

# Commonwealth TODAY

Number Seventy-five

## SINGER FROM CANADA ▶

Miss Donna London, from St. John, New Brunswick, Canada, aged 21, is studying at London's Guildhall School of Music and Drama. She is a soprano, has sung on television in Canada, and was awarded one of the twelve Beaverbrook Scholarships given each year for studying at postgraduate level.

★ ★ ★

## Mr. MACMILLAN'S TOUR OF AFRICA

A pictorial record of the historic tour of Africa, made by the Prime Minister of the United Kingdom, Mr. Harold Macmillan, and his wife, Lady Dorothy Macmillan, is on pages 4, 5.

## THE ROYAL SOCIETY'S TERCENTENARY

Founded in the reign of King Charles II, the Royal Society, the world's oldest Academy of Science, celebrates three hundred years of distinguished work for science. Its history and present responsibilities are reviewed in a feature on pages 8-10.

## NIGERIAN OIL

After a 22-year search that has cost 200 million, oil has been found in Nigeria in economic quantities. The story of that enterprise—of the many difficulties that were overcome before the oil beneath the Niger Delta was tapped—is told, with colour illustrations, on pages 16-18.

## TREATY WITH THE MALDIVES

The Governments of the United Kingdom and the Maldives Islands—a group of coral-girt islands in the Indian Ocean south of Ceylon—have signed a new Treaty of Friendship and Co-operation. Pages 12, 13.

## HONG KONG'S IVORY CARVERS

The ivory carvers in the Crown Colony of Hong Kong are continuing a tradition of craftsmanship that began in China centuries ago. Pages 6, 7.



# Commonwealth TODAY

Presenting the Commonwealth to the Commonwealth

NUMBER SEVENTY-FIVE

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## TRADE VIEWS Commonwealth Industrial Notes

Contractors carried out construction work in Britain to a record value of £509 million in the fourth quarter of 1959. The provisional total for the year, £1,976 million, was about six per cent higher than in the previous year.

Consumption of oil in India is now about six million tons a year, compared with only two million tons in 1947, and estimates of future consumption suggest that as much as 25 million tons a year will be consumed by 1971. Current production of crude oil in India is less than 500,000 tons a year; the rest is imported.

New multi-fuel engines to power British military vehicles are being developed by Rolls-Royce. The engines on test in the company's factory at Crewe, can run on diesel oil, kerosene or petrol, changing from one to another at the flick of a switch. It is believed that, eventually, the engine will be able to operate on almost anything, from peanut butter to creosote, and there are wide possibilities for civil vehicles and marine use.

The units being tested can also be used at a greater angle of tilt than normal petrol engines, a great advantage when positioning the engine and also when the vehicle is travelling over rough country.

Ghana now has its own vehicle assembly plant, which cost £250,000 and covers 35,000 square feet. It was opened at Tema by the Prime Minister of Ghana, Dr. Nkrumah, and is producing about 60 vehicles a month from components shipped from Vauxhall Motors, Luton, in England.

One of the oldest industries in the world, the curing of hides and skins may be carried out with one of the newest techniques, massive radiation. Both the British Leather Manufacturers' Research Association and the Technological Irradiation Group of the Isotope Research Division, Atomic Energy Research Establishment, at Wantage, are experimenting with the process.

The use of X-rays or penetrating gamma rays—according to the U.K. Atomic Energy Authority, in a report on the experiments which have been going on since 1955—should provide a more

efficient way of curing than the traditional methods of drying hides in the sun after flaying or salting.

Eight new hotels have been opened in Jamaica, in The West Indies, increasing the island's total tourist accommodation from 4,200 to 5,100 beds.

A sugar refinery, completed in Toronto, Canada, at a cost of 13 million dollars, is the first major establishment in the city to be built expressly as a result of the creation of the St. Lawrence Seaway. Deep-sea vessels from tropical ports of the Commonwealth unload raw sugar at the refinery, which at present produces 1.3 million pounds weight of refined white sugar daily.

The electronics industry in Britain is growing at the rate of £30 million a year, and its gross output last year approached £475 million. About 350,000 people are employed in the industry, which allots 10 per cent of its annual turnover to research—the highest proportion of any industry in Britain, except aviation.

One of New Zealand's best-known sheep stations, "Erewhon", in mid-Canterbury, has been offered for sale by public auction. Under the "hammer" went a total area of 62,000 acres with 9,100 Merino sheep, 40 head of cattle, 12 horses and the complete station plant and equipment.

The Commission for Technical Co-operation in Africa South of the Sahara has been celebrating its tenth anniversary this year. The Commission is a valuable clearing house for the exchange of information and advice on improving technical standards in the region on a co-operative basis. Membership of the Commission is open to all south of the Sahara, forming a partnership for co-operation between technical staffs and services. Its main headquarters has been moved from London to Lagos, the capital of Nigeria.

New deep-water wharf facilities, costing over £1,300,000, are to be built at Lautoka, the second port of Fiji. A grant of £337,500 towards the cost of the scheme has been made from Colonial Development and Welfare Funds.

## COMMONWEALTH STAMP CORNER

### ST. HELENA

FAR out in the South Atlantic Ocean, twelve hundred miles from the coast of Africa, lies one of the loneliest islands in the world, St. Helena. Discovered by a Portuguese explorer on St. Helena's Day, 1502, later a regular port of call for sailing ships making the long voyage round the Cape of Good Hope to the East, and for a time the home of the exiled Napoleon Bonaparte, St. Helena has been popular with stamp collectors ever since its first stamps were issued in 1856.

For many years portraits of reigning sovereigns provided the designs of most issues of St. Helena, but in 1922 came a series of large stamps showing the badge of the colony, an East Indian man at the entrance to the port of Jamestown. A similar design was used for stamps issued during the reign of King George VI.

With the accession of Queen Elizabeth II, pictorial designs were chosen for the new stamps. On the 3d. value is depicted the island's only indigenous land bird, the wire-bird, so called because it makes its nest in the wire-grass which covers much of St. Helena. Other stamps illustrate the production of hemp from New Zealand flax, which is the island's main industry. On the 10s. stamp is a view of

Longwood House, where Napoleon spent his last years and which is now the property of the French nation, to whom it was given by Queen Victoria a century ago.

Except for the six years of Napoleon's exile, when it was under military rule, St. Helena belonged to the East India Company until it became a Crown Colony in 1834. One of three stamps issued in 1959 to mark the tercentenary of the first British settlement in St. Helena recalls the island's long association with that famous Company. Finely engraved on the 3d. value is the coat-of-arms borne by the Company in 1659, when Captain John Dutton led the first settlers to their lonely destination. The other two stamps show Captain Dutton's flagship, the *London*, and an inscribed stone which he let into the wall of the castle at Jamestown when he built the island's first fortifications. Although St. Helena's military glories belong now to the past and eastward-bound vessels no longer make it a regular port of call, the island remains a firm favourite among the many collectors of its beautiful stamps.

G. W. HILL.



## THE ROYAL TOURS

### Royal Guests Honoured by the City of London

ROYAL tours to the Commonwealth and elsewhere were nothing if not human and personal occasions. There is nothing material or mechanical about them. . . . So spoke the Duke of Edinburgh, who with the Duke and Duchess of Gloucester and Princess Alexandra of Kent were the guests at the traditional luncheon given by the Lord Mayor, Sir Edmund Stockdale, and the Corporation of London, to members of the Royal Family on their return from official tours abroad.

It was a brilliant scene in London's Guildhall library: besides the Royal guests there were 650 others, including Commonwealth High Commissioners, members of the U.K. Government, and representatives of the Services, the Livery Companies, and other organisations of the City of London.

The Duke said that the Royal journeys could be assessed statistically. . . . Such details would sound impressive but impersonal. Most of the people who had personally witnessed or taken part in the festivities of these journeys had gone away having experienced a very simple and moving emotion.

"Something about the whole occasion has awakened a response which cannot be put into words." It was participation, he said, that mattered, and it was difficult to feel the magic at second-hand.

"To the people we visited", the Duke continued, "we are like Shakespeare's poet's pen, which 'turns them to shapes and gives to airy nothing a local habitation and a name'. We bring into immediate focus all the mystery of all the Coronations of history, and people react in the same way whatever their colour, whatever their religion, or the state of their civilisation, or their political organisations."

"I believe", the Duke added, "that the key is that we remind people of ideas and perhaps ideals which they respect and admire. I think that on these occasions they generously ignore the blemishes of our history and only remember the best."

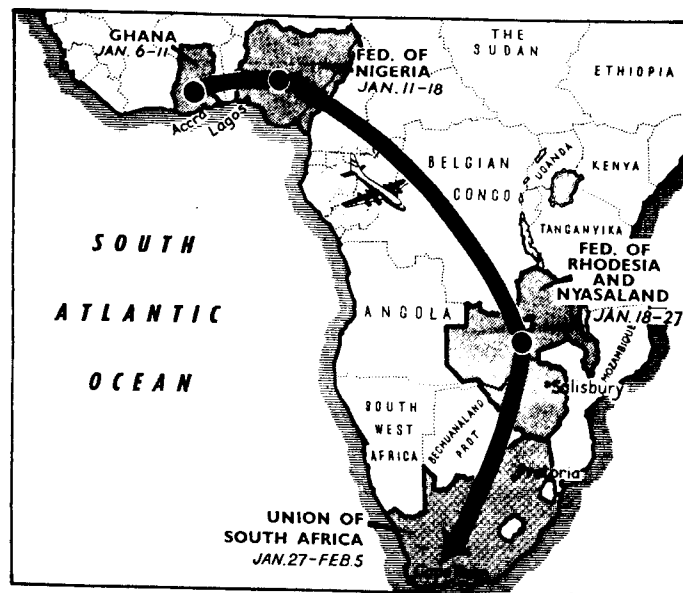
H.R.H. THE DUKE OF EDINBURGH speaking at the luncheon given by the Lord Mayor, Sir Edmund Stockdale, and the Corporation of London, in honour of the successful conclusion of the Royal tours.

THE DISTINGUISHED gathering in the Guildhall, showing H.R.H. Princess Alexandra of Kent reading her address. On the left of the Lord Mayor of London is the Lady Mayoress, H.R.H. the Duke of Gloucester and H.R.H. the Duchess of Gloucester.





**MR. MACMILLAN**, at a State Banquet in Accra, Ghana, said: "We realise Africa presents a challenge to us all." With him on the top table are (l. to r.) the Prime Minister of Ghana, Dr. Nkrumah; Lady Dorothy Macmillan; the Governor-General, Lord Lis-towel; and Lady Korsah, wife of Ghana's Chief Justice.



# BRITAIN'S PRIME MINISTER IN AFRICA

## Strengthening the Bonds of the Commonwealth

**T**OLERANCE, understanding and, above all, faith. It is in this spirit—faith—that I made these journeys to Asia, Australasia, and now to Africa." This was part of a statement which Mr. Harold Macmillan, Britain's Prime Minister, made on his return to London with his wife, Lady Dorothy Macmillan, after their 19,500-mile African tour.

"I thought it right during my tour," Mr. Macmillan said, "to state as plainly as I could the principles upon which we base our policies in those parts of Africa where the United Kingdom Government still has responsibility. I think that if these principles gain acceptance—and I believe they will—we have every good reason to hope for the future. But, of course, to do what we all want to do means patience, self-restraint, tolerance and, above all, understanding."

The needs and rights of others, he said, had to be recognised; there was no single simple solution to this complex problem. We had to get on with the job quietly. It was a job we had done before in our history, and he believed we could do it again.

Mr. Macmillan said that the six weeks tour had been fascinating; that this had been a good time to go to Africa, where keen feelings of nationalism had grown. In one of his most telling speeches of the tour—when addressing the South African Parliament—he spoke of the strength of African national consciousness—"the wind of change blowing through the continent". That, he had pointed out, was a political fact; in different places it may take different forms, but it was happening everywhere, and Britain's national policies must take account of it.

## Spectacular Progress

Mr. Macmillan spoke of "the ferment of thought and activity" in Africa; "but this does not mean", he added, "that all the cheerfulness and the merry character of the Old Africa is not still there. I saw a lot of that, but building up side by side with it is the material progress of a spectacular kind which European skill has brought to Africa."

He cited the example of Nigeria, in population the biggest country in Africa; and Nigeria, approaching independence with zest and excitement and goodwill towards Britain, would this year become the newest member of the Commonwealth.

"In Nigeria as in Ghana," Mr. Macmillan said, "the transition to full independence has not been a matter for bitterness and recrimination but for mutual congratulation and satisfaction. I am sure both countries want to be on terms of close friendship with the United Kingdom—with all the members of the Commonwealth."

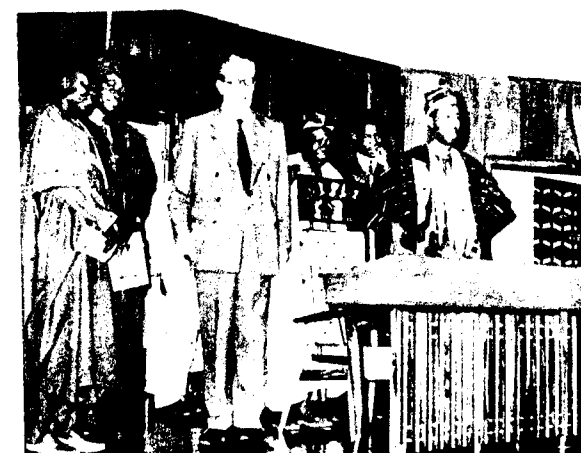
The Prime Minister spoke of the "extraordinary economic progress" of the past few years in the Federation of Rhodesia and Nyasaland. "We have to try to think of the political progress which follows on economic progress—a difficult but not, I think, an insoluble problem."

"I am more than ever convinced," he said, "of the tremendous influence for good which the Commonwealth can be. It is something unique in the world. But we must not take it for granted. It is something our forbears have created for us, and it is our duty to hand it on."

**THE PRIME MINISTER** views the site of the projected Volta River Dam, with Dr. Nkrumah. As Mr. Macmillan said in Accra: "We share the strong tide of feeling among Africans that this is a time of destiny." The dam might cost £60 million to build.



**IN KADUNA**, Northern Nigeria, Mr. Macmillan saw a model of the new Chamber at Lugard Hall. With him (l. to r.) are the President of the House of Chiefs, the Emir of Gwandu, and the Sardauna of Sokoto.



**IN IBADAN**, Western Nigeria, Mr. Macmillan stands by the Speaker's Chair, which is decorated with traditional carvings. He is accompanied by leading public figures of the Region including (right) the Regional Premier, Chief S. L. Akintola.



**AT LAGOS** Airport are (from left to right) the Governor-General of Nigeria, Sir James Robertson; the Federal Premier, Alhaji Sir Abubakar Tafawa Balewa; Mr. Macmillan; and Lady Robertson.



**AT SALISBURY** Airport. Greetings from Sir Roy Welensky, Prime Minister of the Federation of Rhodesia and Nyasaland. Mr. Macmillan toured all three territories in the Federation; saw the Kariba Dam and the Victoria Falls.



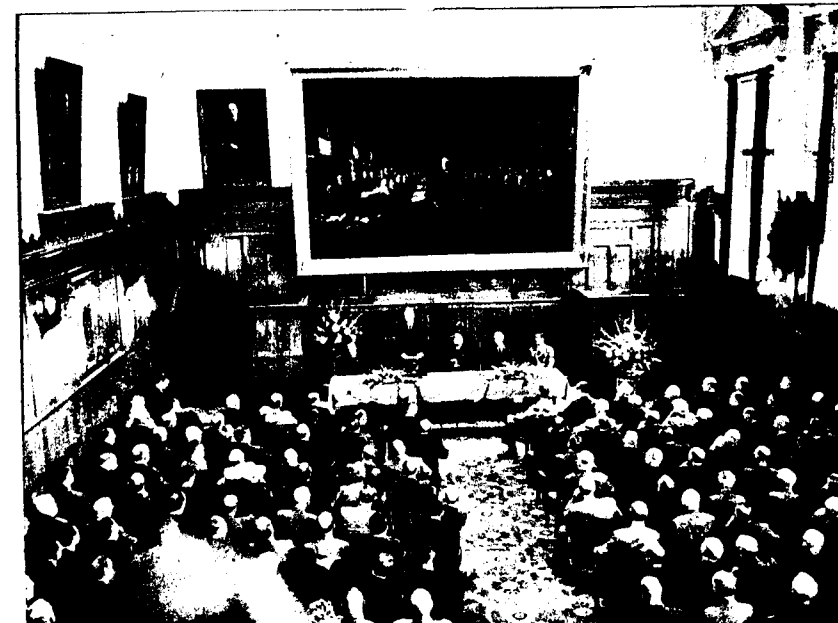
**LADY DOROTHY** Macmillan visited a number of welfare centres in the Lusaka area. Here she is with some of the patients and staff of a polio clinic in Chilenje African school, run jointly by the Red Cross, the Northern Rhodesia Polio Fund, and Lusaka Municipal Welfare Services.



**IN** Protectorate of Bechuanaland: The Resident Commissioner, Mr. R. P. Fawcus, introduces Mr. Macmillan to Seretse Khama, whose wife is by his side.



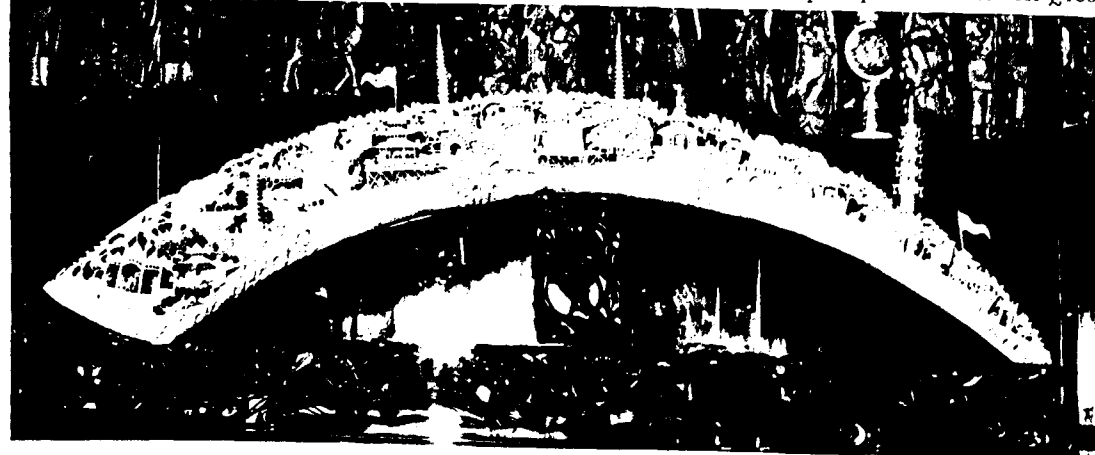
**A WARM WELCOME** at Durban, in the Union of South Africa. Mr. Macmillan started his tour of the Union in Johannesburg, and visited Pretoria, Bloemfontein and Cape Town. He also saw the U.K. High Commission Territories of Basutoland and Swaziland.



**ADDRESSING** the Union Parliament in Cape Town—a speech which attracted world-wide interest. When Mr. Macmillan sailed for home, from Cape Town on 5th February, crowds on the quayside sang, and cried out "God Save the Queen", "Come back again", and "Long live the Commonwealth".



**A CRAFTSMAN** carves a delicate bridge from the entire, imported white tusk of an African elephant. Below: the finished "paradise" bridge with its ebony base, will be sold—perhaps to a tourist—for £106.



**THE SON** of the proprietor of an ivory carving workshop respectfully eyes a tusk 85 inches long. The tusks, which are often partly hollow, are sold by weight; in carving little ivory is wasted.

## THE IVORY

**I**VORY carvers in the Crown Colony of Hong Kong are continuing a tradition of craftsmanship that began in China centuries ago.

Working in family groups they produce hundreds of different articles, ranging from two-inch boats to intricate bridges carved from a complete elephant's tusk. In 1958 exports of carved ivory from Hong Kong were worth £212,800.

There are about 1,000 ivory carvers in the Colony, many of them specialising in a particular type of work. Some carve only chess sets, others only figurines, such as the Goddess of Mercy or Longevity.

To give customers a wide choice of carvings, ivory workshops employ up to 100 full-time and part-time carvers. Most shops stock a wide range of carvings, including houseboats, lampshades, and all the Chinese gods and well-known figures from mythology.

Despite the fact that carvers count their working time by the day, and not by the hour, prices are considered reasonable. An 18-inch figurine, taking ten days to carve, costs £25. A seven-day figurine costs about £6 16s., and a chess set the same amount.

Delicately carved bridges made from the entire tusk have always fascinated buyers

from the West. The bridges represent a Chinese paradise, with tiny figures, temples, pagodas and gardens. The figures are carved in life-like poses even though they are less than half an inch tall. Some are shown playing mah-jongg, others are riding buffaloes, and some are seen working—an appropriate activity in paradise; for the Chinese are an industrious people and have always shunned idleness.

A 45-inch-long bridge takes twenty days to carve and costs between £106 and £125, depending on the quality of the ivory. Concentric balls, fashioned from a solid sphere of ivory, are priced from 7s. 6d. to £312. They have from five to twenty-six layers, one inside the other, each movable; one of the largest balls ever made had thirty-two layers, and is now in an American museum.

In recent years many orders have been received from abroad for special carvings. A Chinese living overseas had a bridge made depicting Chinese history in three dynasties. The hundreds of tiny figures took fourteen months to carve, and the completed carving cost £875.

Most carvings are produced in three stages. The first of these, in which the outline is carved, is the most important, and is invariably carried out by the more expert, elderly carvers. It is then left to the sons to carve the faces and detailed body work. Finally, the carvings are polished with sandpaper, water, and the leaves of peach trees. This work is more often than not done by the daughters of the family.

An ivory carver's tools consist of very sharp knives, and hooks of various sizes with wooden handles. Most carvers prefer to work at home; one shop in Kowloon, employing 100, has only four workers on the premises.

## CARVERS OF HONG KONG



In years gone by these ivory carvers were regarded in China as the most skilled of workers; they still occupy a special place among Chinese craftsmen because of the delicate beauty of their work. They usually serve an apprenticeship of at least five years, and it is very difficult for a lad whose father is not a carver to become apprenticed.

The ivory is imported from South Africa, a tusk costing from £50 to £125. Brown tusks, from female elephants, are more expensive than white tusks, which come from

the males. Consequently, brown carvings cost more than white carvings.

Very little ivory is wasted by the carvers. Odd pieces are used for chessmen or the handles of paper knives, and the centre section of a tusk (used for piano keys in Europe) is made into chopsticks. Anyone accustomed to handling a pair of smooth, ivory chopsticks knows how they tend to enhance the flavour of even the most delicious Chinese meal.

WILLIAM FISH.

**TOURISTS** in a Hong Kong shop bargain for small figurines. Prices range from 3s. 1d. for a sampan to over £100 for a bridge. A bridge depicting history in three dynasties costs £875.

