents, who took him back as a baby to their sheep station. The best known of his earlier works are *Voss* and *Tro* of *Man*.

The Economy of British Central Africa (William J. Barber, Oxford University Press, 35s.) is the title of a study, nearly 300 pages long, of "the dualism of the British Central African economic system and its implications for economic development". This is a rather specialised book which will appeal mainly to students of economic analysis; it is also relevant, however, to the economic issues at stake in the determination of the political future of the Federation of Rhodesia and Nyasaland and so may be read with benefit by students keenly interested in central Africa.



BRITAIN'S Minister of Science, Lord Hailsham (right), examines a chemical shock tube at the research establishment of Vickers Ltd., one of Britain's biggest industrial groups. He was also shown a sealed-off, 6,000,000-volt X-ray tube for the treatment of cancer and for industrial radiography.

TRADE WINDS

Commonwealth Industrial Notes

A cement plant with a yearly production of 400,000 tons is to be set up near Jhelum, in West Pakistan, and is expected to go into production in July 1963. A British firm of consulting engineers, Henry Pooley, are the general consultants for the project.

A £250,000 factory is to be established at Kaduna, in the Northern Region of the Federation of Nigeria, by a British company, for the manufacture of surgical gauze, cotton wool, surgical lint, adhesive plaster, and plaster-of-paris bandages. Nigerians will be shareholders and sit on the board.

The amount of mail handled by the East African Posts and Telecommunications has more than doubled since 1948. Telephone calls have increased fourfold.

About £3,000,000 is to be spent by Britain, in the next three years, on research into nuclear propulsion for ships. Four reactor systems will be studied with the object of devising small reactors of low capital and running costs.

Orders worth more than £2,000,000 for two 9,550-ton cargo liners for the Nigerian National Line have been placed with the British firm of Swan Hunter & Wigham Richardson, of South Shields. The vessels will be built at Newcastle upon Tyne.

A contract valued at approximately £200,000 for the construction and installation of a submarine gas-filled power cable, linking the Caribbean island of Tobago with Trinidad, has been placed with a leading British cable construction company.

Britain continues to be Fiji's best customer, buying almost half the Colony's exports, chief of which is sugar. The next most important customers, in order, are Canada, New Zealand, and Australia.

The Sheffield firm of Newton Chambers & Company Ltd. is to build 15 crawler-mounted draglines and three truck-mounted cranes for the East Pakistan Water and Power Development Authority. The order is worth over £260,000.

A British company which made fireproof doors for the Royal Yacht *Britannia* has been asked to supply eight doors of a similar type to Canadian shipyards.

About 400 high-grade steel workers have been trained in Britain to work at the Durgapur steelworks, in India.

A British steel company, Richard Thomas & Baldwins, is to have, at its Spencer plant in South Wales, the first steelworks with a fully automated system for control of production from the beginning to the end of the production process. The plant, which has been devised with the help of Elliott Automation Ltd., of London, involves the establishment of electronic computers throughout the works.

The output of scientific and industrial instruments and apparatus in Britain was 11 per cent up, in the third quarter of 1961, on the previous year.

Australia used 2,874,617 tons of cement during 1960-61, and will use more than 3,000,000 tons in 1961-62.

ANTIGUA

Stamp Corner



LIKE those in other West Indian colonies, the first postal services in Antigua were run by the Postmaster-General of the United Kingdom. In 1860, somewhat reluctantly, Antigua assumed responsibility for her own post office, paying the Postmaster at St. John's a salary of £100 per annum and his deputy at English Harbour an annual fee of £20.

Two years elapsed before Antigua obtained her own postage stamps from a London printer, and until they arrived ordinary British stamps were used in the island. These can only be recognised as coming from Antigua if they have clear and unmistakable postmarks of St. John's or English Harbour, and their rarity makes them much prized by collectors.

In 1862 Antigua's first stamps arrived. They had a face value of sixpence, which was then the ordinary letter rate to Britain, and their design was a portrait of Queen Victoria.