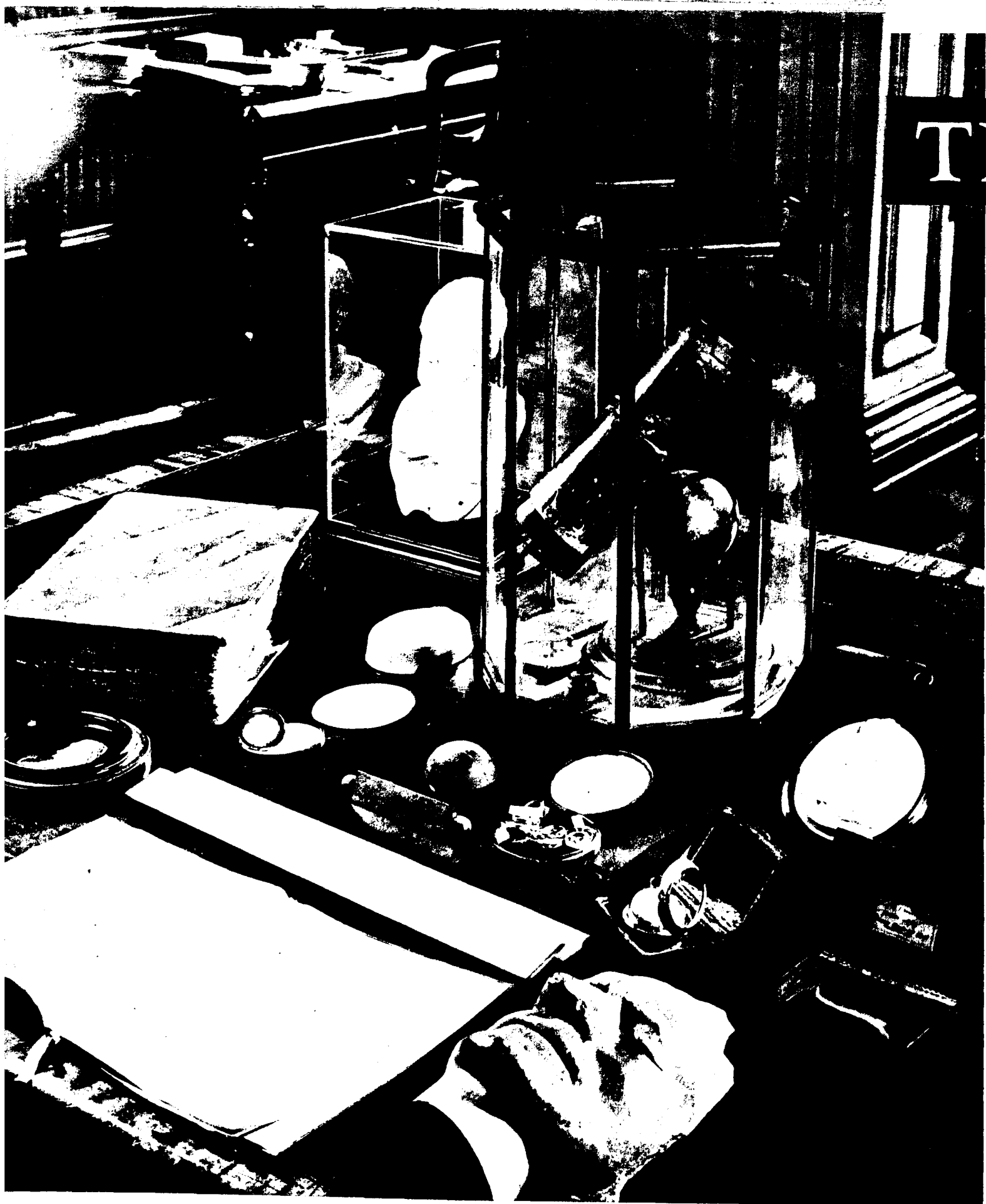


**ANOTHER** mythological figure, a famous female warrior named Leong Hung Yuk. Thirteen inches tall, the figure was carved from brown ivory, and costs £13 14s. Brown carvings, from the tusks of female elephants, are more expensive than white ones.



**DAUGHTERS** in the families of carvers are often employed to put the finishing touches to products. This girl, whose father is a master carver, uses sand-paper, water, and the leaves of peach trees, to give a smooth finish to a figure. In 1958 Hong Kong exported carved ivory worth £212,800.

**THIS CARVING** of General Lee Ching, one of the Heavenly Generals of Chinese mythology, is eighteen inches tall. It took ten days to carve, and sells for £25. Hong Kong's 1,000 ivory carvers specialise in different kinds of work; some produce nothing but figures from mythology.



**RELICS** of Sir Isaac Newton, The Royal Society's most distinguished Fellow, include his telescope, the manuscript of the "Principia", his bust, death mask, watch and (in the box on the right) a lock of his hair.

**THE PRESIDENT** of The Royal Society, Sir Cyril Hinshelwood, under a portrait of King Charles II, speaking at a Press Conference in Burlington House. With him (l. to r.) are Sir Lawrence Bragg, who was born in Australia; Dr. D. C. Martin, Assistant Secretary; Sir William Hodge, Physical Secretary; Sir William Penney, Treasurer; Dr. H. G. Thornton, the Society's Foreign Secretary; Professor E. da C. Andrade; Sir Harold Hartley.



# THE ROYAL SOCIETY

## CELEBRATES ITS 300th ANNIVERSARY

**B**ETWEEN 18th and 26th July, 1960, The Royal Society—"The Royal Society of London for Improving Natural Knowledge", as it was termed in its Royal Charter of 1662—celebrates three hundred years of work dedicated to the pursuit of scientific knowledge.

About 160 representatives of national academies and universities from 47 countries will attend the tercentenary celebrations in London. They will begin with an address to be given in the Albert Hall, by the President of the Society, Sir Cyril Hinshelwood; ten tercentenary lectures will be delivered by Fellows of The Royal Society.

The Society began in 1640, with the first meetings in London of a small group who were interested in the New Philosophy, propounded by Francis Bacon. In 1660, these men formed themselves into a scientific society which, two years later, received the grant of a Royal Seal from King Charles II.

### Oldest Learned Society

Not only is The Royal Society the oldest of the learned societies in the United Kingdom, but it can also claim to have the longest continuous existence of any Academy of Sciences in the world. Originally its membership included not only scientists but all those whose interests lay in history, literature, art, archaeology or exploration. From about 1820 the administration of the Society's affairs passed increasingly into the hands of its scientist members, and since the beginning of the 20th century the Fellows, with the exception of a few specially elected ones, have all been men of science.

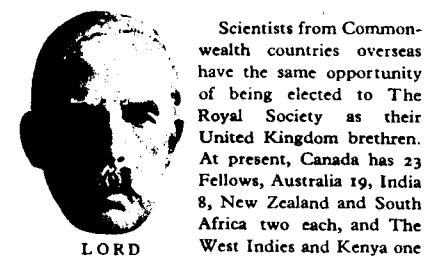
Today the influence of The Royal Society permeates the scientific life of the United Kingdom and the rest of the Commonwealth. Its Fellows are leaders of thought and achievement in various branches of science, all of which are represented.

Only outstanding men and women in their own fields (the first woman was elected to Fellowship in 1945) have a chance of joining

this distinguished body. Candidates for Fellowship must be proposed and recommended by no fewer than six Fellows. Ordinary Fellowships—there were 594 Ordinary Fellows on 1st January—are restricted to 25 a year. In addition there are six Royal Fellowships, headed by Her Majesty the Queen, who is the patron, and His Royal Highness the Duke of Edinburgh.

One non-scientist may be elected each year for his services to science, and four foreign members a year are also elected. There are 63 foreign members at the moment.

### The Royal Society and the Commonwealth



LORD RUTHERFORD

Scientists from Commonwealth countries overseas have the same opportunity of being elected to The Royal Society as their United Kingdom brethren. At present, Canada has 23 Fellows, Australia 19, India 8, New Zealand and South Africa two each, and The West Indies and Kenya one each. One of the most distinguished of Fellows, Lord Rutherford, the "father" of atomic physics, came from New Zealand, and his name is perpetuated by The Royal Society through the Rutherford Memorial Committee, and again through the Rutherford Memorial Scholarship.

The Committee appoints a lecturer to lecture in the Commonwealth every two years (at least one in three of the lectures is given in New Zealand); and a Scholar is appointed each year to carry out research in the Commonwealth.

The affairs of the Society are managed by its Council—which is made up of 21 members, including all the principal officers, and which elects a new President every five years. A successor to Sir Cyril Hinshelwood, the physical chemist, whose term of office ends this year, will be chosen in November.

Distinguished past Presidents before the

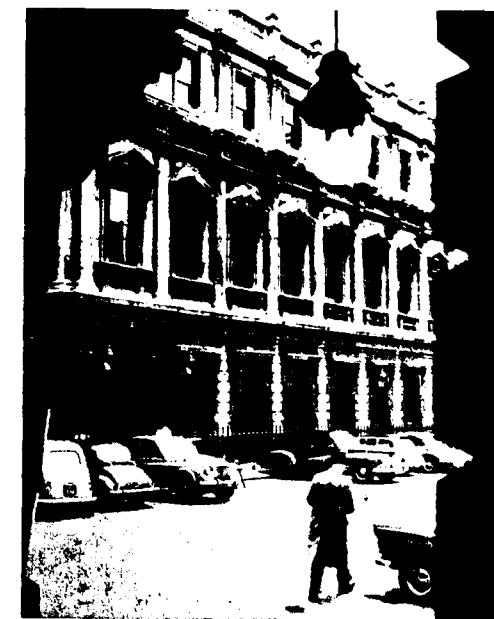


**H.M. QUEEN ELIZABETH** the Queen Mother, who was elected a Royal Fellow in 1956, with the President of the Society, Sir Cyril Hinshelwood, at Burlington House, London.

20th century include Sir Christopher Wren (1680-1682), Samuel Pepys (1684-1686), Sir Isaac Newton (1703-1727), Sir Joseph Banks (1778-1820), Sir Humphry Davy (1820-1827), Sir Joseph Hooker (1873-1878), Lord Kelvin (1890-1895), and Lord Lister (1895-1900).

Sir Isaac Newton, who was elected to The Royal Society in 1671 at the age of 29, is perhaps the most illustrious Fellow of all. His investigation into the nature of light, and his gravitational theory, revolutionised science; his reflecting telescope, which re-

(Continued overleaf)



**THE ROYAL SOCIETY** has occupied rooms in this building, which surrounds a quiet courtyard off Piccadilly, London, since 1873. Three other Royal foundations also have accommodation here.

### Five Distinguished Past Presidents of the Royal Society



**SIR CHRISTOPHER WREN** 1680-1682



**SAMUEL PEPYS** 1684-1686



**SIR ISAAC NEWTON** 1703-1727



**SIR HUMPHRY DAVY** 1820-1827



**LORD KELVIN** 1890-1895



**CAPTAIN COOK** the explorer, who discovered Australia, was an early recipient of The Royal Society's highest award, the Copley Medal, founded in 1731.

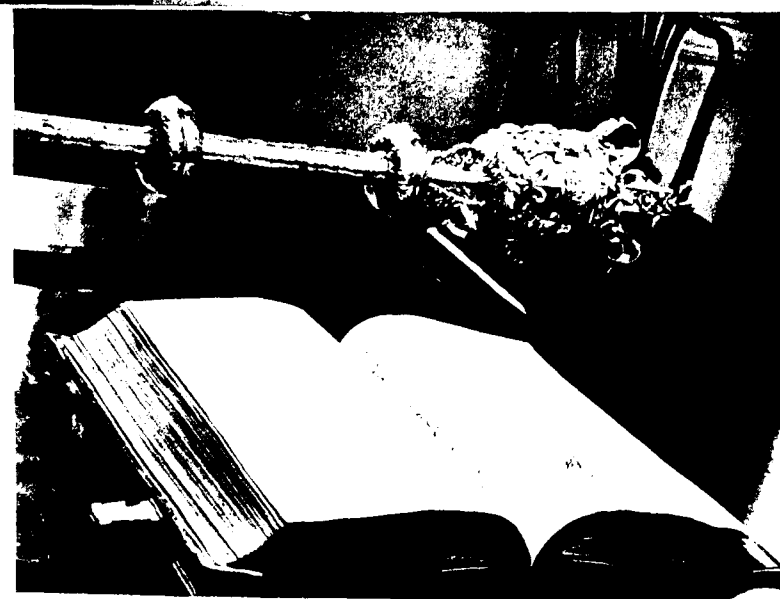


**IN THE LIBRARY** at Burlington House Sir O. G. Sutton, Director-General of the Meteorological Office, looks at a reference work. The bust is of Charles Darwin, a Fellow who, however, was never elected President.



**OVER 150,000** volumes lie on these shelves. The Royal Society has published its "Philosophical Transactions" since 1665, and the famous "Proceedings of the Royal Society" since the year 1832.

**TWO** great treasures—the silver gilt mace presented by King Charles II in 1663; and the Charter Book, which contains the signatures of all British Sovereigns, and all the Fellows, from the beginning to the present.



#### *The Royal Society—continued*

presented a huge step forward in the study of astronomy, remains a treasured possession of The Royal Society at its Burlington House headquarters in London, though most of the Society's other early treasures have been presented to the British Museum.

Although the Society is independent of the British Government, and relies upon endowments to pay its way, it has from its foundation been consulted by the Government on scientific projects of national importance, and has never hesitated to make representations to the Government on scientific matters. It is represented on the board of many colleges and scientific institutions. It set up the British National Committee which participated in the International Geophysical Year, from July 1957 to December 1958; and it has also formed a National Committee to advise the Government of the United Kingdom on the scientific instrumentation of Space Research.

The Council of The Royal Society appoints the British delegates to eleven International Unions—members of the International Council of Scientific Unions. They are the Unions for Astronomy, Geodesy and Geophysics, Chemistry, Scientific Radio, Physics, Geography, Biology, Crystallography, Theoretical

and Applied Mechanics, Mathematics, Biochemistry and Physiological Sciences.

In addition, the President and Council of the Society, acting on behalf of the Committee of the Privy Council for Scientific and Industrial Research, have been responsible for the management of scientific work at the National Physical Laboratory, Teddington, since its establishment in 1900.

Each year the Society awards medals for outstanding scientific work. The highest, founded in 1731, is the Copley Medal. Captain Cook, the explorer, was one of the early recipients. Other medals include the Rumford Medal, Darwin Medal for biological research, Hughes Medal for Physical Sciences, Sylvester Medal for mathematical research, Buchanan Medal for hygiene, and the Davy Medal for the most important discovery in chemistry made in Europe or North America.

#### **Royal Medal Awards**

There are also two Royal Medals, awarded each year by the Sovereign on the recommendation of the Council of the Society. They are for achievements in physical sciences and biological science, respectively.

Foremost among The Royal Society's activities is the publication of scientific papers written by Fellows. The "Philosophical Transactions", which has been published since 1665, contains memoirs of scientific investigations, and in 1832 the Society began a series entitled the "Proceedings of The Royal Society", which has become world famous.

The Royal Society's library on the first floor at Burlington House—a quiet, dignified building, off Piccadilly, shared by a number of other Learned Societies—has over 150,000 volumes, and is open to all students of science, introduced by Fellows, who wish to study there. The library, which also contains treasured portraits of some of the greatest men of British science, breathes an atmosphere of age and erudition.

The Royal Society is in all but name, a Commonwealth Academy of Sciences—a "brains trust" and clearing house of science, the three-hundredth anniversary of which will be honoured the world over.

## **OFF WE GO**

**Children's Railway in Delhi**



**KHEL GAON** station may not be big, but it has modern facilities, including a canteen and a retiring room.



**PASSENGERS** (above) buy their tickets for the round trip. Below: the signalman is kept busy.



**P**LAYING with a toy railway indoors can be great fun, but playing with a miniature railway that has a steam locomotive with its driver and carriages in which young people can sit—that is far more thrilling.

Children in India's capital, Delhi, have such a railway. Known as the Bhal Bhavan Railway, it was opened by Mr. Nehru, the Prime Minister of India, well known for his love of children.

The track, 15 inches wide, runs in a wide circle, over a level crossing, through a tunnel, and under a bridge. Along the track chuffs the engine, 25 feet long, weighing something less than nine tons and capable of pulling a line of open coaches filled with children.

The children, who have been taught to run the railway at Khel Gaon, the "Play Village", take great pride in looking after the railway's "assets". The small station is well equipped, and also has a canteen, waiting hall, and retiring room. The signal box may have only five levers, but, after all, there is only one train to control and keep up to its scheduled time.

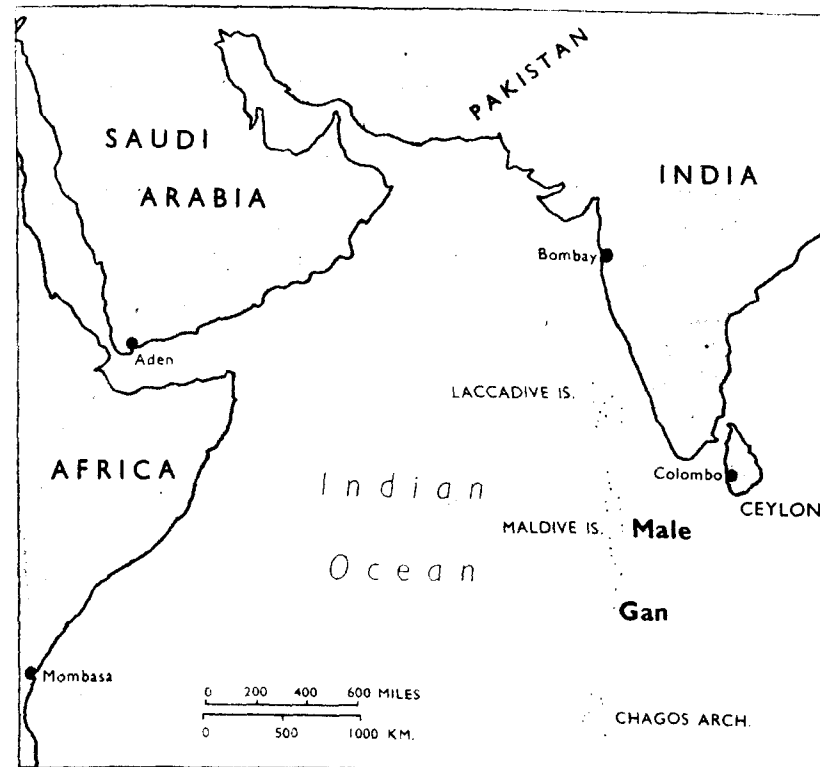
Delhi's children's village is being gradually developed. Eventually Khel Gaon will have a museum, a theatre, swimming pool, library, workshops and an arts and crafts centre.



**ALL ABOARD!** Open carriages give the children a good view of progress along the 15-inch gauge railway track.



**THE UNITED KINGDOM** Minister of State for Commonwealth Relations, Mr. C. J. M. Alport, exchanges a friendly handshake with a Maldivian boy. Most of the people of the islands are fine sailors and fishermen.



**HITADOO** (right) is one of about 7,000 islands and tiny islets in the Maldives; a modern radio station is to be built there.

**GAN** is in the far south of the archipelago, as the map shows. The coral islands stretch across the Indian Ocean for several hundred miles.



# Maldivé Islands

## New Agreement Between British and Maldivian Governments

**I**N the island city of Malé, capital of the Maldivé Islands, an agreement has been signed between the Governments of the Maldivé Islands and the United Kingdom, redefining relations between the two Governments and reaffirming Britain's obligations for the defence of the Maldives.

Signatories on behalf of their respective Governments were Mr. Ibrahim Nasir, the Prime Minister of the Maldivé Islands, and Mr. C. J. M. Alport, the United Kingdom Minister of State for Commonwealth Relations, who flew to those Islands in the Indian Ocean at the invitation of the Maldivian Government.

The Maldives consist of groups of about 7,000 islands and tiny islets, more than 400 miles south-west of Ceylon. Between 200 and 300 of the islands, comprising about 115 square miles of land, are inhabited by over 90,000 people—great sailors and fishermen, the majority of them being Muslims.

The islands have been under Britain's protection since 1887, and under the terms of the new agreement the Maldivian Government made a free gift to the United Kingdom of the use of Gan Island and other facilities in Addu Atoll for thirty years.

Britain will now have a representative in the Maldives. He will live on an island named Doonidoo—half a mile from Malé—an island which the Maldivian Government has given to Britain for the use of her representative.

Under the new agreement, which has replaced the one signed in 1953, the United

Kingdom retains responsibility for the defence and foreign relations of the islands, but the Maldivian Government will conduct its own external relations in the economic and cultural fields.

In the words of a joint communiqué issued by the two Governments: "The United Kingdom Government is making available to the Maldivian Government a total sum of £850,000, of which £100,000 will be a direct grant to the Maldives budget and £750,000 spread over a period of years and devoted to specific development projects, e.g., the improvement and expansion of the fishing industry, communications, health and education services.

"The Maldivian Government has also welcomed the United Kingdom offer of good offices in regard to the restoration of the Maldivian Government's authority in Addu

Atoll, and both Governments are agreed that this must be a gradual and peaceful process."

Gan—in Addu Atoll, which is the southernmost group of islands in the Maldivé Archipelago and only a few miles from the Equator—is important to the United Kingdom and the rest of the Commonwealth because its airfield, which has been reconstructed at a cost of £4½ million, is an important link in communications with Australia and the Far East. It also provides a base for the defence of the Maldivé Islands.

The friendship and co-operation which has long existed between Britain and the Maldives will continue on a new, firm basis. The Commonwealth has secured a mid-ocean "staging post", and the Maldives have gained financial aid which will benefit the people of those beautiful tropical islands.



**THE PRIME MINISTER** of the Maldives, Mr. Ibrahim Nasir, signs the new agreement. With him (left) is Mr. C. J. M. Alport, the U.K. Minister of State for Commonwealth Relations, who signed for Britain, and (right) Sir Alexander Morley, the U.K. High Commissioner in Ceylon.



**IN MALÉ**, the capital of the Maldives, after the signing of the agreement. *L. to r.*: Sir Alexander Morley; Mr. C. J. M. Alport; Captain W. J. Munn, Commanding Officer of the Royal Navy ship *Gambia*; Mr. Ahamed Zaki, Maldivian Minister of Food and Commerce; and Mr. Ibrahim Nasir, the Prime Minister, Maldivé Islands.



**MR. ALPORT** presents an inscribed silver inkstand to the Sultan of the Maldives on behalf of Her Majesty's Government. Under the new agreement Britain is to give the Maldives a direct grant of £100,000, plus a future £750,000 for specific development projects.

# PEOPLE AND EVENTS



## CEYLON'S NEW HIGH COMMISSIONER

The new Ceylon High Commissioner in London, Mr. Gunasena de Soyza, is greeted by the Minister of State for Commonwealth Relations, Mr. C. J. M. Alport, at the Commonwealth Relations Office. Mr. de Soyza was High Commissioner in the United Kingdom for four months in 1958, after which he returned to Colombo to take up the post of Permanent Secretary of the Ministry of Defence and External Affairs.



## THE FIRST AFRICAN TO BE ELECTED CARDINAL

Monsignor Laurian Rugambwa, Bishop of Rutabo, Tanganyika, is the first African ever to be elected a Cardinal. With six other Cardinals-elect he went to Rome for his elevation by Pope John XXIII. Monsignor Rugambwa—the name means “of great renown”—is 47 years of age, the second youngest Roman Catholic Cardinal in the world.

## INDIAN BACTERIOLOGIST IN BRITAIN

Dr. T. N. Mathur, a bacteriologist with the Punjab Government, Karnal, India, examines bacteria cultures at St. Thomas's Medical School in London. He is studying new research techniques under the Colombo Plan. With him is Professor Ronald Hare, a world authority in Dr. Mathur's field of study.



## THREE JUDGES IN LONDON

Photographed at Church House, London, at the conclusion of the African Law Conference, are (l. to r.) Sir Ronald Sinclair, Chief Justice of Kenya; Lord Denning, Lord of Appeal in the United Kingdom, who was Chairman of the Conference; and Sayyid Muhammad Abu Rannat, Chief Justice of the Sudan. The future of law in Africa was discussed by delegates from a dozen African territories.

## MOBILE DISPENSARIES FOR PAKISTAN

The Pakistan High Commissioner in London, General Mohamed Yousuf Khan (centre), inspects one of three mobile dispensaries—fibre glass bodies on Landrover chassis—donated by Pakistan citizens living in Glasgow, Scotland, for use as ambulances or dressing stations in West Pakistan. He is accompanied (l. to r.) by Mr. S. B. Sufi, Labour Attaché in London, and Lieut.-Colonel F. I. Khan, Medical Adviser.



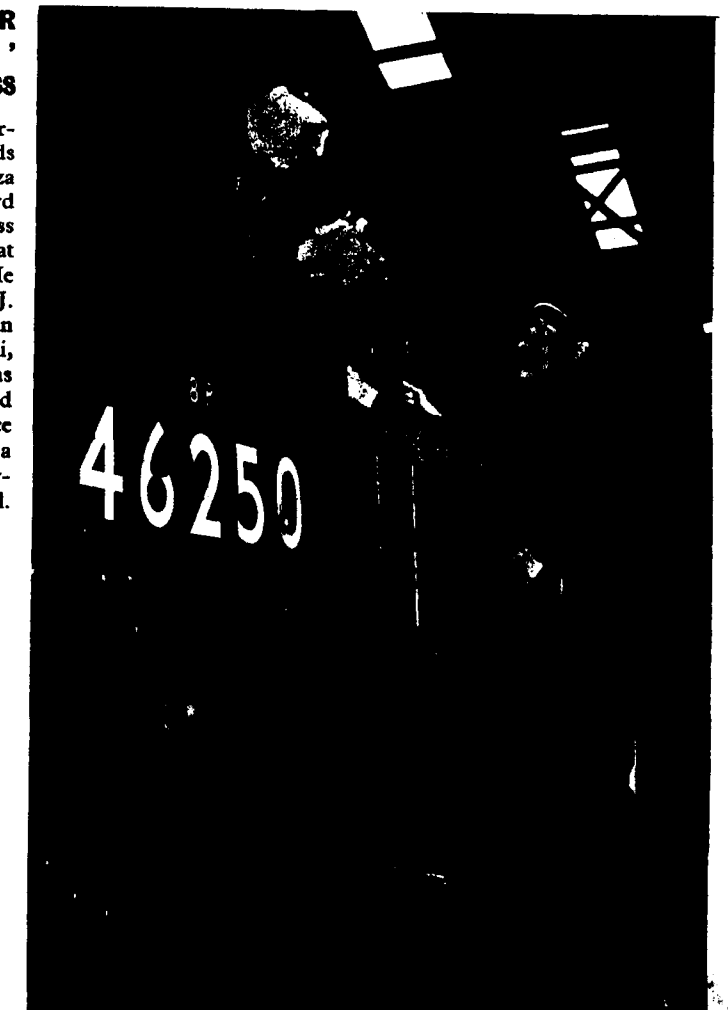
## VICTORY FOR NEW ZEALAND SHOOTING TEAM

The New Zealand Acting High Commissioner in Britain, Mr. G. R. Laking (left), receives the “B.S.A. Challenge Cup” on behalf of Canterbury, New Zealand, from Mr. James Hall, of the National Small-Bore Rifle Association, at a ceremony in the office of the New Zealand High Commissioner in London. The trophy, the first prize in an annual small-bore shooting competition, was won by a team from Canterbury in competition with teams from Britain and many other Commonwealth countries.



## TANGANYIKAN DRIVER RIDES ‘CRACK’ EXPRESS

Yunge Mwanasali, who normally drives mail and goods trains on Tanganyika's Mwanza and Central Lines, climbs aboard the “crack” British express train “City of Lichfield” at Euston station, London. He assisted the driver, Mr. J. Heslop, on the 300-mile run north to Carlisle. Mwanasali, who is 40, is married and has four children. He has worked on railways in East Africa since 1939, and came to Britain on a three-month study course arranged by the British Council.



# Oil from Nigeria—in Economic Quantities

INCREASING PRODUCTION AFTER A  
22-YEAR-OLD SEARCH COSTING £60 MILLION

**O**IL has been found in economic quantities in Nigeria after a 22-year search that has cost £60,000,000. However, further development will be needed before the supply can fully hold its own in the markets of the world.

Nigerian oil is expensive, compared with oil from other areas, mainly because so much of it lies beneath the mud and swamps of the Niger Delta. The terrain not only makes exploration difficult and costly but also creates special production and transport problems.

Nevertheless, pipelines have been successfully laid, connecting the main producing areas of Oloibiri, Afam and Bomu, with Port Harcourt; and a further pipeline, linking the wells with Bonny Island at the mouth of the Bonny River, is now under construction.

The search for oil in Nigeria began in February 1937, in a concession area of 40,000 square miles, in some of the worst types of country in the world from an oilman's point of view.

The geologists, first in the field, fought their way through dense, humid forests and the mangrove swamps of the delta area, almost astride the equator.

Bigger survey parties followed the geologists, and in some places shallow core holes were drilled to probe the underground rock. Then came the war, and exploration was suspended.

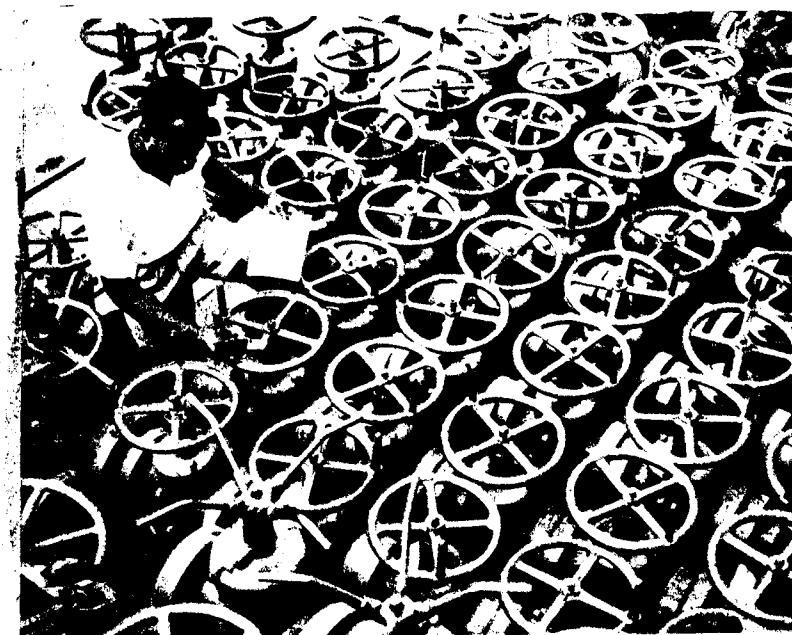
## Aerial Surveys

In September 1946, more ground and aerial surveys were carried out, hampered always by the terrain and the weather. It took five years to map the 9,000-square-mile delta by air; for in the wet seasons, when 100 to 140 inches of rain fall, low cloud covers the swampland, and in the dry seasons, with the temperature about 100 degrees Fahrenheit, dust haze often blankets the ground.

Then, in January 1956, a good show of oil was found at Oloibiri, in the heart of the swamps, 45 miles from Port Harcourt; at the end of 1956 more oil was found, at Afam, 20 miles from the port; and early in 1958 the first exploration well at Bomu, 16 miles south-west of Port Harcourt, struck oil. Several promising shows of oil were also found in other areas in the Eastern Region, and, in September 1959, oil was found for the first time in the Western Region of Nigeria, at Ughelli.

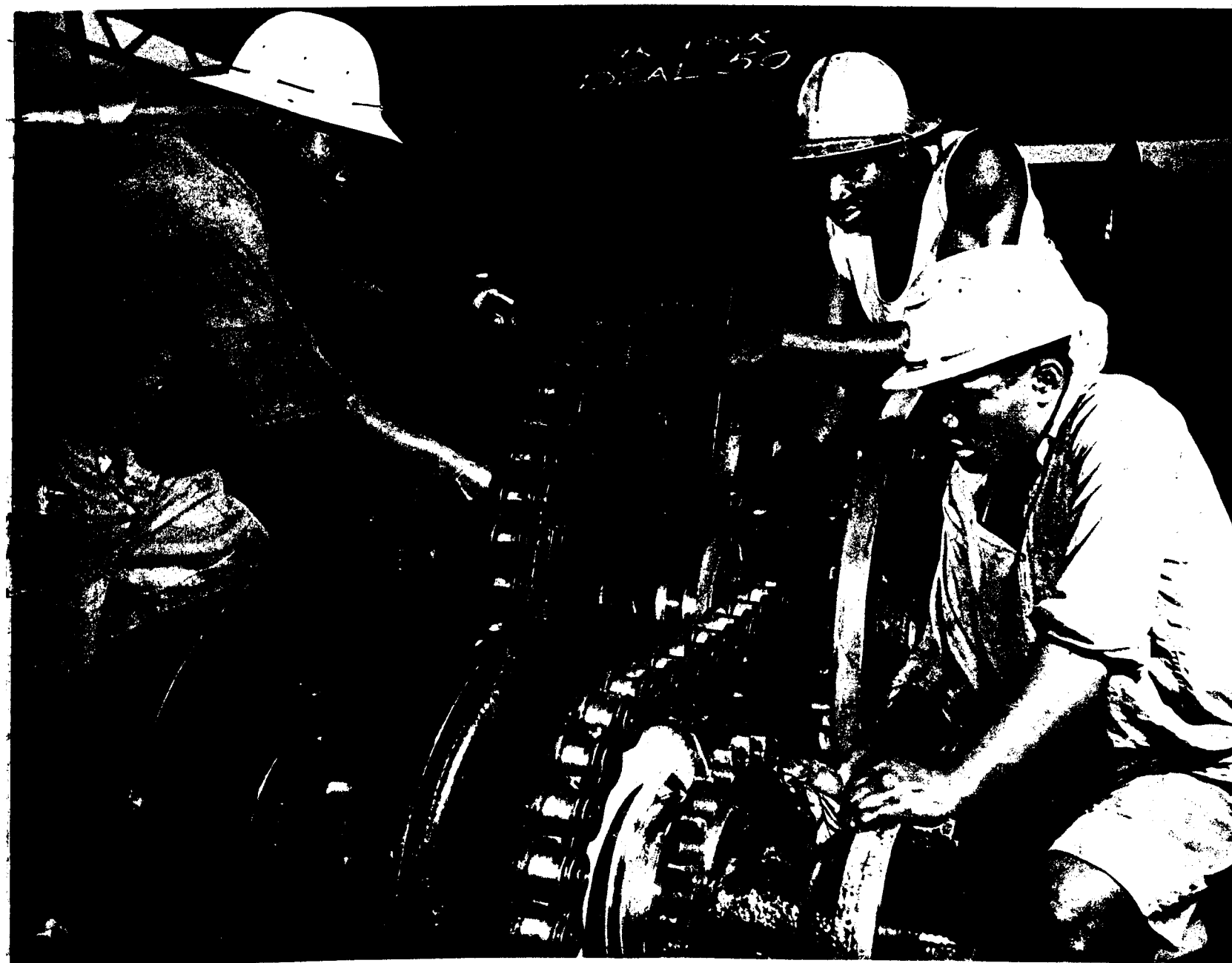
The company concerned—the Shell-BP Petroleum Development Company of Nigeria Ltd.—estimates that if development work continues according to schedule they should produce an average of at least 30,000 barrels of oil a day (about 1,500,000 tons a year) by the end of this year, compared with an average of 15,000 barrels a day in 1959.

(Continued on page 18)

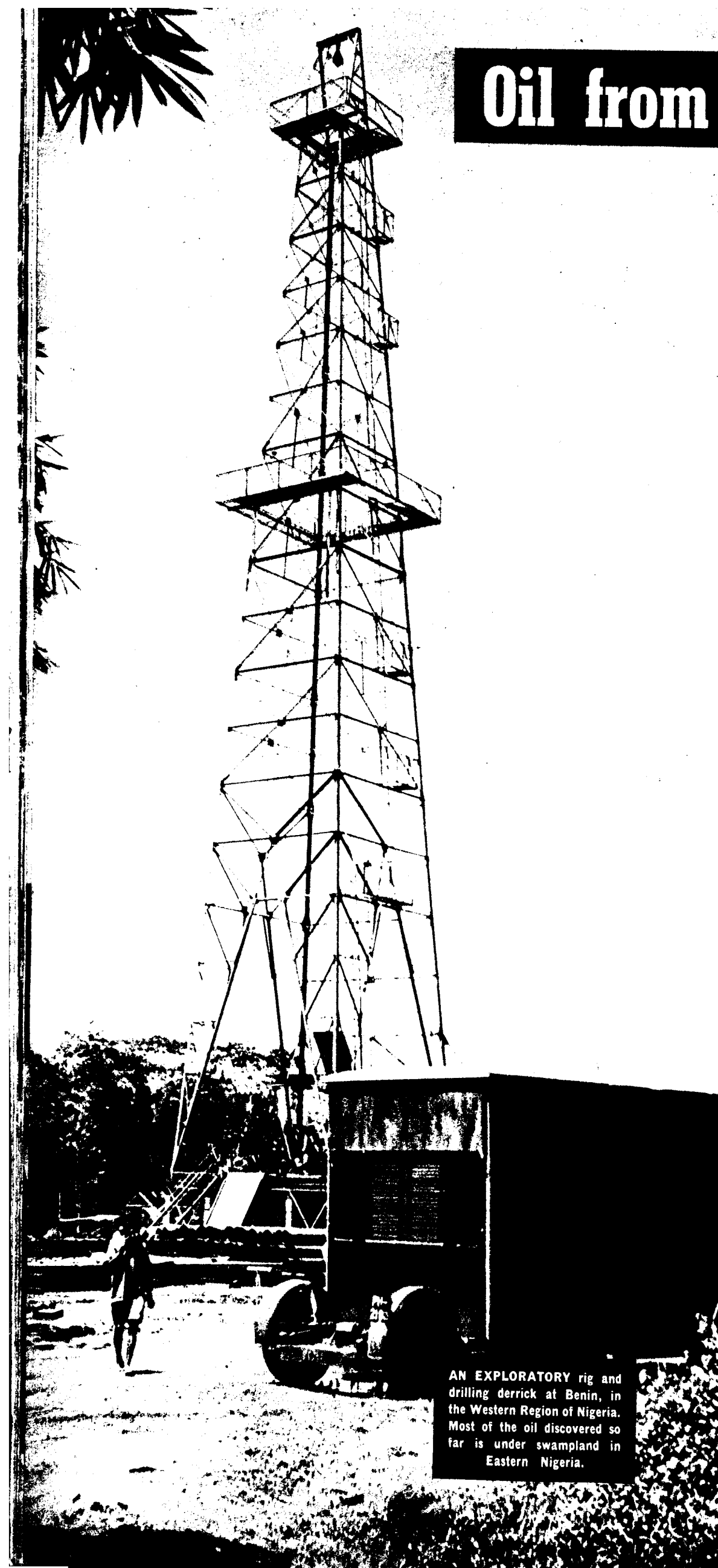


AN OILMAN about to set drilling machinery in motion. Searching for oil is an expensive business; one well alone, at Akukwa, cost \$380,000, and no oil was found. Others gave a good show of oil.

CHECKING well-head valves in an oil equipment stockyard in the Eastern Region. Nigerian wells should produce 1,500,000 tons of oil in 1960.



THE EQUIPMENT of oil rigs needs frequent cleaning and overhaul. Nigerians have found both skilled and unskilled employment in the new oil fields.



AN EXPLORATORY rig and drilling derrick at Benin, in the Western Region of Nigeria. Most of the oil discovered so far is under swampland in Eastern Nigeria.



MEMBERS of a drilling crew carry out minor adjustments to an oil rig at Nzam, 70 miles to the north of Owerri. The search for Nigerian oil began in 1937 in a region of 40,000 square miles, and has continued, apart from the war years, ever since.



RICHES from deep beneath the ground. Nigerian oil is expensive, but will pay increasing dividends. The Government may receive \$750,000 in royalties in 1960.

BASE CAMP at Owerri, with industrial and administrative buildings in the foreground and the spacious planned residential area beyond.

A NIGERIAN trainee, in a petroleum engineering laboratory, examines rock cuttings and oil samples from test drillings.



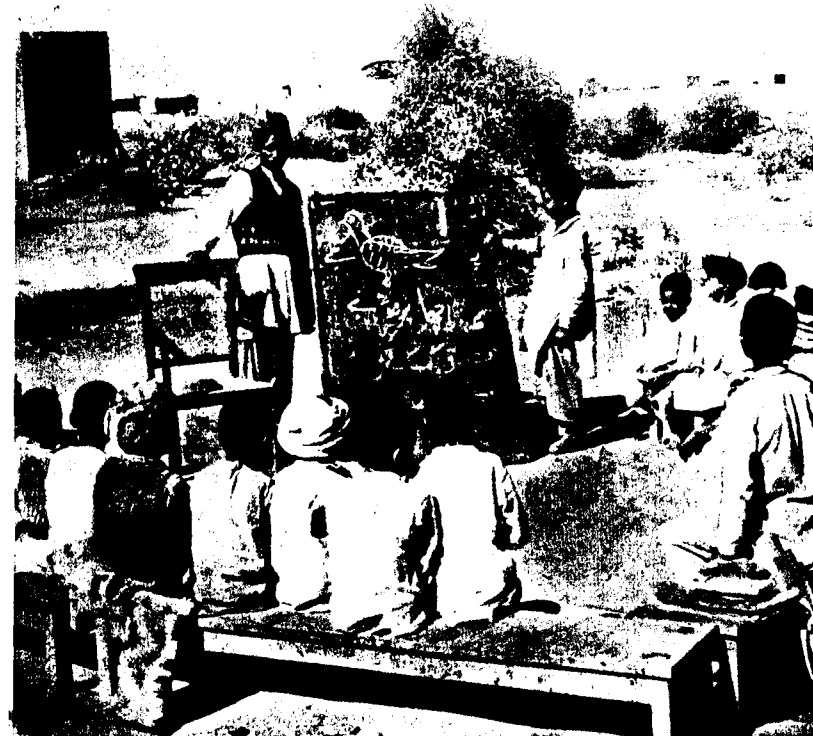
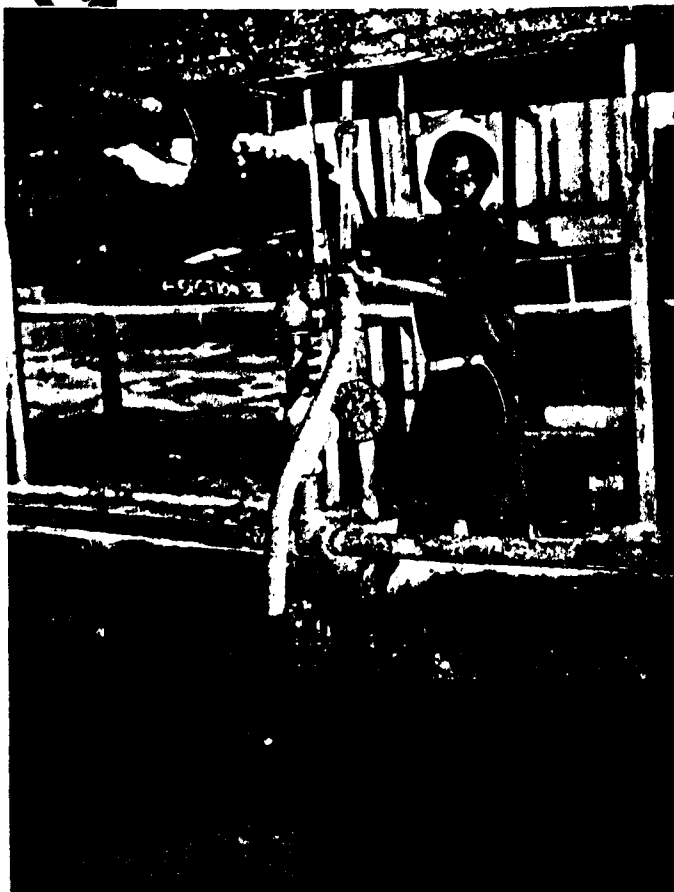
Production, it is estimated, may reach 4,500,000 tons a year by 1965, after which there may be an increase of about a million tons a year; Nigerian oil production would then be approximately equal to that of Brunei or Trinidad.

It will be many years before the company—which expects to pay about £750,000 in royalties to the Nigerian Government in 1960—can hope to recoup the costs of the years of exploration and development. The sinking of one well alone, at Akukw, cost £380,000—and no oil was found there; the Oloibiri to Port Harcourt pipeline, seventy miles long and ten inches in diameter, cost £1,250,000; the first stage of dredging the bar of the Bonny River is costing £600,000.

#### New Terminal

When the work is finished, 18,000-ton tankers should be able to depart fully laden from the new terminal on Bonny Island. This will be a big improvement on the present system, under which tankers leave the Port Harcourt terminal only half laden in order to surmount the bar, and are then "topped up" by a "shuttle tanker" in the open sea.

Two drilling barges—both with helicopter landing stages—costing £1,250,000 each, are now operating in the swamps, probing still further for Nigerian oil. The entire enterprise is regarded by oilmen as a classic example of the risks, uncertainties, and high cost of oil exploration; it is the story of a hard-won triumph in uncovering a valuable asset for a country on the verge of independence.



CHILDREN in rural Pakistan receiving basic education in an open-air "classroom".



VILLAGERS near Karachi being vaccinated against tuberculosis.



ONE of the aims of V-AID is to raise production and incomes in rural areas. This cigar maker is in East Pakistan.



## VILLAGE SELF-HELP

### Pakistan's Flourishing Rural Aid Projects

PAKISTAN has an official village aid programme which, beginning in a modest way in 1953, now covers almost every aspect of the life of 85 per cent of the people. The title of the organisation is the Village Agricultural Industrial Development Programme, known as V-AID. It assumes that the planning of development projects is better carried out at village level than imposed indiscriminately by a central authority.

The principal aims of V-AID are: to raise production and incomes; to multiply community services; to create a spirit of self-help, leadership and co-operation; to co-ordinate the work of the appropriate Government departments; and to give a welfare bias to the entire administrative structure.