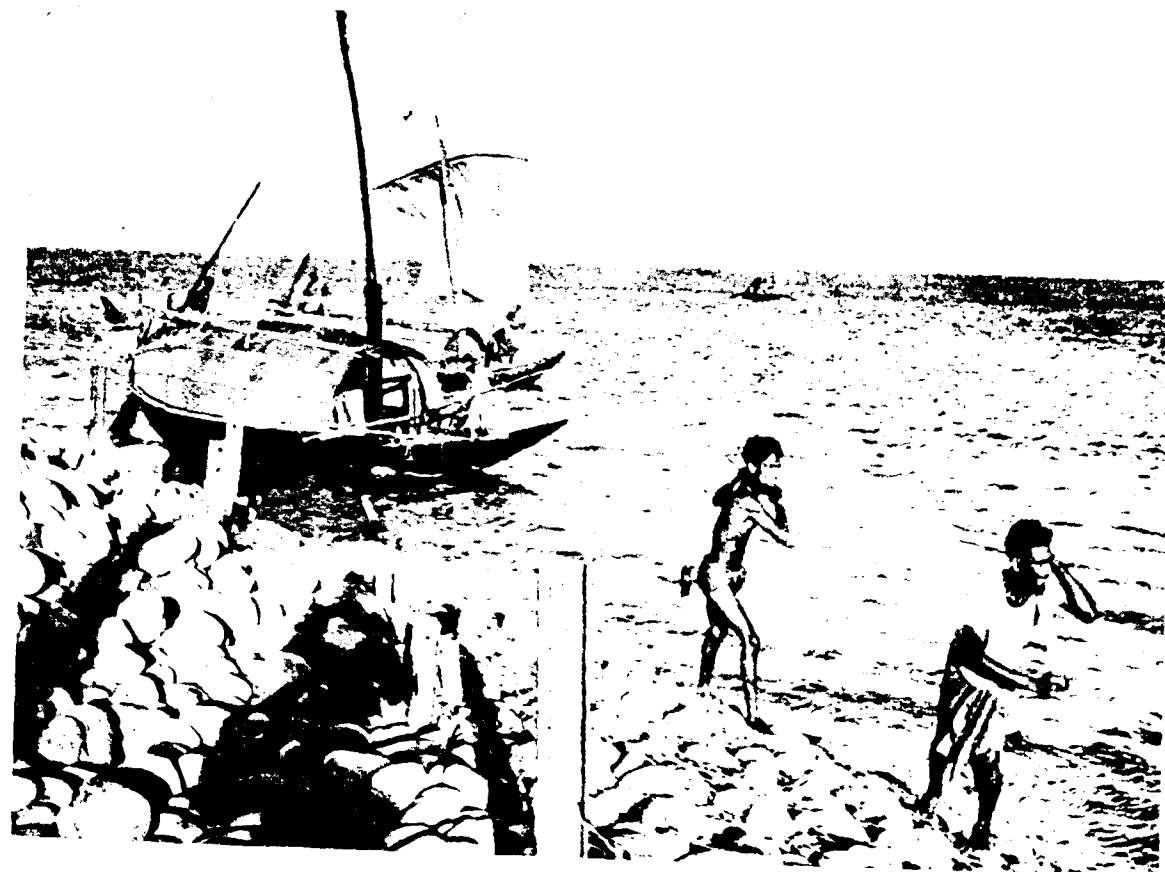
Later issues followed the normal trend of British Commonwealth issues, showing the portrait of the reigning monarch, but in 1932 a special series marked the tercentenary of the arrival in Antigua of the first British settlers. The five-shilling stamp of this series, now worth upwards of £5, depicted the vessel commanded

by Sir Thomas Warner, leader of the 1632 expedition.

It is for Antigua's association with Lord Nelson, however, that the island is chiefly famous. The 11d. stamp of King George VI and the current 5-cents stamp of Queen Elizabeth II both have a view of Nelson's Dockyard, where the Admiral refitted his ships during the wars with France. Other values have a view of English Harbour, Nelson's sixpence, which was then the ordinary letter rate to Britain, and their design was a portrait of Queen Victoria.

In common with other British territories, Antigua celebrated victory in the second world war by the issue in 1946 of two finely engraved stamps with a view of the Houses of Parliament at Westminster. The inauguration in 1951 of the University of the West Indies and the Coronation in 1953 were also the occasions for special issues of stamps similar in design to those of other West Indian colonies.

C. W. HILL

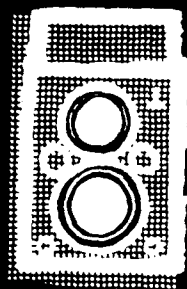


VITAL LINK. Pulling a boat past offshore obstacles, where it might be dangerous to use sail.
From Azizur Rahman, 19 Stadium Arcade, Dacca-2, Pakistan.



SELF-PORTRAIT. A self-portrait by a keen East African photographer and artist.
From Ibrahim Jaffar, Box 937, Nakuru, Kenya.

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.



FURRY FRIEND. A young Ceylonese boy poses proudly with his pet.
From A. Karunanyake, Post Office, Galle, Ceylon.

NEON LIGHTS. A spectacular night street-scene in Hong Kong.
From Ng Shiu-Keen, Photographic Society, University of Hong Kong, P.O. Box 1943, Hong Kong.

FAMOUS VISITOR. Popular British singer Cliff Richard, centre foreground, walks among some of his fans, during a visit to Singapore.