There are eleven V-AID Training Institutes, five in East Pakistan and six in West Pakistan, and over 3,700 workers, including 383 women, have now been trained. The training is given in such subjects as animal husbandry, forestry, fishery, sanitation, and cottage industries, and the students are taken to adjoining V-AID areas where they carry out practical work under the guidance of instructors.

In 1959, two Academics were opened to train the upper ranks of V-AID Area Staff, and to instruct civil servants in rural pro-

MEAL BREAK in the fields. Women in rural Pakistan are being taught modern methods in child welfare and other subjects from experts trained at eleven V-AID Institutes.

blems. The trained senior staff (men and women aged between 20 and 35) move into the villages and act as the Government's point of contact, carrying to the villagers the latest knowledge and techniques, and relaying back to the Departments the problems of the villagers.

Women Village Workers are specially trained to influence the womenfolk; they work in village homes and clubs and teach modern techniques in child welfare, home economics, nutrition, tailoring, gardening, home decoration, vegetable growing, care of poultry, and cattle sanitation.

One of the first tasks of the Village Worker is to form a Village Council, which represents a cross-section of the people of a village. The Village Workers act as advisers, never forcing their views on the Council but always ready to make valuable suggestions at the right time.

Towards the end of 1959, there were 12,040 Village Councils in 106 V-AID areas. There were also more than 6,000 Youth Clubs—known as Chand Tara Clubs—whose members, through their good example and initiative, have done much to influence their elders. About 375 of the Youth Clubs have been formed by village girls.

A village Aid Development Area has from 150 to 200 villages. East Pakistan has fifty-four of these areas, comprising 9,939 villages with a population of 6,648,812; and seventy-three are in West Pakistan (11,979 villages, 9,214,265 population).

# Mainly for Women

ASSORTED TOPICS AND EVENTS

## THE ART OF THE LACE MAKER

WHEN His Royal Highness the Duke of Edinburgh visited the city of Nottingham, in the East Midlands of England, not long ago, he was shown a tablecloth specially made to honour his visit. It was 35 feet long, contained 53 miles of cotton, and the city's Arms were repeated in the pattern 16 times.

Such an achievement—for this was the longest tablecloth ever made—is one which Nottingham can take very much in her stride. She is known the world over as the centre of the British lace-making industry, and today continues to make both contemporary and traditional lace for many markets.

The art of lace-making has its roots in pre-history—our Bronze Age ancestors used decorative knotted braids and meshlike fabrics to trim their garments! The art was brought to Britain in the 16th century and centred in the Midlands.

Originally lace was hand-made—a slow and intricate task; then, in 1813, an artisan, named John Leavers, established in Nottingham an increasingly mechanised industry that has flourished

ever since. He invented a lace-making machine which has “the strength and intelligence of the elephant, and the delicacy, patience and artistry of the spider”. It has 40,000 moving parts, with 4,000 wafer-thin bobbins, and in use contains enough yarn to stretch half way round the world.

It is hard to tell the difference between hand- and machine-made lace; the machine-made product is usually more precise and regular. Some of the most intricate laces, such as Chantilly and Alençon, are made on heavy, complex machines; but high skill is still needed to work them. Some of the machines are so made that they automatically stop the moment a single thread breaks.

Each factory keeps a record of every design it has ever used, and as many as 50,000 samples are to be found in many factories. The designer's ideas are translated in terms of mechanical movement by a draughtsman.

This is done on a chart where every motion of the thread is separately plotted. Each thread is

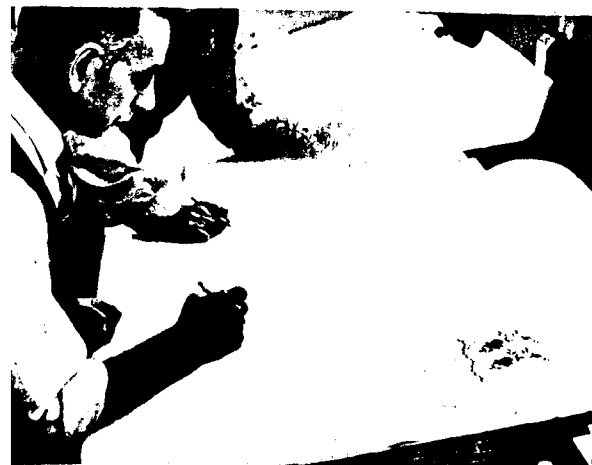


USING a single-needle machine, Mrs. Doreen Davies of Nottingham puts a “frechand” design on a wedding veil. Facing the camera: Mrs. Lily Hardy, overlooker and designer.

represented by a number which shows how it moves at every moment during the entire process. The design thus becomes a network of numbers.

The yarns used have to be of the very best quality. Even nylon yarns, which do not stretch or shrink appreciably, are specially processed for lace-making. Other yarns used in Nottingham include cotton, silk, wool, rayon, Orlon and Terylene.

Nottingham lace has always had a high reputation, due not only to the retention of old skills, but also to constant research and development.



WORKERS in a dressing and dyeing works stretch a length of lace across a flat frame in order to set the lace to its correct width and length. Nottingham has made a tablecloth 35 ft. long.

▲ DRAUGHTSMEN prepare a new design for an embroidery. The various stitches required are later translated into numbers—a code which will enable the new lace pattern to be created mechanically.



## COMMONWEALTH GIRLS IN EDINBURGH



A NIGERIAN girl, Florence Ogunshure, one of 4,000 students taking courses at the Edinburgh College of Domestic Science, with her teacher.



THREE Commonwealth girls at the College. L. to r.: H. Stewart, Kenya; D. Hamilton, Br. Guiana; M. Odoi, Ghana. Right: A Malayan girl cook.

GIRLS from many Commonwealth countries and from the United Kingdom dependencies are attending full- or part-time courses, in such subjects as cookery, home management, needlework and dressmaking, at the Edinburgh College of Domestic Science.

Countries represented among the 4,000 students at the college include South Africa, Ceylon, Ghana, Malaya, Southern Rhodesia, Sierra Leone, Kenya, British Guiana, and the Bahamas. Some of the girls live in Halls of Residence; many from overseas live with Edinburgh families.

The college was established in 1873, and its patron today is H.R.H. the Duchess of Gloucester. Under its Principal, Miss P. L. Wingfield, it provides a wide range of training to qualify girls for jobs as school matrons, professional cooks, manageresses in hotels, restaurants and canteens, or for posts in hostels and hospitals.

Recreation facilities, provided through the Students' Union at the College, include hockey, tennis and lacrosse; there is also the satisfaction of living and working in the fine and historic city of Edinburgh, which, because of its extensive cultural activities, has been called “the Venice of the north”.



ONE of the last pictures ever taken of Countess Mountbatten. She is sitting with (l. to r.) the Sultan of Selangor, Tengku Ampuan of Selangor, and Dato Ong Yoke Lin (Malaya's Minister of Health and Social Welfare) after inaugurating the St. John Council of Malaya, in Kuala Lumpur.

## DEATH OF A GREAT LADY

FROM all over the Commonwealth and elsewhere came tributes honouring the memory of Countess Mountbatten of Burma, wife of Admiral of the Fleet Earl Mountbatten of Burma. She died in Jesselton, North Borneo, where she had gone during a tour as Superintendent-in-Chief, St. John Ambulance Brigade, and Chairman, St. John and Red Cross Service Hospitals Welfare Department.

At the time of her death Lady Mountbatten was connected with a dozen or more bodies devoted to the welfare of youth, the sick and the underprivileged; among them were the Girl Guides Association, Save the Children Fund, the Royal College of Nursing, the Women's Voluntary Services and the Westminster Hospital, London.

Her interest in these activities was never passive. She devoted herself wholeheartedly to the task of relieving suffering; in a multitude of ways in which her sympathies were aroused she gave generously of her time and her great organisational experience.

At the Memorial Service held for Lady Mountbatten in Westminster Abbey H.M. the Queen was represented by H.R.H. the Duke of Edinburgh, and there besides other members of the Royal Family, were several hundreds, among them members of the United Kingdom Government, Ambassadors, other members of the Diplomatic Corps, and Commonwealth High Commissioners.

In his address the Archbishop of Canterbury emphasised the part Lady Mountbatten had played in a battle of life for so many good causes. She died, he said, on active service, obedient to the call of that service in which for so long she had been so ceaselessly, so courageously, and so unsparingly engaged.

“Leaving us in this manner, she has done to us the last great service of calling us to remember what kind of life and what kind of battle it is in which she and we alike are engaged. She had in abundance”, the Archbishop said, “those gifts which add so much grace and gaiety to life—personal charm and good looks, vitality, the power to captivate, and there was no shallowness of soul in her.”

Speaking of her work for various organisations, the Archbishop of Canterbury added: “She served them and made them living agents of mercy all over the world.”

### LADY MOUNTBATTEN FUND

The memory of Lady Mountbatten of Burma will be perpetuated in a fund, named the Edwina Mountbatten Trust. It is for the world-wide benefit of the three main causes to which she devoted her life: the St. John Ambulance Brigade, the Save the Children Fund, and the nursing profession. The appeal is to all countries and to people in all walks of life.

Similarly, the Canadian headquarters of the St. John Ambulance Brigade in Ottawa is establishing a fund in memory of Lady Mountbatten. It will be used to provide bursary assistance for nurses in Canada.

## PAKISTAN COSTUME PARADE

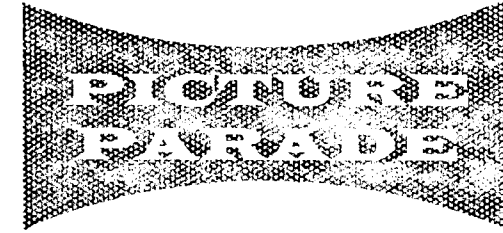
ASIAN and African women's costumes, infinite in their colour and variety, appear all the more fascinating when a collection from a country is displayed on a single occasion, as it was during a “mannequin” parade organised by a girls' school in Lahore, Pakistan.

Miss Kulsom Husein, a High School student, of No. 1 Anand Road, Upper Mall, Lahore, Pakistan, who sent the photograph reproduced here, draws attention to the Pakistan costume which she wore in that “parade”.

“It is a Sindhi dress”, she writes, “consisting of a brightly coloured, flared skirt, adorned with miniature mirrors and beads; there is also a beautifully embroidered bodice and a shawl or veil five or six yards long. “I understand that this costume”, she says, “originated in South India; from whence it found its way northward and into Sind, Pakistan, and other places. Those who wore it were for the most part a type of gypsy, who made a living dancing and selling trinkets. It is usually worn with many accessories—necklaces, earrings, bangles, bracelets, anklets, and even nose rings; though I could not, of course, wear a nose-ring.”

FOOTNOTE:

The Editor would be interested to hear from women in Commonwealth countries overseas who have unusual items of interest, original cookery recipes and other ideas which might be suitable for publication in these pages.



THIS cocktail dress and jacket, with matching hat, is a reversible gold and silver lamé, with stretch Nylon in the warp to give elasticity. The fabric is one of the most luxurious of man-made fibres; metallic yarns give the lamé effect.



AN evening dress in fancy-knit jersey, bound with an obe (sash) of black moiré. It is an acetate filament rayon yarn with a small amount of Nylon to give extra strength, and made on the warp loom, in the lace idiom.



H.R.H. PRINCESS Alexandra at a Royal Commonwealth Society reception in London, with guests from Tanganyika and Australia.



MARRIED in London: Ajit Hutheesing, nephew of Mr. Nehru, the Prime Minister of India, to Amrita Nigam. Right: Mrs. Lakshmi Pandit, Indian High Commissioner.

# PROGRESS IN CONCRETE

## Canadian Architects and Engineers Study Britain's New Techniques

**S**EVENTY-THREE Canadian consulting engineers and architects have been touring Britain, studying the latest methods in concrete construction.

The visit was arranged by Supercrète Limited, of Canada, in association with Britain's Cement and Concrete Association, which was formed in 1935 to provide a service for users of cement, and to encourage a high standard of concrete construction.

The Association is a non-profit-making organisation financed by the cement manufacturers of the United Kingdom. It carries out research into the chemical and physical nature of concrete, its structural properties, the behaviour of concrete structures, and investigates the materials and methods used in concrete making. It provides a technical advisory service, issues a wide variety of publications and arranges training courses. These services are given free to anyone interested in the use of concrete in any form or any scale—from a garden path to a motorway.

The arrangements of visits by parties of architects, engineers and contractors to sites in Britain where work of interest is being done forms an important activity of the Association.

One of the visiting Canadians, Mr. Ernest J. Smith, an architect from Winnipeg, referred to the "boom" feeling he experienced on his arrival in England—"large and interesting commercial building done in quantity with no apparent fear of spending". He was made aware, he said, of the great advances taking place in Britain in the techniques and methods of prestressed and poured-in-place concrete. He was impressed by the designs of new schools—"multi-storey schools with 30-passenger lifts for student movement".

Among the projects which the Canadians saw in London were a new hotel being built in Chelsea; the city's tallest school, Tulse Hill School, Lambeth, and one of London County Council's newest housing estates at Roehampton Lane.

Roehampton Estate is planned to include 1,875 dwellings in various forms amid the oak, elm and cedar trees of 100 acres of parkland and orchards. There, concrete is used in the construction of fifteen 12-storey blocks of flats, five 11-storey maisonette blocks, a 10-storey block, including a library, in the main shopping centre, and amenities which include twenty-six shops, two doctors' surgeries, 73 garages and a public house.

## New Bridges

Concrete is constantly invading new fields in Britain. For example, there has been a remarkable increase in the number of prestressed concrete bridges—since 1945 over 400 have been built by order of Britain's Ministry of Transport. Clifton Bridge across the River Trent, in Nottinghamshire, has a single span "without visible means of support", 295 feet in length—thanks to the use of prestressed concrete.

At Crawley, south of London, the Canadians saw the New Town, and the new air terminal building and hangars of the airport at Gatwick. They also travelled to the Midlands city of Coventry, which now possesses a new, and still growing, city centre of imaginative design; and there concrete is also being used to fine effect in the rebuilding of its war-damaged cathedral.



**TWELVE-STORY** flats, which form part of London County Council's big housing scheme at Roehampton, were admired by the seventy-three Canadian

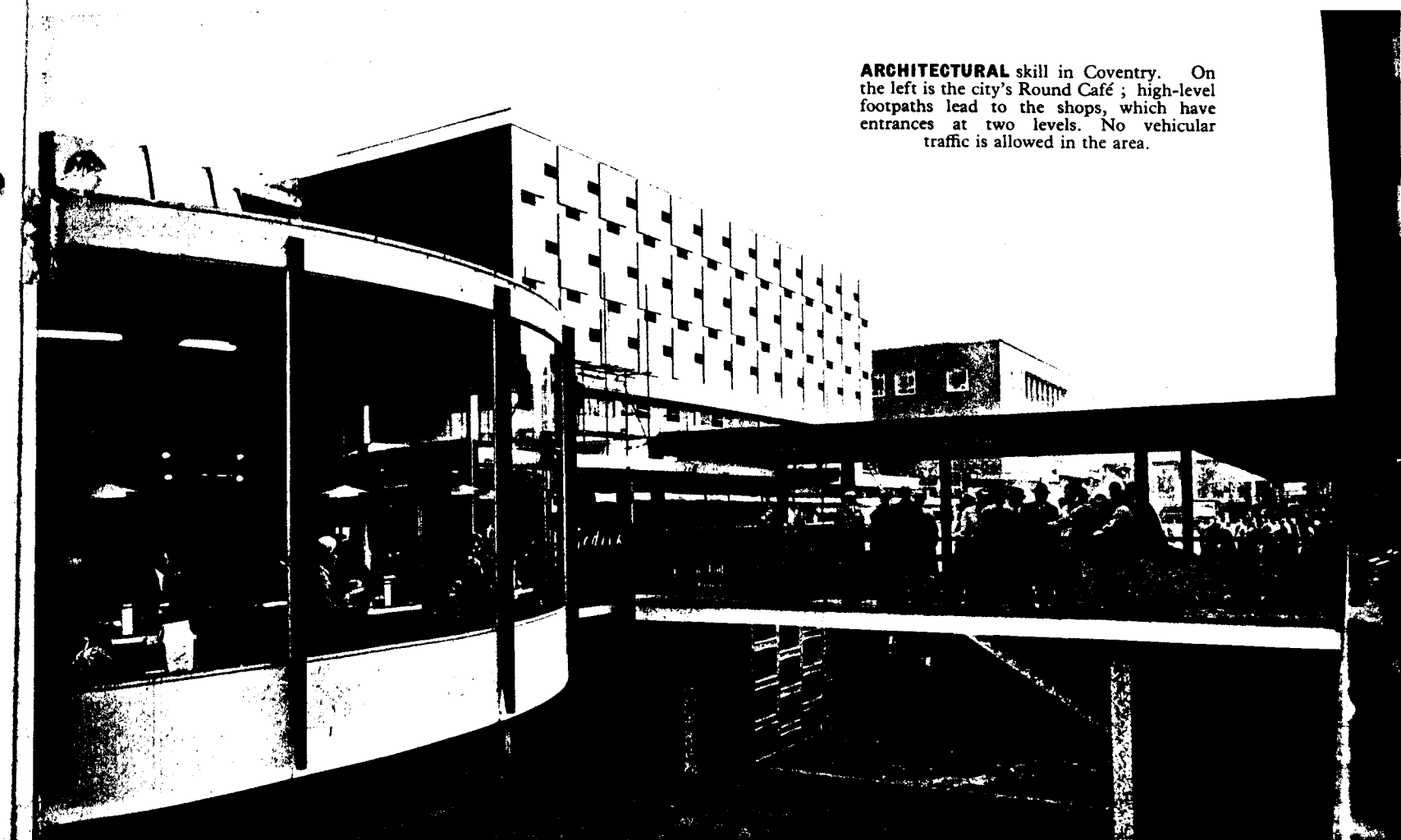
architects and engineers who toured the United Kingdom.



**A NEW SYSTEM** of concrete stressing was explained to the visiting Canadians at the Cement and Concrete Association's structures laboratory at Fulmer, Buckinghamshire. The Association provides a free technical advisory service.

**COVENTRY'S** reborn cathedral takes massive shape. The Canadians expressed surprise at the extensive use that was being made of concrete in Coventry and elsewhere in Britain.

**ARCHITECTURAL** skill in Coventry. On the left is the city's Round Café; high-level footpaths lead to the shops, which have entrances at two levels. No vehicular traffic is allowed in the area.

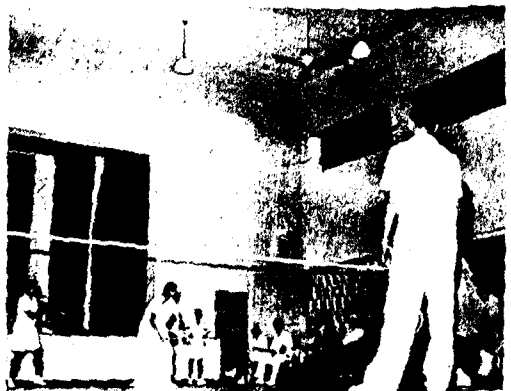




THE WIFE of a British Council representative makes an award to a student who has passed examinations in Swahili literacy, English and arithmetic. Sir George Arnaoutoglu, after whom the centre is named, looks on.



THE CENTRE has its own boxing club, which provides instruction and arranges regular tournaments—often against Naval teams visiting Dar es Salaam.



THE ASIAN community is keen on badminton, and sessions are held in the main hall three times a week. This hall has a stage and cinema projection room.

## Community Centre in Tanganyika

SITUATED at the heart of Tanganyika's capital, Dar es Salaam, the Arnaoutoglu Community Centre is a main focus of social life in the town. It was opened in December 1952 by the then Governor, Sir Edward Twining (now Lord Twining), and since that time has been increasingly used by every section of the community in Dar es Salaam.

Built for £45,000, from the joint contributions of Sir George Arnaoutoglu, O.B.E., the Colonial Development and Welfare fund and the Tanganyika Government, the Centre incorporates a large assembly hall, complete with stage and dressing rooms, dance floor, and cinema projection room. Side doors open from the hall on to a spacious courtyard and beer-garden, and grouped round two other garden courtyards are five classrooms, a domestic science room, a library, lounge, canteen and offices.

The public has full access to these facilities. Men and women flock to adult education classes, club and society meetings, to enjoy relaxation in sports, dancing, reading, and meeting friends. Over 250 people attend nightly classes in simple literacy, arithmetic and English. More than a hundred associations and societies regularly use the Centre, and the number is increasing steadily.

The "Arnaoutoglu" is financially self-supporting except for the salaries of the Manager and Assistant Manager, who are members of the Social Development Department. It is controlled by a Board of Management which is responsible to the Minister of Social and Co-operative Development, and which is advised by a committee representing the public using the Centre.

As a means of promoting social and community advancement in Tanganyika's towns, the Centre has become a model for the growing number of community centres throughout the territory.



ADULT evening classes under volunteer teachers are popular; so are the dances (below) held every Saturday night. The Arnaoutoglu Community Centre has become the main focus of social life in Dar es Salaam, and a model for the growing number of community centres throughout Tanganyika.



## CONSTITUTIONAL ADVANCE IN KENYA



THE U.K. DELEGATION (above) at the Kenya Conference held in London, under the Chairmanship of Mr. Iain Macleod (second left), the Secretary of State for the Colonies. Left: Mr. R. Ngala, Leader of the African Constituency Elected Members, speaking at the Conference.



GROUP CAPTAIN L. R. Briggs (on the right) with two other representatives of the United Party.



ASIAN and Arab delegates (above, l. to r.) are K. Zafrud Deen; Anant Jagaunath Pandya; Sheikh Mahfood S. Mackawi; Shariff M. A. Shatry; and Dr. S. G. Hassan, who led the Group. Below: Mr. Michael Blundell, of the New Kenya Group, at the Conference table with Mr. Amalemba, African Specially Elected Member.



THE purpose of the Kenya Constitutional Conference, which was held in London from 18th January to 21st February, 1960, was to plan the next step in Kenya's constitutional evolution; to see at what pace Kenya can assume greater responsibility for the conduct of her own affairs.

While independence for Kenya was the ultimate objective, the function of the Conference was not to take decisions about the future of Kenya. "That is a responsibility", said the Secretary of State for the Colonies, Mr. Iain Macleod, "which ultimately rests with Her Majesty's Government as a whole; and it is my duty as Secretary of State to make recommendations and give advice to my colleagues about what should be done. But when I give that advice I should be guided in my turn by what has been said at the conference."

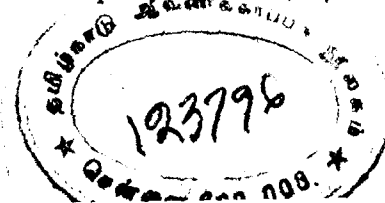
Seventeen plenary sessions were held and there were also many informal meetings between the Secretary of State for the Colonies and various groups at the Conference, and also between the groups themselves.

Among those who attended were the Governor, Sir Patrick Renison, and the Attorney-General of Kenya, Mr. E. N. Griffith-Jones, forty-five Elected Members of the Legislative Council (35 out of the 36 Constituency Elected Members of all races and 10 of the 12 Specially Elected Members), and two

Nominated Members. The Conference members resolved themselves into four main groups: the United Party, led by Group Captain L. R. Briggs; the New Kenya Group, led by Mr. M. Blundell; the Asian and Arab Group, led by Dr. S. G. Hassan; and the African Constituency Elected Members, led by Mr. R. Ngala.

At the closing session Mr. Iain Macleod gave the views of Her Majesty's Government on the subject of the fundamental rights of individuals in Kenya in relation to the proposed constitutional changes.

"I do not ask the various groups specifically to accept or to approve what I have said. Indeed, as with the proposals on the executive and legislature which I put before the Conference, I have been told by the groups, and well understand, that they have serious reservations, or would have preferred points to be expressed differently. All groups, except the United Party, have none the less told me that having taken note of what I have said they accept that the proposals on the executive and the legislature should be implemented as the next stage in Kenya's constitutional advance. Accordingly", Mr. Macleod added, "I am glad to be able to announce that my colleagues have endorsed these proposals and what I have said today as the policy of Her Majesty's Government."



# AFRICAN FARMER'S ENTERPRISE



ON HIS twenty-acre farm in the Nyabondo Plateau of Central Nyanza, Wilfred Achila inspects a calf. With him is Nehemiah, his 14-year-old son.

## Wilfred Achila Profits by Expert Advice from Kenya's Agricultural Department

A GROWING number of progressive African farmers are making a valuable contribution to the development of agriculture in Kenya.

Typical of the new "scientific" farmers is Mr. Wilfred Achila, whose smallholding in the Nyabondo Plateau of Central Nyanza is one of the best in the entire Province. When Kenya's Minister for Agriculture and Animal

Husbandry, Mr. Bruce McKenzie, toured the area, he praised highly both the farm and Mr. Achila's methods of running it.

Wilfred Achila started farming on modern lines about seven years ago. His holding, which covers twenty acres, is set in a high rainfall area in one of the most beautiful parts of Central Nyanza. The farm has been laid out by the Agricultural Department and

is now fully fenced and divided into arable and pasture sections.

A good selection of milking cows and ploughing oxen is maintained in the grazing section, which is run on a rotational basis, while the arable part of the farm carries a variety of crops, including pineapples, English and sweet potatoes, bananas, vegetables, Madagascar butter beans, onions, sorghum,

and a fine crop of maize; in addition a good supply of manure is produced for the holding.

Although last year's rain in Nyanza was scarce and unreliable, the gross return from the farm was in the region of £300—about £100 from vegetables, and £200 from maize, bananas, beans and potatoes. This income will probably be doubled when a coffee crop comes into full bearing next year.

In comparison, an ordinary African peasant farmer in Kenya, practising traditional methods of shifting cultivation, usually has an income of between £8 and £12 a year. The Kenya Government's aim is to encourage more intensive cultivation and to raise the average income of each African family to at least £100 annually, and so reach a position in which everyone can maintain an adequate standard of living.

### Man of Influence

Wilfred Achila is a man of considerable influence in the Nyabondo area. A member of the Central Nyanza African District Council, and of the Nyakach Location Council, he has played a leading part, during the past two years, in persuading the people to accept land consolidation and enclosure. This has earned him the respect of many responsible African farmers in Central Nyanza.

Today land consolidation and enclosure is virtually completed in Mr. Achila's area, and several people are ready to have their holdings registered. A coffee growers' co-operative has been formed, and voluntary groups turn out on selected days each week to take part in self-help projects.

The progress now apparent in the district is due very largely to the courage and example of farmers like Wilfred Achila, who, together with Government officers, have broken through barriers of suspicion and opposition, and have established model holdings as an example to others.



GRAPEFRUIT is one of Achila's many crops. Others include pineapples, potatoes, bananas, Madagascar butter beans, onions, sorghum and a fine crop of maize.



ACHILA and his family remove the grains from maize cobs. The present gross annual return from the farm—about £300—may be doubled when a coffee crop bears fruit next year.



INSPECTING coffee berries (above); and (below) Mr. Achila talks farming matters with a friend and neighbour, Benjamin Oendo. Wilfred Achila has set an example in his district by the use of modern farming methods. Kenya's Minister for Agriculture and Animal Husbandry, Mr. Bruce McKenzie, has praised the farm and the methods used to improve it.





**EVERY YEAR** members of the Wapping Group of painters exhibit their paintings of Thames river life, created in the previous 12 months. In this exhibition, at the Royal Exchange, 129 pictures were seen by over 10,000 people.



**PAINTERS** gathered in a dockside pub discuss the merits of a painting started and finished the same evening.

# THE WAPPING GROUP

The River Life of London is Their Favourite Subject

**L**ONDON'S port, the largest in the Commonwealth, has 4,000 acres of dock estates and thirty-six miles of deep-water quays. And on those docks and quays, when the sun shines brightly, but especially when fog or mist settles thinly, there are all kinds of forms and shapes, hues and gradations of tones to catch and hold an artist's fancy.

When the business of docking ceases on a summer evening or on Sundays and holidays, large parts of Dockland present a very tranquil scene. It then becomes the happy hunting ground for many professional and spare-time painters.

One of these groups is often seen going into Millwall Docks. Carrying easels, stools and paint boxes, they pick their way between railway trucks and crates, move around cranes and bollards, and over mooring ropes and, having found a place of vantage, settle down contentedly to hours of "sketching",

recording with honesty something of their impressions of the peace and pattern of London's docks and river.

They are members of the self-styled Wapping Group of Artists. There are some professional artists in the group but, for the most part, it consists of schoolmasters, civil servants, businessmen—persons from almost all walks of life who are united by a love of painting and sketching along the Thames.

The Group was born in 1938 during a Sunday afternoon's sketching trip down the river from Tower Pier. Jack Merriott, the President of the Group; James C. Middleton, the treasurer; and William A. Watkins, another artist still painting with the Group, were among the founder members. An average of 15 to 20 members attend the sketching sessions, which are held every Wednesday evening, from May to the end of July, at various places along stretches of the tidal Thames river.

From Rotherhithe to Richmond, from grimy wharf to green lawn edging the river, you may see the "Wappers Wopping" their own phrase for their painting excursions. Then, during the autumn, the Group shows the results of its labour-of-love in an exhibition in the Royal Exchange, where more than 10,000 people each year see over 100 paintings—a year's panorama of the Thames, called "The Spirit of London River".

The "Wappers'" activities, extending as they do from the Nore to Teddington, have produced a unique record of Thames life in its many moods—much of it unrealised even by the mariners who sail the waterway. Great painters—Canaletto, from Richmond House, and Constable deserting his rural scenes—have turned to the Thames for their subjects. The River has always attracted painters, but perhaps none so devotedly as the Wapping Group of Artists.



**THE DOCKS** are still; the working day is over and now the painters move in. Above: Mr. J. Sturgeon (left) and Mr. E. Thorp, a professional artist, consider a technical point.



**MAKING** a water-colour sketch near the entrance to London's Millwall Docks. This photograph is of the late Mr. Leslie Ford, who was a founder member of the Wapping Group and its Honorary Secretary for eleven years.

**A RETIRED** schoolmaster finds a cosy retreat between the buffers of a railway truck. The Wapping painters are men from many walks of life united by a love of their art and London's river. They meet every Wednesday evening from May to July.



# READERS' PICTURES

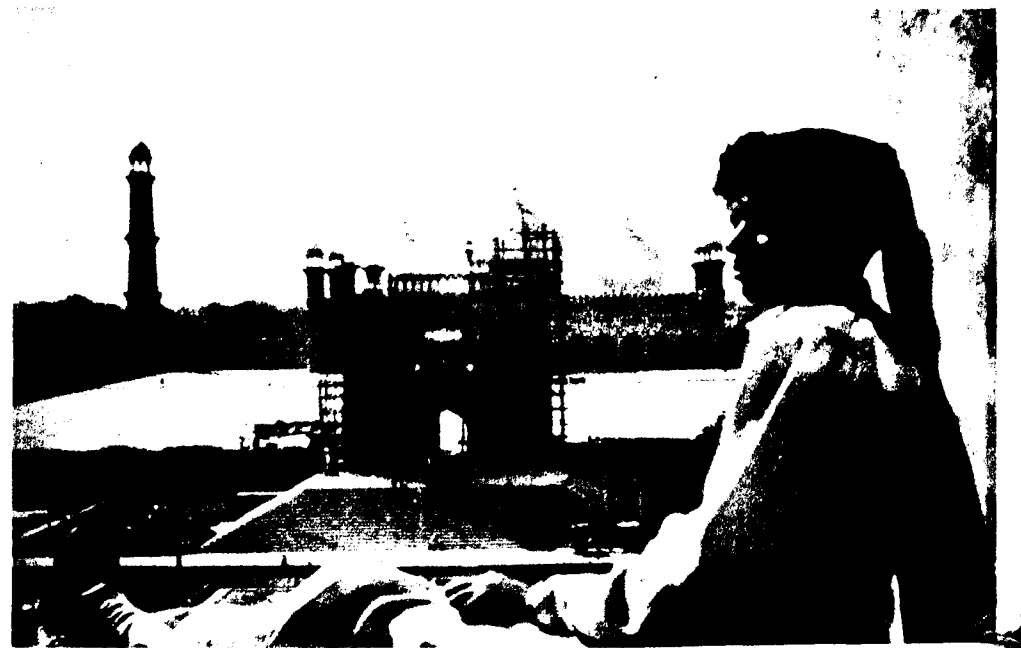
This is a further selection of pictures from our readers. They are invited to send in photographs which they have taken themselves. A fee of a guinea will be paid to the owner for each published picture. Please write captions and addresses in ENGLISH on the backs of the prints. Photographs will not normally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



"RICKSHA BOY." This magnificent headdress is a part of the colourful costume worn by a ricksha boy in South Africa.  
From H. A. Harcourt, P.O. Box 44, Richmond, Natal.



"INTRICATE GATE." These travellers in New Zealand are passing through a village gate resplendent with intricate carvings that are typical of the art of the Maori people.  
From Nguyen-Van-Co, 52 Hobson Street, Wellington, New Zealand.



"OVERLOOKING THE MOSQUE." Sitting on a battlement of the Fort in Lahore, this Pakistan boy has a fine view of the main gateway, courtyard and minarets of the Badshahi Mosque—which was featured in "Commonwealth Today" No. 69.  
From A. Rashid, Idgah Street, 2, House No. P89, Gojra District, Lyallpur, West Pakistan.



"TRIBUTE TO THE BRIDEGROOM" at a wedding celebration in India. This gorgeously attired bridegroom on horseback receives a traditional blessing from his mother-in-law, a mark of goodwill and devotion.  
From M. C. Sharma, Brahumpuri Macca, Jodhpur, Rajasthan, India.



"HUNTER AND TROPHY." From E. A. Omozusi, Posts and Telegraphs, Kwale-Sapele, Nigeria.



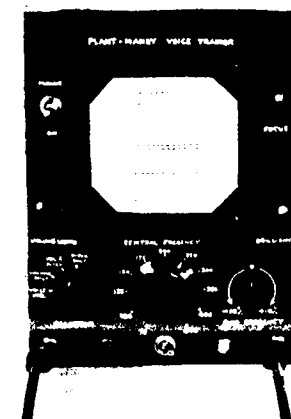
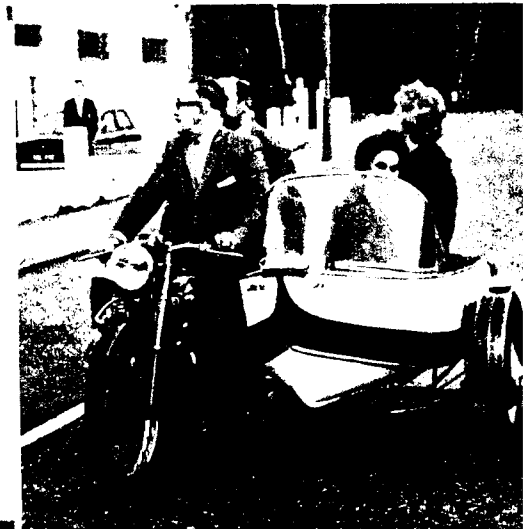
"AT THE EXHIBITION." Mr. V. H. Ntem, of Ghana's Department of Social Welfare and Community Development, at Ghana's Second Five-Year Development Plan Exhibition.  
From V. H. Ntem, Dept. of Social Welfare and Community Development, P.O. Box 778, Accra.

# NEW IDEAS



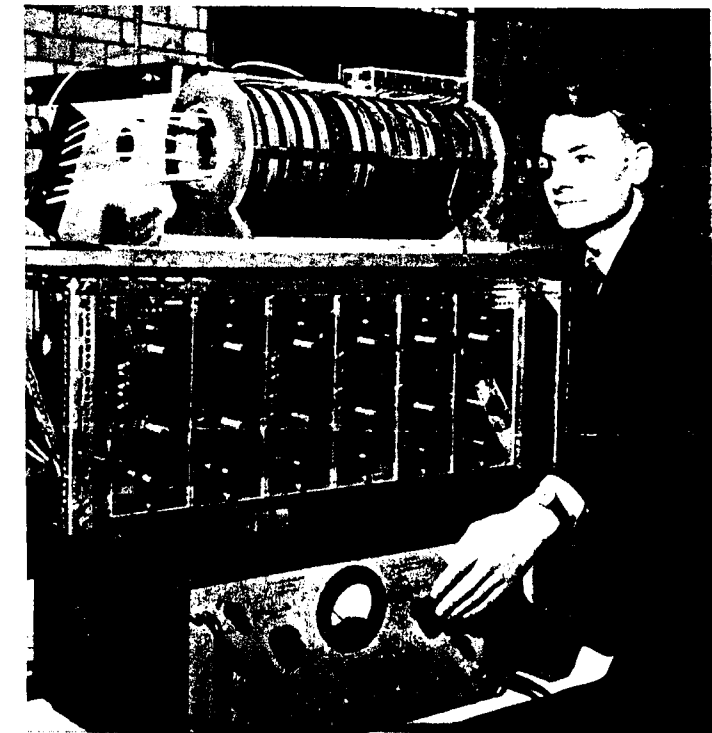
## The First Amphibious Sidecar

A British firm has produced the first motor-cycle sidecar which is equally at home on rivers and lakes as on the open road. It weighs less than 1½ hundredweight and has a speed in the water of up to eleven knots. Its 80 c.c. two-stroke engine is controlled by a simple hand throttle, and the boat is steered by a centrally mounted lever—to go right the lever is pushed forward; left when the lever is pulled back. The sidecar can be detached from the motor-cycle chassis and "launched" within seconds.



## Electronic "teacher" to help Deaf Children

A Lloyd's underwriter, Mr. George Plant, working in his spare time in his London home, has developed this electronic machine to measure vocal pitch, volume and resonance, and picture them on a cathode ray tube. With the help of this device, which transmits the vibrations from a person's vocal chords, a deaf child can see his own, and his teacher's, voice "reflected" on the screen, and learn to imitate the inflections of normal speech. The Gulbenkian Foundation granted him £4,000 to perfect the device, the patent rights for which he has given to Speech Research for the Deaf Ltd., a non-profit-making London organisation.



## Brighter Images

The Department of Instrument Technology of the Imperial College of Science has discovered and developed this "Intensifier", which makes optical images 50,000 times brighter. If used by astronomers it could take practically instantaneous "snapshots" of planets and stars, thus overcoming the effects of local disturbances in the earth's atmosphere; its uses can also be extended to the fields of medicine and nuclear physics.



## Car Tester

A British manufacturer of quality cars has adapted Telemetry techniques, used in space research, to the testing of family saloons. The black box in the photograph transmits readings from up to 23 different points on the car, during tests. A motor engineer can obtain in minutes data that would otherwise take weeks or months to collect.



## Robot Trolleys

These "Robotug" driverless trolleys, developed in Britain, can be "instructed" to stop at up to 75 different points, for loading and unloading. A guidance control system ensures that they obey instructions to the letter. Several of the trolleys can be operated at the same time on one network without risk of collision. British Railways are using them successfully, and several have been ordered by Canada.



TUNKU ABDUL RAHMAN (centre, white shirt) views a hot pool in the thermal area of Rotorua, in New Zealand's North Island. With him is Rangi, a Maori guide.

## Malayan Prime Minister in New Zealand

A GOODWILL State visit to New Zealand, following a similar visit to Australia, was made by the Prime Minister of the Federation of Malaya, Tunku Abdul Rahman Putra Al-haj. He was accompanied by his wife, Puan Sharifah Rodziah, his son, Captain Tunku Ahmad Nerang, and daughter-in-law, Puan Sharifah Noor Azah, and by Dato Gunn Lay Teik, High Commissioner for the Federation of Malaya in Australia and New Zealand, and the High Commissioner for New Zealand in the Federation of Malaya. Tunku Abdul Rahman had talks with the New Zealand Prime Minister, Mr. Walter Nash, and spent most of his two-week visit getting acquainted with the country and its people. During a car journey in the North Island, from Auckland to Wellington, the Malayan party met many of the Maori people.

**WATCHING** trout being fed at Paradise Valley Springs. Standing next to Puan Sharifah Rodziah (extreme right), the Prime Minister's wife, is Mr. C. M. Bennett, New Zealand High Commissioner in the Federation of Malaya.



**THE PARTY** goes trout fishing on beautiful Lake Rotoaira. Several trout caught by the Tunku's entourage were grilled and eaten by the side of the lake.

# Commonwealth TODAY

Number Seventy-six

## VILLAGE DRUMMER ▶

A village drummer from Abbottabad, in the Hazara District of West Pakistan, a familiar figure particularly on feast days and holidays. He lives in a land of wild scenery, wind-swept hills and sequestered valleys. The people there are sturdy, conservative and hospitable, and their dances have a virile quality, full of variety and individuality.

★ ★ ★

## THE RIGHT TO VOTE

The secret ballot and universal adult suffrage are surprisingly recent developments in Britain. An illustrated article about their determined growth is on pages 8-11.

## AUSTRALIAN WINE INDUSTRY

Australia's flourishing wine industry makes ingenious use of old skills and modern scientific research. See pages 18 and 19.

## LONDON HOUSE

This centre in London offers reasonably priced accommodation, and a "college atmosphere", to post-graduate students from Commonwealth countries (pages 22-24)

## THE WOODEN SHIP BUILDERS OF NOVA SCOTIA

His Canadian Maritime Province has ways bred fearless sailors and expert ship builders. Some idea of the craftsmanship that goes into the making of Nova Scotia's ocean-going wooden ships is told on pages 4 and 5.

## MILITARY COLLEGE IN INDIA

The Rashtriya College, in the Doon valley, educates and prepares India's future Service officers in an atmosphere similar to that of an English Public school. Pages 12 and 13.



# Commonwealth TODAY

Presenting the Commonwealth to the Commonwealth

NUMBER SEVENTY-SIX

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## Commonwealth Industrial Notes

The East African Civil Aviation Authority has chosen the British Pye Instrument Landing System for installation at Nairobi airfield, which is on the new main jet aircraft route through Africa. The system is designed to bring airliners safely to touch-down under all weather conditions.

A plant equipped to assemble commercial vehicles ranging in weight from 15 cwt. up to 10 tons has been opened in Salisbury, capital of the Federation of Rhodesia and Nyasaland, by the British Rootes Group of motor manufacturers and exporters. A technical training school is included.

The British Motor Corporation (B.M.C.) is now producing about 15,500 vehicles a week—12,500 cars and 3,000 commercial vehicles.

Output of British farm machinery in 1960 will probably be 15 to 20 per cent higher than in 1959. Exports may exceed the 1959 total of £105 million.

A record amount of uranium ore—nearly 12,400 tons, worth \$262.9 million—was produced in Ontario, Canada, in 1959.

Decimal coinage was introduced in Pakistan on 1st January, 1960. Pakistan is also to have a metric system of weights and measures.

Production of plastics in the U.K. reached 500,000 tons in 1959—a 20 per cent increase over the previous year.

Ghana's Minister of Transport and Communications, Mr. Krobo Edusei, has announced an expansion programme for Ghana Airways which will include the purchase, or long-term charter, of two Britannia airliners.

The generating plant for Canada's first full-scale nuclear power station is to be provided by Associated Electrical Industries of London. The contract, which is worth £2 million, brings the number of steam-turbine generators ordered from A.E.I. by Canadian undertakings to twenty-two.

A London firm, the Woodall-Duckham Con-

struction Co., is to build, for the Sierra L. Development Co., an ore-preparation plant can handle 110 tons of crude iron ore an hour. It will cost more than £300,000.

In 1959 the U.K. imported more oil than before—about 13½ thousand million gallons compared with 11½ thousand million gallons in 1958. More than three-quarters of it was crude oil refining in Britain; and 2½ thousand million gallons of refined oil products were exported.

The construction of a polyethylene plant worth £3.25 million, at Altona, Victoria, Australia, has been entrusted to the U.K. firm of Ge Wimpey & Co.

Work has started in New Zealand on construction of a new railway line to connect Nelson with the South Island main trunk system. The cost will be about £10 million.

The Dunlop Company is to build a tyre plant at Petaling Jaya, in Malaya. Initially it will produce about 400,000 tyres a year, many of which will be exported.

The thousandth railway coach made in Madras, India, by the Integral Coach Factory, came off the assembly lines in January 1960. India obtains much of her rail equipment from abroad but is self-sufficient in steam locomotives, wagons and passenger coaches.

A new copper rod rolling mill in Lancashire, England, is fully automatic; production is 100,000 tons a year, and it is operated by 17 men.

A safety glass plant costing £300,000 is to be built by a British firm of glass specialists Pilkington Brothers Ltd., in Umtali, Southern Rhodesia, to meet the demand from a rapidly expanding motor trade.

An electronic "tape measure" has been introduced by Standard Telephones and Cables Ltd., of England. It is said to be accurate within one inch in 40,000 miles. The new unit is claimed to be both inexpensive and mobile.

## COMMONWEALTH STAMP CORNER

### THE FALKLAND ISLANDS



THE Falkland Islands, off the coast of South America, have stamps that are very popular among collectors of British Commonwealth stamps. Many beautiful pictorial stamps have been issued in the Falklands, especially during the last twenty-five years.

Portraits of Queen Victoria and King Edward VII provided the designs of early issues, and in 1933, to celebrate the centenary of the final British occupation of the Islands, a pictorial series was issued.

At the same time a memorial arch of whales' jaw-bones was erected in Port Stanley, the capital of the colony. This arch is depicted on one of the King George VI pictorials issued in 1938.

Other stamps have portrayed some of the wildlife of the Falklands, including sea lions, upland geese, black-necked swans and, on the current one-shilling stamp, the penguins.

South and east of the Falklands lie four groups of islands, South Georgia, the South Sandwich, the South Shetlands, and Graham Land, the latter forming part of the Antarctic continent. These British possessions, known as

the Falkland Islands Dependencies, have since 1944 had their own stamps.