From Lily Ong Siew Wah, 342 River Valley Road, Singapore-9.



VEST-POCKET TOOTHBRUSH. A toothbrush which can be carried in a waistcoat pocket complete with its own water supply in a small plastic tube, has been produced by a British company. Attached to the brush is a toothpick or "gum stimulator".



LIGHTWEIGHT LAWNMOWER. Two British firms working in collaboration have produced a new power lawnmower fitted with a light-weight engine and weighing only 14 pounds. The 50 c.c. engine has many other applications in the industrial and agricultural fields.

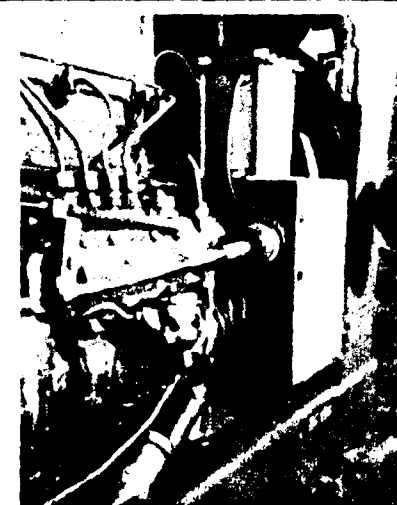


FIRE-FIGHTING "ARMOUR." A new type of fire-fighting suit which can withstand temperatures of 1,200 degrees Fahrenheit, has been invented by a British firm and has proved itself in trials. It is made in two parts—an outer garment and hood, and an under-suit. The former, which consists basically of asbestos cloth with a thin film of aluminium bonded to its surface, reflects up to 95 per cent of the heat thrown upon it. The under-suit consists of four separate layers of materials—thick wool, waterproof material, woven fibre-glass and fireproofed canvas. The suit can be used to fight fires and save lives at locations, such as airports and oil refineries, where the heat from a fire is likely to be too intense for normal precautions to prove effective.

SAFETY DEVICE FOR TRACTORS



One person is killed every two or three days on British farms, and over 70 per cent of these deaths are caused by overturning tractors. Now a device, contained in a small metal box, has been marketed, which automatically cuts out the engine and sounds a warning hooter when a tractor rears or rolls at a dangerous angle. The device can be fitted to any make of tractor, and can also be adapted for use on cranes.



NEW IDEAS

BOON TO MOTORISTS. An invention which repairs punctures and reinflates a tyre in one speedy operation will prove a boon to motorists. It has a connector which is screwed on to the tyre valve and a canister which is attached to the free end of the connector. This injects into the tyre a quick-sealing medium, together with pressurised air, which seals the leak and reinflates the tyre. It can be used on both tubed and tubeless tyres.

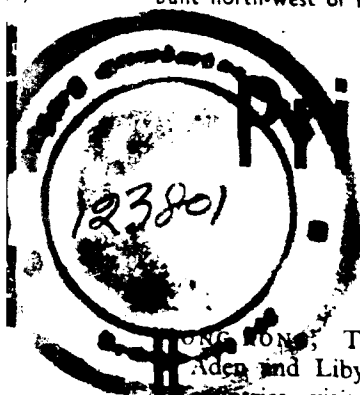




H.R.H. PRINCESS ALEXANDRA OF KENT sees women making baskets at a £75,000 Community Centre in the new town of Tsuen Wan, which is being built north-west of Kowloon. The town will have a population of 175,000.



THE PRINCESS was met by this "junior policeman" when she attended Youth Festival at the Hong Kong Football Club Stadium on Hong Kong Island. She was driven round the stadium and cheered by thousands of children.



Princess Alexandra in Hong Kong

Her unflinching charm wins many friends

Hong Kong, Thailand, Burma, Japan, Aden and Libya . . . These were the countries visited by H.R.H. Princess Alexandra of Kent during a six-week tour in which her gaiety and charm captivated all who saw her.

The pictures on this page are of the Princess in Hong Kong, busy with just a

few of her many engagements. She stayed in the Crown Colony for 11 days; toured the New Territories; visited the Tsuen Wan Community Centre, So Uk Housing Estate, and the Queen Elizabeth Hospital Nurses Training School, among other places; and was conferred with the degree of Doctor of Laws at Hong Kong University.

At a dinner given in her honour by the Hong Kong Chinese community the Princess said that the development—and from time to time the survival—of Hong Kong had been the fruits of co-operation between the Chinese and the British. She spoke of Hong Kong's remarkable progress and wished the Colony every success in the future.



CHILDREN in a day nursery (left) receive a Royal visit. While their parents are at work the children are taught simple lessons and also receive a free midday meal and a bath. Right: Princess Alexandra in Stanley Village, on Hong Kong Island. She walked down the narrow main street to chat with the villagers.