The Queen Elizabeth II series comprises fifteen stamps, each depicting a different ship which has been concerned in the exploration of the Antarctic or in the maintenance of communications between the Falkland Islands and their Dependencies. On the halfpenny stamp is a picture of the Royal Research Ship *John Biscoe*. Named after a famous sealing-captain who charted the west coast of Graham Land in 1832, this vessel served in the second world war as H.M.S. *Pretext* and was afterwards transferred to survey work in the Antarctic.

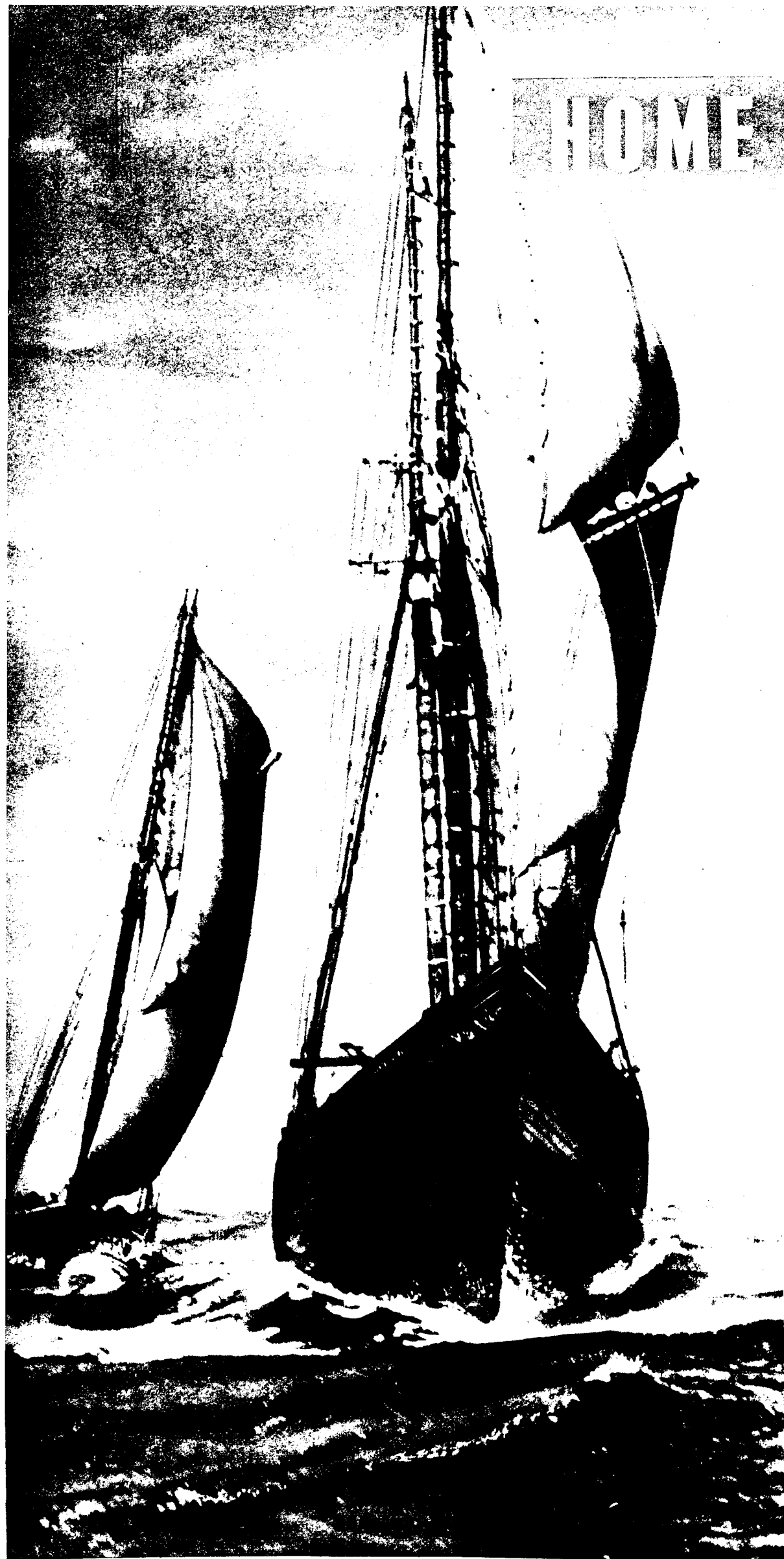
When the American explorer, Lincoln Ellsworth, made his southern voyages in the thirties, he used a Norwegian vessel which he rechristened *Wyatt Earp*, after the notorious Texan frontier marshal. The *Wyatt Earp* is depicted on the 1½d. stamp, and other ships shown on the stamps of the Dependencies include the *Discovery* and the *Endurance*, in which Captain Scott and Sir Ernest Shackleton, respectively, made their historic voyages to the Antarctic.

C. W. HILL.



## BABY PRINCE ANDREW

One of the first portraits of baby Prince Andrew with his mother, Her Majesty Queen Elizabeth II. The portrait is by Mr. Cecil Beaton, the well-known photographer and designer. The Queen and Prince Philip chose the names Andrew Albert Christian Edward for their third child, who was born at Buckingham Palace on 19th February, 1960. The first two names are those of his grandfathers—Prince Andrew of Greece and King George VI of England. The third and fourth names are of his great-great-grandfather King Christian IX of Denmark and of his great-great-grandfather King Edward VII.



**DEEP-SEA** fishing schooners (above), made and sailed by Nova Scotians, help to keep alive old wind-ship traditions. A variety of schooners, yachts and cabin cruisers are built in Nova Scotia's shipyards.

## HOME OF THE BLUENOSE

**T**HE art of building wooden ships is still very much alive in Nova Scotia, one of Canada's maritime provinces. The crafts and skills which fashioned the incomparable "Bluenose" cargo ships of the nineteenth century are steadfastly preserved in an age of steel. On the coast of Nova Scotia, 74 shipyards are producing a variety of trim wooden craft, ranging from fishing schooners to custom-built yachts and luxury cabin cruisers.

It was in the second half of the last century that shipbuilding on Canada's Atlantic seaboard reached its zenith. As long ago as the 1830s Quebec was building large square-rigged vessels of more than a thousand tons for the British market; and by the 1850s shipbuilding became an absorbing industry not only in Quebec but also in New Brunswick, Prince Edward Island, and Nova Scotia.

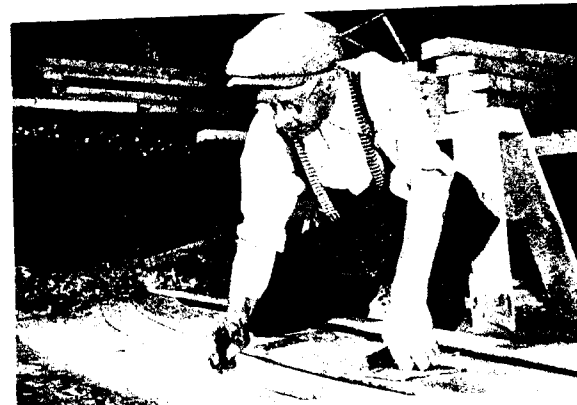
Those exciting times are vividly described in a book, "The Salt-Water Men, Canada's Deep-Sea Sailors", by Joseph Schull, published in the "Great Stories of Canada" series by Macmillan. "It seemed", Schull writes, "that every man along those shores ringed round by the Bay of Fundy, Northumberland Strait and the Gulf of Saint Lawrence, knew how to build an ocean-going vessel. Fishermen and traders, lumbermen and farmers and storekeepers, heard the talk of droghers building, and of the good sale for them in England. They had built schooners enough and small craft for themselves—why not a larger ship? They discussed it cautiously with friends and neighbours, divided the cost into sixty-four shares as they had always done with their schooners, and when the shares were sold the launch went down."

### Nova Scotian Woods

Nova Scotians did not take long to lead the way as shipbuilders and, later, as ship-owners. The ships they built, in contrast to the hardwood ships of Britain and the U.S.A., were of soft wood—tamarac, spruce and pine which grew almost at the water's edge in the coves of Nova Scotia. Again, to quote Joseph Schull, "Timber came in from the near woods by oxen and mule-team. The sawmill by the creek began to scream. Sheds went up near the launch for the carpenters and blacksmiths. A knowledgeable foreman and a few handy lads from the neighbourhood began to potter about a slowly rising hull. . . ."

The result of their efforts, as often as not, was a "Bluenose" ship (Bluenose being a nickname for the people of Nova Scotia)—a sturdy, hard-driven sailing vessel to be sailed to Liverpool, in England, and sold to British shipping firms, or worked by the Nova Scotians themselves on the trade routes of the world.

The fame of the Bluenose ships was at its greatest at the very time when iron and steam were beginning to make their challenge. For many years the wooden vessels from



**SHIPWRIGHT** Alton L. McKay (above) marks out the forward end of the pilot house for a wooden ship being built at Shelburne, Nova Scotia. Below: Another Nova Scotian, George Acker, cuts bolts for use as fastenings.

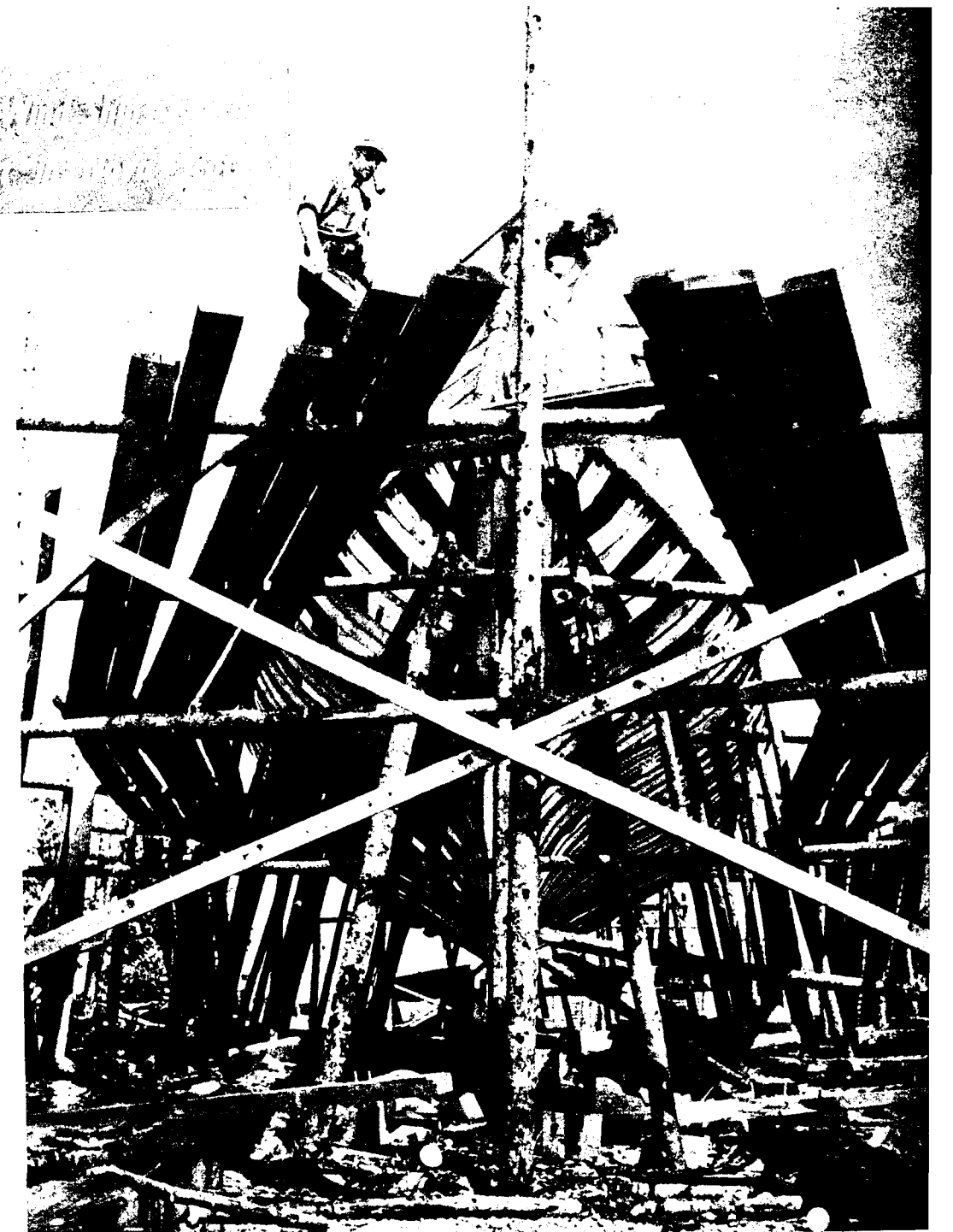


Nova Scotia held their own; Bluenose crews won a reputation for hard work and smart seamanship, while the ships they sailed, beginning with the famous *Marco Polo*, were eminently seaworthy vessels, capable of speeds for brief spells of up to 15 knots.

Joseph Schull says in his book: "By the early 1870s the carrying-trade had become a large and important part of Canadian life. The ships that went to England with timber were coming back with iron and coal. They were returning to Europe with cotton from Mobile, Charleston and Galveston. They were moving outward again with coal, bound round the Horn for South America and the coaling-stations of the Pacific. Cargoes of guano brought them back round the Horn to Europe. Guano, the petrified droppings of sea-birds, deposited through centuries on lonely headlands and islands along the South American coast, was in tremendous demand in Europe as a fertiliser, and the guano carrying-trade was an industry itself."

However, "The Salt-Water Men" is not a mere chronicle of industry and trade. Many a thrilling story is told of the adventures of Canadian seamen—ancestors of today's sailors and craftsmen who still build fine wooden ships, and sail them on the high seas of the world.

**TWO EXPERTS**, Hugh McKay (left) and Bill Jackson, check blueprints. In the old days these sturdy ships were always built by rule of thumb.



**A SHIP** takes shape. . . . Abundant timber, mostly of soft woods, helped, in the 19th century, to turn Canada into the fourth greatest shipbuilding and ship-owning nation in the world.



## KEEN AMATEUR WORKERS AT THE LIVINGSTONE SCHOOL OF ARCHAEOLOGY

**D**ELVING into the past history of many parts of Africa can be a rewarding occupation; for few, if any, records are in existence. Groups of keen amateurs are being encouraged to dig through centuries of soil in a search for fresh evidence of Africa's past.

Suitable basic training for the amateur worker in this field is provided by the Rhodes-Livingstone Museum, in Livingstone, Northern Rhodesia. The work began three years ago at an annual School of Archaeology, the only one of its kind in Africa. These schools have taken students from all over southern Africa, from all sections of the population, and their success can be seen in the growing number of really keen and proficient amateur prehistorians who are doing valuable work in their several regions of the continent.

About twenty students attend each of the



**ARCHAEOLOGISTS** measure and draw one of the sections of a "dig". They are working in the field as part of a two-week course provided by the Rhodes-Livingstone Museum in Northern Rhodesia.

courses which last a fortnight. They come from as far afield as Angola, the Cape, Natal and the Federation of Rhodesia and Nyasaland.

The courses are conducted on informal lines. Lectures on the background of the various pre- and proto-historic cultures of the continent are combined with practical instruction in field methods, archaeological surveying, the handling and classification of material, and its interpretation, reconstruction drawing, and presentation for publication.

Students carry out excavations on sites in the Zambezi Valley, near Livingstone, and are being taught how to record and present their results. Emphasis is laid on careful excavation and recording, and on the general practical problems which the amateur has to face.

Lectures and instruction by the Museum staff, under Dr. J. Desmond Clark and Mr. Brian Fagan, Keeper of Prehistory, are supplemented by the teaching of visiting lecturers who often travel hundreds of miles to help at the school.



**PROBING** (above) to measure the depth and nature of deposits near the main excavations. The instrument in use—called an earth auger—can reach a depth of 25 feet. *Right*: Members of a working party use a surveyor's level to locate the position of an excavation.



**A TWO-STORY** house on Bodija estate near Ibadan, the capital city of Western Nigeria. It has 2,000 square feet of floor space and sells for £3,500.

## Attractions of Suburbia

### NIGERIA'S NEW HOUSING SCHEMES

**A**n expanding population and rising living standards are causing thousands of Nigerians to move out from the cities into spacious suburban estates.

Lagos, the Federal capital of Nigeria, bounded by the Western Region and the Atlantic Ocean, is becoming very overcrowded; so, too, is Ibadan, the capital of Western Nigeria, which now has a population of about a million.

The Western Region Government has created a Housing Corporation, which is building at Ikeja, thirteen miles outside Lagos, a 500-acre housing project to accommodate some of the "overspill" population from the Federal capital. It has also launched the Bodija development, of 400 acres, to provide an out-of-town suburb for the city workers of Ibadan.

Under the Chairmanship of Chief F. O. Owosika, the Housing Corporation not only builds houses, but advances the purchase price—20 per cent down, and the balance over fifteen years, with an interest of seven per cent. Loans are available, up to a sum of

£4,000, for citizens of Western Nigeria who wish to build their own homes. About £400,000 has been advanced to home owners by the Western Region Housing Corporation.

Three varieties of housing are available in the new suburbs, which include shopping centres, cinemas, supermarkets, well-kept parks and churches of striking contemporary design. The houses were planned specifically for Nigeria by a team of United Nations architects, and are built of local stone and concrete, and painted in soft blues, pinks and yellows.

The smallest house, which sells for £1,000, has an area of 700 square feet; it has a living room, kitchen, two bedrooms, bathroom, veranda and bicycle storeroom. The next biggest (£1,580) is 1,100 square feet in area, with an extra bedroom, a garage and servants' quarters. The largest house, costing £3,500 (2,000 square feet) includes a living room, dining room and study.

The Housing Corporation has drawn up a schedule of minimum monthly salaries to determine the eligibility of buyers. Applicants

must have an income of at least £29 a month to buy the £1,000 house; £46 8s. for the £1,580 house; and £101 10s. a month for the two-storey, £3,500 dwelling.

The Ikeja and Bodija projects are admitted to be "frankly experimental". Ikeja is a "live close to your work" suburb, and Bodija is an experiment in Government-sponsored housing to relieve the cramped quarters of a badly overcrowded city.

Both developments, which are the efforts of a socially aware, progressive Government, are lending new impetus to Nigeria's exodus from the cities to the suburbs.



**THE SMALLEST** type of house on the estate—700 sq. ft., for £1,000. This includes the cost of the plot, sewerage, water and road development.

**CONSTRUCTION** scene at Bodija, which covers 400 acres, just before the roads were surfaced. Ultimately Bodija will contain 1,200 homes as well as a shopping centre, churches, schools, parks and a cinema.



**REAR VIEW** of a £1,580 house, which includes a garage and separate servants' quarters. Thousands of Nigerians now live in such out of town houses.

# THE RIGHT TO VOTE

**A TREASURED DEMOCRATIC INSTITUTION  
WHICH HAD ITS BEGINNINGS 700 YEARS AGO**

**T**ODAY in Britain the right to vote is taken for granted; but 700 years of history lie behind its achievement.

On 8th October, 1959, about 28,000,000 of the voters registered in the United Kingdom made their way to polling booths in cities, towns and villages, to elect 630 members of a new House of Commons. They exercised what has come to be regarded as a basic right—the right to vote. To many of Britain's voters on the registers in 1959—and to many people elsewhere in the Commonwealth—it would come as a surprise to learn that universal adult suffrage was introduced in Great Britain in 1928, no more than thirty-two years ago.

Over the centuries Britain evolved a system of parliamentary government which has been widely adopted, in principle and practice, throughout the Commonwealth. Thus a way was found of reconciling three things which, in other nations and in other systems, have sometimes been found incompatible—executive efficiency, popular control and personal freedom.

It took long years of political experience, economic development and social change before the country became united under a constitutional monarch and with a government elected by the people. After a long and often bitter struggle, which included a civil war in the seventeenth century, effective power passed from the Crown to Parliament which, through the extension of the franchise, became more and more representative of the people.

The development of Britain's democratic institutions can be said to date from the signing of Magna Carta in the English meadows of Runnymede, near Windsor, on 15th June, 1215. Magna Carta was the first attempt clearly to define the rights of free men and to circumscribe the powers of the King.

The Charter did not mention rights of Parliament, for it was not until after the accession to the throne of King Edward the First that the first Parliament of Lords and Commons was convened at Westminster in 1295. But the signing of Magna Carta was the first milestone on the road, later signposted by measures such as the Petition of Rights (1628), the Act of Habeas Corpus (1679), and the Bill of Rights (1689). Equality before the law, freedom of speech and assembly, the freedom of the Press, and other free institutions may well have developed without Magna Carta, but they would have had to wait longer for their inspiration.

The right of every adult citizen—with the exception of "Peers of the Realm, criminals and lunatics"—to vote for a representative in Parliament is a com-



**THE PALACE** of Westminster. Members of the House of Commons—between the Clock Tower and the central spire—are elected for a period of five years.

paratively recent development. So is the existence of an electoral system free from abuses.

In the mid-eighteenth century, when electioneering was still open to corruption, the return of over 190 members of the House of Commons depended on the patronage of a handful of influential landowners.

The qualification for the vote varied from seat to seat. For some boroughs the vote was given to "every adult male who has not accepted poor relief, or who has a dwelling of his own and a hearth there at which to cook his food"; for others the vote was restricted to those who had qualified "by nomination, inheritance or marriage, apprenticeship or purchase"; and in some cases the seat was the gift of a corporation, whose members elected their own man to the Commons.

It was possible therefore for a town, such as Ports-

*(Continued overleaf)*

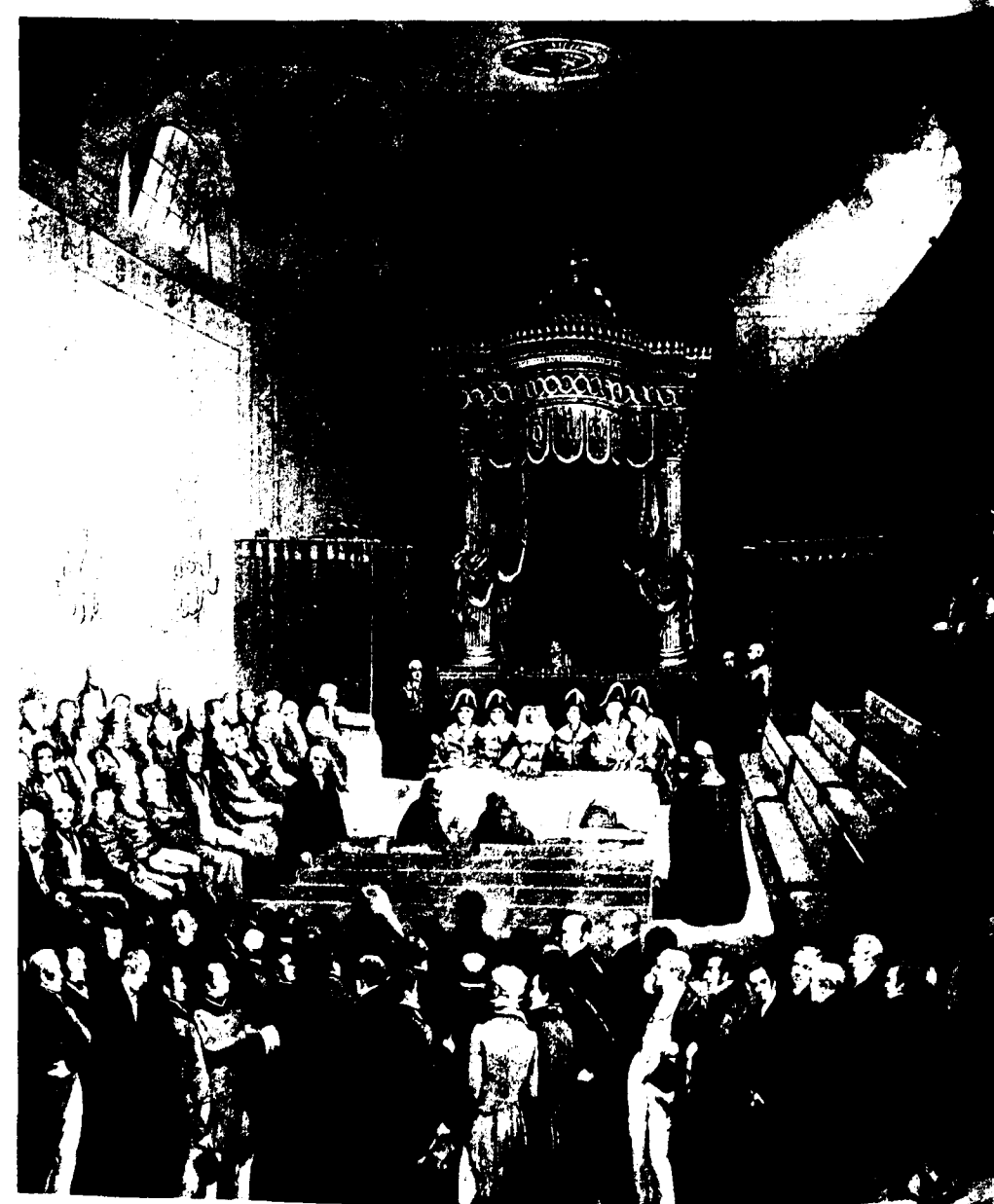


**WOMEN** cast their votes at a polling station in a school hall. They place a cross against the name of the candidate they favour, and then put the folded voting slip into a locked and guarded ballot box.

**THE ANNOUNCEMENT** of the result of the poll in Saffron Walden, Essex. In General Elections similar scenes occur throughout Britain; sometimes results are delayed when candidates demand a recount.

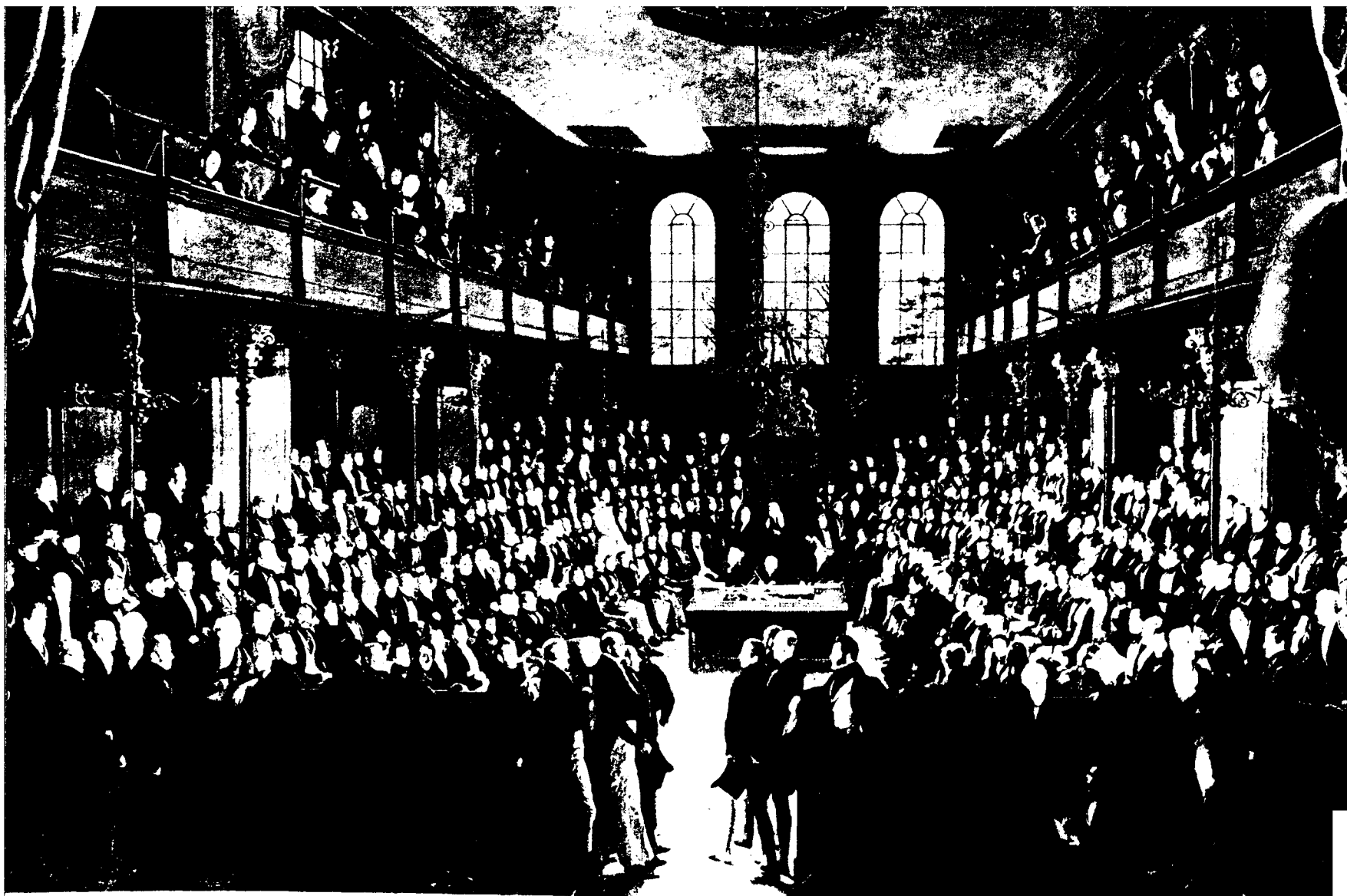


**KING JOHN** signs the historic Magna Carta in the meadows of Runnymede, 15th June, 1215.

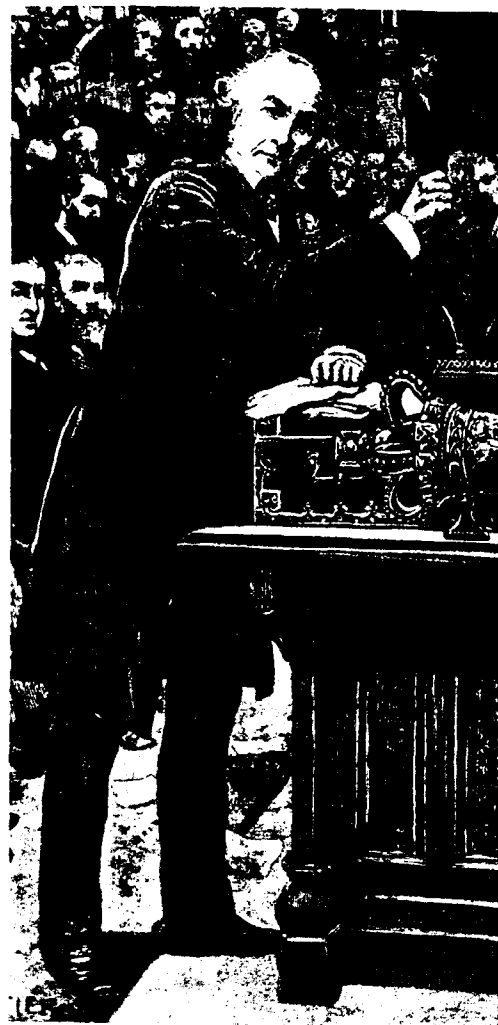


**THE REFORM BILL** of 1832, which greatly extended the franchise, also demonstrated to the world that revolutionary change could be accomplished by peace.





**THE COMMONS**, shortly before the great fire of 1834 which destroyed both Houses in the old Palace of Westminster. The original painting is by Sir George Hayte



**WILLIAM GLADSTONE**, who was four times Prime Minister, speaks in the House of Commons. He proposed or supported several measures of Reform.

## THE RIGHT TO VOTE

*Continued from page 9*

mouth, with 20,000 inhabitants in those days, to have only 80 eligible voters, while Winchester, with a population of 3,400, had 120 voters. A tiny village, long deserted, on Salisbury Plain—Old Sarum—still had the right to be represented by two Members of Parliament.

During the Napoleonic wars, and inspired to some extent by ideals of the French Revolution, the demand for reform grew and was accompanied by an increase in the number of public meetings and reform societies.

In 1793 and again in 1810 the minority in the House of Commons put forward schemes for reform. Between 1818 and 1826 more and more plans for reform were put before Parliament but without success, although the would-be reformers successfully exposed abuses of the existing electoral system.

The climax came in 1832 when the Reform Bill was introduced into Parliament by Lord John Russell. After a protracted battle, which brought the country near to another civil war, the measure was passed.

The Bill disenfranchised 56 "nominated boroughs", including Old Sarum, and deprived 30 more of either one or two members, whose seats were redistributed among the growing industrial towns of the Midlands and the North. The Bill proved that truly revolutionary changes could be carried through by peaceful legislation, without resort to violence as in the old days.

The Reform Bill gave the vote to half million of the new middle classes; nothing now could stem the tide of electoral reform.

In 1867, another Reform Bill introduced a "household franchise" and thereby doubled the number of voters in the boroughs. In 1873 Gladstone's Ballot Act created the secret ballot, thus protecting voters against intimidation and illegal influence. Then in 1884 the Franchise Act extended the household franchise from the boroughs to the counties, and tripled the electorate to 2,500,000.

In 1885 yet another Act redistributed 14 seats and in the process abolished 7 boroughs; in 1918, the vote was granted to "all males adult and resident in, or occupying premises in, the constituency, and women over 30 who occupy, or whose husband occupies, premises or lands to the annual value of £5". In 1928 all adults, that is, men and women over 21 years of age, were given the vote. Britain, for the first time in her long history, had universal suffrage, "one man one vote".

The fairness of modern elections in the United Kingdom contrasts starkly with the corruption which was rife as late as the eighteenth century. Today, while every genuine method of influencing voters is allowed, corruption and intimidation are prevented by law. The list of "corrupt practices" punishable at law includes bribery, treating (buying drinks or food for voters), using "undue influence or threats" in order to obtain votes, impersonation, making a false declaration of

expenses, hiring conveyances for voters, broadcasting from foreign radio stations, and printing imitation polling cards.

Each candidate is allowed to send, post free, one packet not exceeding two ounces in weight to every elector in his constituency. Usually it contains his election address. Other communications either have to be delivered to the voters by party helpers, or paid for from election expenses which are limited by law to £450 a candidate, plus 1½d. for each elector in towns and 2d. for electors in country districts.

The procedure in 1959 was broadly the same as in previous elections. The polling booths, in halls and schools, were open from 7 a.m. to 9 p.m.; the counting of votes in the towns began when the booths closed and continued through the night; in many country districts the votes were stored under guard for counting the following day.

On Town Hall balconies throughout the United Kingdom, on 8th and 9th October, 1959, Returning Officers announced the result of the ballot to waiting crowds; the new Members of Parliament made short speeches, and their defeated opponents publicly accepted their defeat with good grace.

The system of free elections based on the secret ballot—arrived at after 700 years of trial and error—is among the most treasured of the democratic institutions which have grown up in Britain since Magna Carta.



**A FAMOUS CARTOON** of the nineteenth century. The die-hards on the right are trying vainly to bolster a tree, representing the old corrupt system of Rotten Boroughs, against the determined attacks of Reformers. Universal adult suffrage, however, did not come until 1928.

## THE CANDIDATES MEET THE PEOPLE

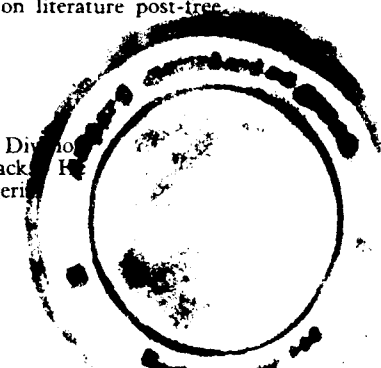


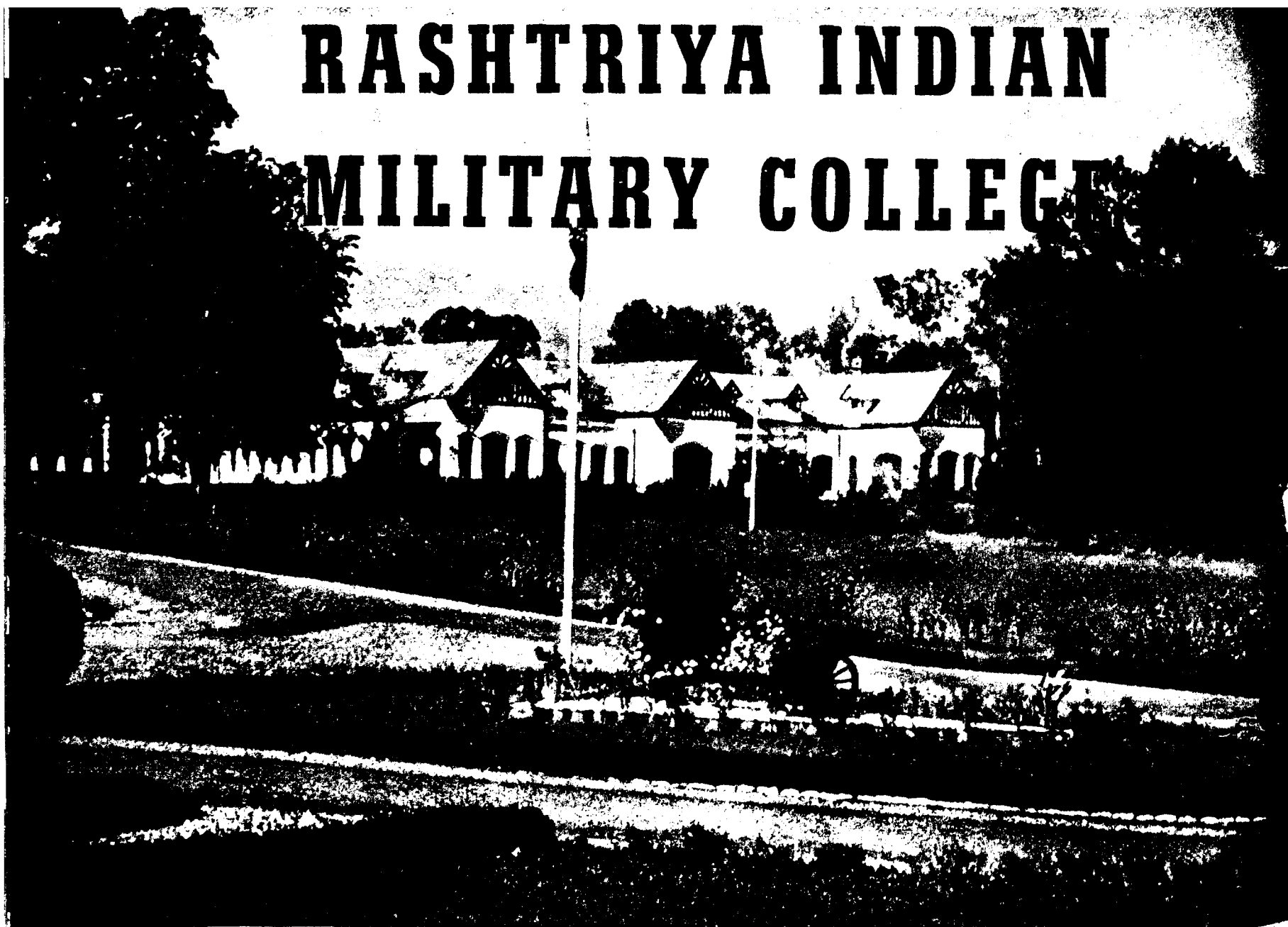
**IN THE 1959 General Election** in the United Kingdom, election meetings were very well attended despite the many "party political broadcasts" on radio and television. Above: A Liberal candidate addresses voters in a community hall.



**BENEATH** a line of washing, a Labour candidate (right) talks with a railwayman's wife. Candidates are allowed to send to their constituents one packet of election literature post-free.

**A CONSERVATIVE** candidate canvasses a Division of the English Lake District on horseback. He was an Administrative Officer in Nigeria.





THE MAIN BUILDING, with the Siwalik Hills beyond. The College was opened in March 1922 by H.R.H. the Prince of Wales (now the Duke of Windsor).

## A Modern Educational Centre for Future Service Officers

By Ved Bidani (wife of the Principal)

**H**IDDEN away in the lush foliage of India's Doon Valley, on the north-western fringes of the city of Dehra Dun, are the cone-topped, elegant buildings and extensive playing fields of the Rashtriya Indian Military College, set against a distant back-drop of the Siwalik Hills. Here, India's future Service officers receive their initial education and training.

Before the founding of the Indian Military Academy, Indians seeking a Commission in the Indian Army and Air Force had to go to one of the Cadet Colleges in England.

Accordingly, the Government of India established this College to provide the preliminary training for entry to the Royal Military Academy, Woolwich, and the Royal Air Force College at Cranwell, and in March 1922 the College was opened by His Royal Highness the Prince of Wales (now the Duke of Windsor).

How far its object has been achieved may be judged from the fact that when India attained her independence many officers of the rank of Brigadier and upwards in the Indian Army were Old Boys of the College.

So far the College has produced one General, three Lieut.-Generals, 16 Major-Generals, 23 Brigadiers and one Air Commodore; posts of importance held by Old Boys include Chief of the Army Staff, Deputy Minister of Railways, the first two Ambassadors to Abyssinia, the first Indian Surveyor General of India, the present Ambassador to the Philippines, the Deputy Chief of the Army Staff, Chief of the General Staff (1), Adjutant General (3), Quartermaster General (3), the present Commander of the U.N.E.F., and the first Indian Commandant of the Staff College, Wellington.

The role of the College since independence has been to feed recruits to the National Defence Academy. There is no waiting list for admission, and boys between the ages of 11 and 12 from all over India are admitted after qualifying in English, Arithmetic, and at an interview, conducted by various State Governments under the instructions of the Indian Government's Ministry of Defence. Admission is governed by merit alone, and parents have to give an undertaking that their sons or wards, selected for admission, will endeavour to make their career in the Army, Navy or Air Force. Scholarships are awarded to deserving cadets.

The educational block at the College in-



THIS SILVER TROPHY, with College crest, was presented in 1955 by the Old Boys' Association.

cludes 12 class rooms, a staff room, fully equipped science laboratories, and a Convocation Hall with a stage. The subjects taught are English, Hindi, Mathematics, Science (Physics and Chemistry), Indian History, Geography, Current Affairs, Drawing, and Manual Training.

In addition to the National Defence Academy examination, which is compulsory, the Cambridge School Certificate Examination is also taken.

Regular parades and drill, and the wearing of a uniform, help the cadets to maintain smartness and discipline. Senior cadets are put in charge of parades to develop qualities of character, leadership and self-reliance, and the best all-round cadet passing out each term is awarded the President's Gold Medal. The Silver Medal, associated with the name of the first Commandant, Lieut.-Colonel H. L. Haughton, goes to the second-best cadet.

Extra-curricula activities are popular, and there are several Clubs. The General K. S. Thimayya Shield—named after the Chief of the Army Staff—is awarded to the Section (House) excelling in these activities.

There are ample sports facilities, including a covered swimming pool, squash courts, gymnasium and tennis courts; and the whole



CRICKET is a popular sport at the College, which has extensive playing fields. Soccer is also played. Sports facilities include a covered swimming pool, squash courts, tennis courts, and a gymnasium.

College does physical training every morning.

The Indian Ministry of Defence has decided to expand the College, in a first phase, from 160 to 200 cadets, and in a second, to 300 cadets. Additional buildings are already being built.

The present Principal, Shri Din Dayal, has had experience of work in various Public Schools, including the College at Winchester, England. He has also sent members of his staff on British Council or Ministry of Education bursaries to refresh their knowledge and gain practical experience of teaching in Public Schools in the United Kingdom. The Master-pupil ratio at the college is 1:13; the tutorial system functions effectively, and individual attention to cadets is possible.

Founder's Day, 13th March, is always celebrated and, on this holiday, it has become the custom to hold an Old Boys' Reunion at the College.

The Old Boys' Association, known as the "Rimcollian", is registered as a club with its headquarters in Delhi. There is a very close link between the Association and the College, and in 1955 the Old Boys presented a magnificent silver trophy, consisting of the College Crest—the Prince of Wales' feathers—suitably mounted, as a token of their feelings towards their "Alma Mater".



CADETS enjoy a game of carom in an anteroom. Subjects taught at the College are English, Hindi, Mathematics, Science, Indian History, Geography, Current Affairs, Drawing, and Manual Training.

## FORMER STUDENTS OF THE COLLEGE



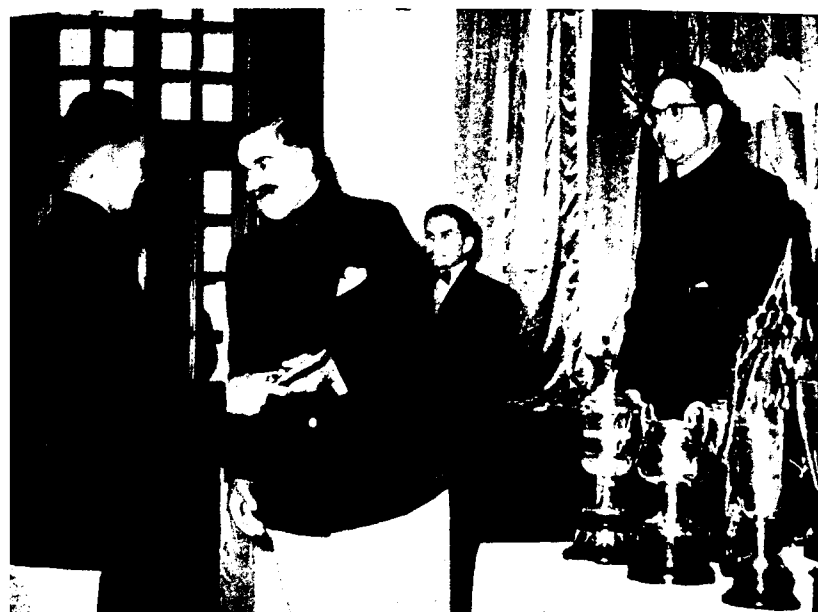
GENERAL K. S. Thimayya, who is Chief of the Indian Army Staff, received his education at the College.



BRIGADIER P. S. Bhagat, another Old Boy, the first Indian officer to win the Victoria Cross in the last war.



LIEUT.-COLONEL H. L. Haughton, of the Sikh Regiment, was the first Commandant of the College.



THE BEST all-round cadet of his term, Cadet Captain A. C. Mahanta of Assam (left), receives the President's Gold Medal from Lieut.-General K. Bahadur Singh, one of the College's many distinguished Old Boys.



**FELICITY** Schwarz (right) and a fellow-Canadian, Jerry Pethwick, both from Ontario, discuss Miss Schwarz's sculpture at the Young Commonwealth Artists' Exhibition. Examples of other works by Commonwealth artists are shown on the back cover of this issue.



**ERIC NEWTON** (left), well-known London art critic, talks with Barry Watson (Jamaica) about the exhibits which attracted hundreds of London's art lovers.

## Commonwealth Artists

### ANOTHER SUCCESSFUL LONDON EXHIBITION OF PAINTINGS AND SCULPTURE

**T**WENTY-EIGHT artists exhibited sixty-four paintings and sculptures at the second Young Commonwealth Artists' Exhibition sponsored in London by the Royal Commonwealth Society.

The exhibition was opened by Mr. C. J. M. Alport, Minister of State for Commonwealth Relations, who said that Britain recognised the contribution that was being made to the artistic and cultural life of the country by visitors from the Commonwealth overseas. "As far as Her Majesty's Government is concerned", he said, "we are only too anxious to encourage this kind of exhibition."

Founder of the Young Commonwealth artists group in London is Mr. Jonathan Kingdon, of Tanganyika, who had five of his paintings on show. After Mr. Kingdon became an A.R.C.A. (Associate of the Royal College of Art), he was appointed tutor in art at the Makerere College, Uganda.

**MR. C. J. M. ALPORT** (right), Minister of State, Commonwealth Relations Office, who opened the Young Commonwealth Artists' Exhibition, talks with the painters, Jonathan Kingdon (Tanganyika) and Miss Wendy Yeo (Hong Kong).



"In London", he said, "there are far more Commonwealth students working at various art schools than there were ten years ago. Our first exhibition in London was held last year, after I realised that the students had no real outlet for their work—no way of reaching a wider public."

This second exhibition contained the work of artists, sculptors and potters from Canada, Australia, New Zealand, South Africa, India, Pakistan, Ghana, the Federation of Rhodesia and Nyasaland, Tanganyika, Jamaica, British Guiana, Singapore and Hong Kong. Among the paintings which attracted special attention were those of Miss Wendy Yeo of Hong Kong—winner of several Slade Summer Prizes and the Arts Council Young Contemporaries' Prize; William Charles Owusu, a 28-year-old potter from Ghana; Neera Sem from India; Bill Culbert from New Zealand; Anwar Jalal Shemza from Pakistan; Frank Bowling from British Guiana, and Sam Ntiro from Tanganyika.

The chief aim of this group of young Commonwealth artists is "to exhibit serious works free from 'isms'—artistic, social or political; and to provide a stimulating centre for people from different geographic homes and cultures".

Some of these young artists in London are paying for their own art instruction. For example, Jerry Pethwick, a sculptor from London, Ontario, Canada, is a third-year student at Chelsea Art School and to finance his studies he works as an all-night watchman in a garage near the school.

Commenting on the first exhibition of the Group's work, David Piper, the art critic of the B.B.C. said that he was fascinated by the reaction of these Commonwealth artists to the many European styles in combat in a big art centre like London. "In their art", he commented, "the only thing they really have in common is a marked influence of European art. They are nearly all still young, and they are still digesting these influences as they slowly reshape them to their own purposes."

## TV in Hong Kong

### Successful Adaptation of 1,000-year-old Chinese Story

**T**ELEVISION viewers of all nationalities in the British Colony of Hong Kong responded with enthusiasm to the appeal of a Chinese classical story, "The Fighting Bride", performed by the Hong Kong Chinese Opera Company.

This 1,000-year-old story was adapted for the television screen by 58-year-old Dr. S. I. Hsuing, a former theatre manager in China. He has lectured on classical drama at Britain's Oxford and Cambridge Universities, and has successfully adapted other Chinese stage classics for non-Chinese audiences. Two previous presentations of his were "Lady Precious Stream" and "The Western Chamber", both of which won world acclaim and have been translated into more than a dozen languages.

Like most Chinese classical tales, "The Fighting Bride" has a simple plot. A young prince leaves home to fight for his uncle, first emperor of the Sung dynasty, who is besieged in a distant city. On the way he hears about the Fighting Bride, a princess who says she will marry any man who can defeat her in battle; they fight, and the prince is defeated, but the princess is still prepared to marry him, for she has fallen in love; to a warrior such as the prince, marriage to a woman stronger than himself is unthinkable, and the rest of the story is devoted, often with an underlying thread of comedy, to efforts—finally successful—to make the prince change his mind.

Because of his insistence on perfection, Dr. Hsuing formed his own company a year before—27 players and seven musicians. His leading man, Lu Ching-Ling, and his leading lady, Pa Mu-Tan, have starred in opera from Taiwan to Indonesia; the other players, chosen for their acting or singing ability came from a dozen different touring companies.

Two hours before the big television performance the cast began to don traditional silk costumes and head-dresses, hand-made in Hong Kong at a cost of thousands of dollars. They applied make-up heavily, accentuating the eyes and mouth; the brilliant colour schemes had been carefully designed.

### Like Bound Feet

All the girls wore shoes that gave them the appearance of having bound feet—shoes which originated in the days when men played all female parts on the Chinese stage, and which force the wearer to balance on the toes. Every member of the cast had been given a copy of the script, handwritten vertically down the page in purple Chinese characters. As soon as the performance began, large glasses of Chinese tea were passed around backstage.

Between acts Dr. Hsuing appeared on the screen to explain in English what was to happen next. This was necessary not only for non-Chinese viewers but also for the thousands of Chinese who were unable to



**DR. S. I. HSUING**, who adapted "The Fighting Bride" for television, sits in the studio during transmission, waiting to give his commentary.

understand the Cantonese dialect being used in the opera.

For the two and a quarter hours of the performance John Bow Chong-Chuen, a former Shanghai film star turned television producer, gave his attention to the monitoring screens in the control room. Before the performance, he and Dr. Hsuing had solved minor problems such as persuading the stage-hands to keep out of camera range during transmission. Normally, during a Chinese opera, the stage-hands move nonchalantly among the players, shifting props and altering the scenery. They had also trained the players to follow the script word for word; whereas, on the stage, the actors are allowed to extemporise, and no opera is exactly the same two nights running.

In a corner of the studio the seven-man orchestra, equipped with drums, cymbals,

(Continued overleaf)

**IN THE CONTROL ROOM** at the TV centre, Producer John Bow Chong-Chuen (centre) follows the Chinese script and keeps an eye on the monitoring screens.





**DR HSUING**, a perfectionist, takes yet another look at the script, going over the final scene with Sao Sing-Chuan, who plays the first emperor of the Sung dynasty. Sao, a stage star, has played in opera in many Asian countries.



**THE WARDROBE MASTER** gives an expert helping hand. The costume is that of the young warrior prince Kao Chun-Pao. Most opera players possess their own costumes for the parts they play. For "The Fighting Bride" Dr. Hsuing had his company fitted out with hand-made silk costumes.



**GIRL** opera player receives the attention of the Wardrobe Master. The gowns of rich silk have brilliant, carefully chosen colours, in distinct contrast to the stage backdrop, which consisted of two-tone paintings of trees and hills. Dr. Hsuing is taking his own company on tour abroad.



**THE YOUNG WARRIOR** prince (left) has demonstrated his prowess with the lance to the Fighting Bride (right), but she is not impressed. In combat she defeats him.



Chinese fiddles and a banjo-type instrument called a pipa, performed nobly. Then, as the opera neared its climax, the "besieged city" appeared. It consisted of a piece of blue cloth six feet high with a movable flap in the centre, and was held by two grinning stagehands crouching just out of camera range.

Apart from swords, lances and a back-drop of trees and hills, the cloth was the only stage prop used, for Chinese opera allows each member of the audience to imagine his own scenery. This does not detract from the classical stories as a television spectacle, for the costumes and action have a fascination even for those unable to follow the dialogue.

As the performance ended the camera focused for the last time on Dr. Hsuing who, with typical modesty, told his viewers: "We did our best, but if you have any suggestions how we may improve, please send them to me".

Not many were sent. The televised version had a great reception. Dr. Hsuing, whose production of "Lady Precious Stream" ran for 900 performances at three London theatres in the 1930s, may well have another "winner" to his credit when he takes his opera company on tour in Canada, the U.S.A. and Europe.

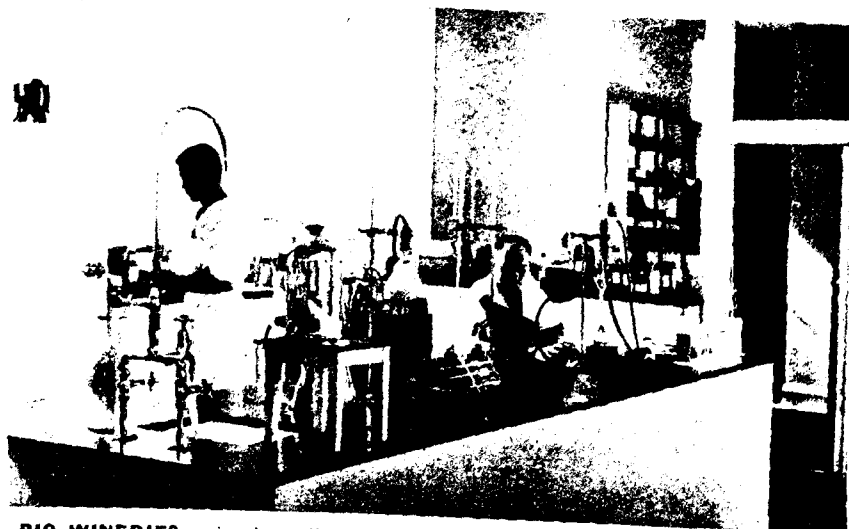


**PRINCESS** Chao Mei-Yung (second from left) tries to persuade her son not to leave home to fight for his uncle in the besieged city. But he goes, and though defeated by the Fighting Bride, she wants to marry him.





**AN AUSTRALIAN GIRL** picks grapes in a New South Wales vineyard. *Right:* An old-fashioned hand-press in use in a small winery in South Australia. There are more than 200 family-owned wineries in Australia. According to the vintners, time alone, and the centuries-old timber of vats, completes the fermentation.



**BIG WINERIES** maintain well-equipped laboratories. Chemists, trained in Oenology at the Roseworthy Agricultural College, constantly test wines during the various stages of production to ensure that the standards are kept high.

## AUSTRALIA'S

**T**HE Australian wine-making industry, with its 135,000 acres of sun-drenched vineyards and an annual production of more than 20 million gallons of wine, is today worth £A70 million.

To many of Australia's vintners, wine-making is more than an industry; it is a life-long pursuit to which generations of families have devoted themselves—a pursuit based upon loving traditions imported from the vineyards of Europe and fortified by the skill of some of the best scientists in this field.

At Roseworthy Agricultural College, 30 miles from Adelaide, South Australia, a course conducted in Oenology (the science of wine-making) has achieved world-wide recognition. According to a French authority, its graduates would be welcomed in any of the great wineries of France.

### Early Vineyards

The first vines were planted in Australia in the early days of British settlement. When Governor Phillip sailed through Sydney Heads with his fleet on 26th January, 1788, one of his tiny ships brought a collection of vine cuttings. They were planted where the Sydney Botanical Gardens now flourish. Although they bore grapes, the site, which is near the sea, was found unsuitable; so the Governor planted three acres from the first vines in the garden at Government House, near Parramatta.

By 1800, the then Governor of New South Wales, Governor King, and the Government in England, had become enthusiastic about the suitability of the soil and climate in the Antipodes for grape-growing, and two years later the Governor was able to report that



## WINE INDUSTRY

*Science Backs Tradition in the Vineyards of the Antipodes*



**HARVESTING** grapes at Chateau Tahbilk, 80 miles from Melbourne in the State of Victoria. Family vineyards are mainly concerned with selected, traditional wines.

the Crown vineyard in New South Wales contained 12,000 vines.

One of the pioneers of the wine industry was the remarkable John Macarthur, founder of the cattle industry in Australia and importer of the first merino sheep, which were to establish the prosperity of the continent. When, after clashing with the fiery Governor Bligh, Macarthur was banished from the colony, he went with his three sons to France, and spent several months gathering vines and learning techniques from French vigneron. When he returned to Australia in 1817, he took with him a huge stock of vines which he planted on his estate at Camden Park, near Sydney. He imported trained vine-dressers and within ten years was producing 20,000 gallons of wine a year.

Before that, Gregory Blaxland, the explorer who found a passage across the Blue Mountains of Australia, had become the first Australian to ship wine to London. However, it is of James Busby that modern Australian vigneron speak with some fervour.

Busby was a careful Scot who landed in the colony in 1824. He was appointed a teacher at an orphans' school, not far from Sydney; there, for a salary of £100 a year,

plus a third share of the profits from the vineyard attached to the school, he tended the vines and taught the orphans viticulture, writing and arithmetic. He wrote Australia's first treatise on the culture of the vine. Later in his career he established at Kirkton, on the Hunter River, a vineyard which still produces some of the best red and white table wines in New South Wales.

When the new State of South Australia was founded in the 1830s it was discovered that the dry climate discouraged vine diseases and insect pests. In the Barossa Valley, on the River Murray and around Adelaide, there were extensive areas suitable for the production of clarets and burgundies, light white wines of the Moselle, hock and chablis types, and the fortified wines, the sherries, ports and tokays. Today, with 60,000 acres of vineyards, South Australia produces about half of Australia's wine.

For many years the Australian Wine Board, the Australian Commonwealth Scientific and Industrial Research Organisation and the University of Adelaide, have carried out research into all subjects which could be of help to Australian wine-makers. Since 1955, the Australian Wine Research Institute, with

a capital fund of £A500,000 granted by the Federal Government, has taken over this research at Adelaide.

Australians themselves are now consuming much more wine than they did twenty years ago; but there is still a surplus, for export, of considerably more than a million gallons a year.

**WELL-KNOWN** vintner, Mr. H. Tulloch of New South Wales, with a worker. Australia produces 20 million gallons a year.



# PEOPLE

## AND EVENTS



### PAKISTAN COLLEGE GIRLS ON "FLYING VISIT" TO LONDON

Four college girls from Karachi, Pakistan, made a "flying visit" to London as guests of Pakistan International Airlines. The company hopes that they will consider taking up careers as air hostesses. Their programme included coach trips to many famous London landmarks, and visits to theatres and restaurants. In the photograph (l. to r.) are Miss Najama Riza, of the Sir Syed Girls' College; Miss Sufia Begum, APWA College for Women; Miss Farzana Sarwar, Karachi College for Women; Miss Lillysirdar, of P.I.A.; and Miss Zubida Hasan, of St. Joseph's College.

### GHANA EXHIBITION IN BRITISH SEASIDE TOWN

An exhibition made up of models, photographs and illustrations of the life, history and traditions of Ghana was opened at the British seaside resort of Southend by the High Commissioner for Ghana in the United Kingdom, Mr. E. O. Asafu-Adjaye. Left: Mr. Twum-Ampofo, Secretary of the Ghana Cultural Society, explains to schoolchildren who attended the exhibition the importance of Ghana's cocoa industry. He is holding a cocoa pod.

### LONDON WOMAN COMPOSES NIGERIAN NATIONAL ANTHEM

Mrs. Charles Kernot, who is a private music teacher and a professional pianist at a London school of classical ballet, has won the £1,000 competition for composing the music to the words of the Nigerian National Anthem. Over three thousand entries were considered by a panel of Nigerian musicians, including Mr. F. Sowande, Director of Music, the Nigerian Broadcasting Corporation. Mrs. Kernot's composition was later described as "the one which most commended itself to the Council of Ministers".

The competition for the words of the National Anthem was also won by an Englishwoman. She is Miss Lilian Jean Williams, an employee of the Federal Ministry of Labour and Welfare in Lagos, Nigeria.



### JAMAICAN APPOINTMENT

This picture, taken in the grounds of Government House, Dominica, is of Mr. Lawrence Lindo and his wife, Holly. Mr. Lindo has been appointed Chief Secretary, Jamaica. A Rhodes Scholar and an Oxford Blue, Jamaica-born Mr. Lindo was Administrator of Dominica from 1952 to 1959. He has also been Acting Governor of the Windward Islands.



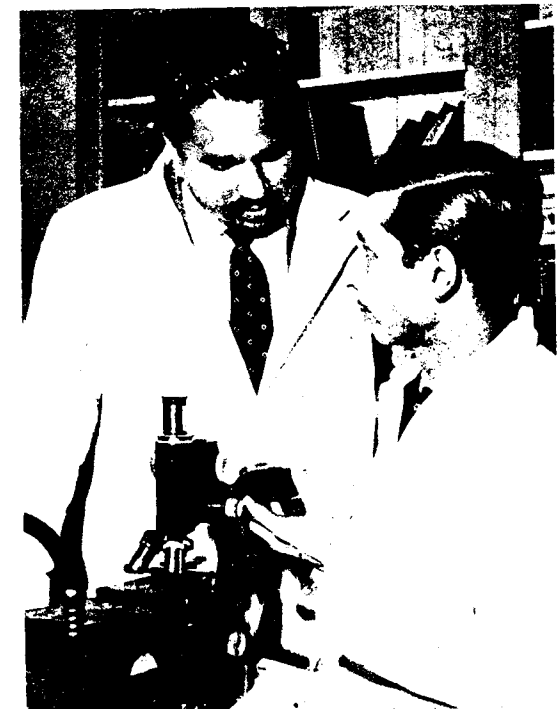
### HONOUR FOR TANGANYIKAN POLICE OFFICER

The Deputy Inspector-General of Colonial Police, Mr. N. G. Morris (right), presents the baton-of-honour to Assistant Superintendent Nirmal Singh, from Tanganyika, at the Metropolitan Police Training School, Hendon, near London. Singh was the best trainee on a course which was attended by 25 police officers from 20 British overseas territories, as well as police officers from the United Kingdom. Training lasted 20 weeks, and included all aspects of modern police and detective work.



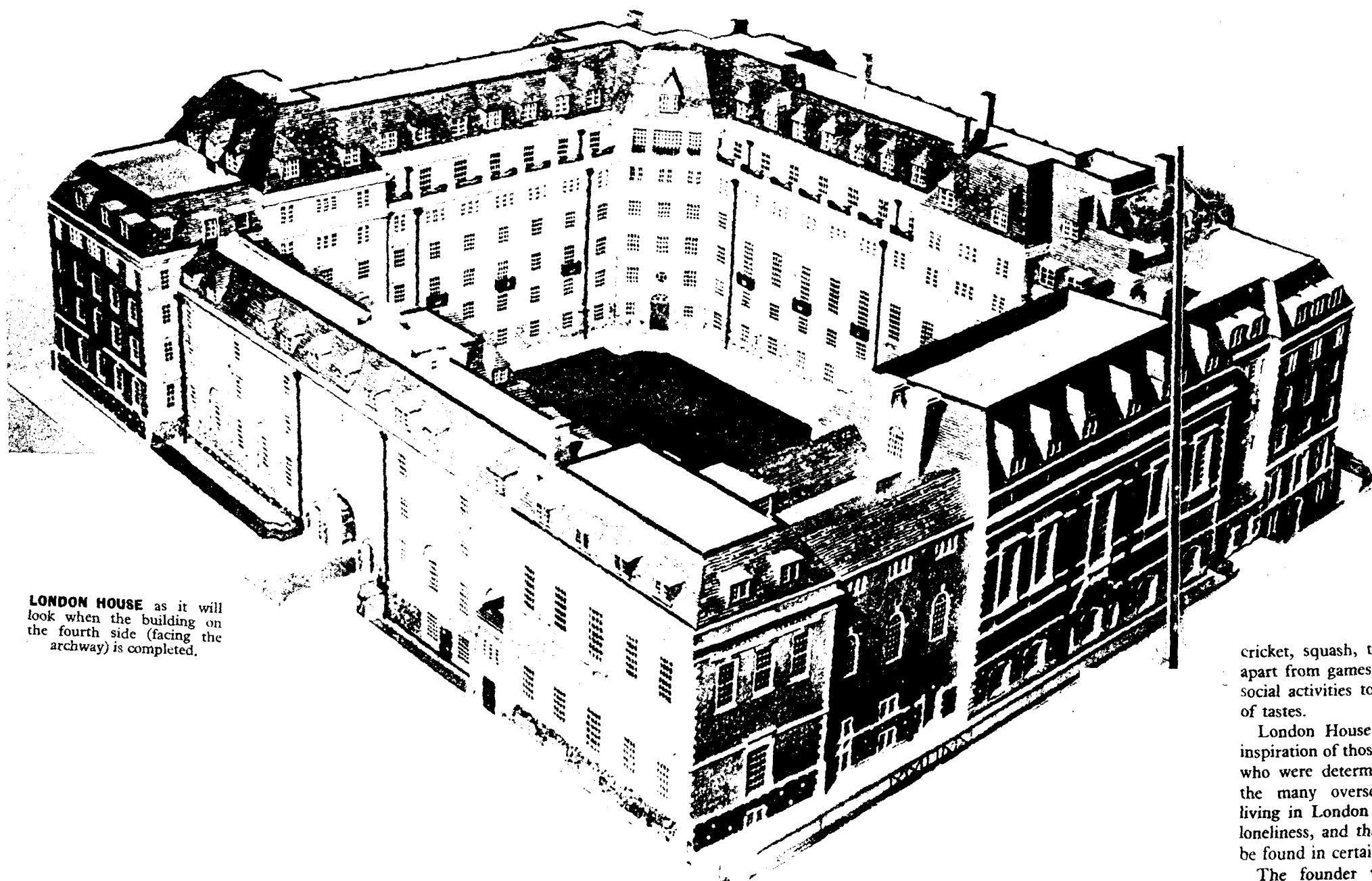
### CEYLONESE STUDENTS STUDY IN EDINBURGH

Two students from Ceylon, Mr. Ariyapala Kurumeru (left) and Mr. George Ellenson Kodituwakku, discuss an aspect of their work in the laboratory of the Royal (Dick) School of Veterinary Studies at the University of Edinburgh, Scotland. With fifteen Commonwealth students, they are taking a postgraduate diploma course in Tropical Veterinary Medicine.



### AUSTRALIAN JOURNALISTS IN BRITAIN

Australian journalists and broadcasters who visited Britain as guests of the Commonwealth Relations Office, admire a Poll Hereford Bull, "Harnill Tim", on the Gloucestershire farm of Mr. R. Henly (second left). They are (l. to r.) Mr. J. Sparkes, Australian Broadcasting Service, Victoria; Mr. D. Sommerlad, Managing Editor, *Inverell Times*, New South Wales; Mr. W. Annabel, Proprietor, Managing Director, Editor, *Bega District Times*.



LONDON HOUSE as it will look when the building on the fourth side (facing the archway) is completed.

# LONDON HOUSE

"College Atmosphere" Accommodation for Commonwealth Students

NOT far from London University is London House, a well-known Commonwealth Centre. It was founded in 1930 by the Dominion Students' Hall Trust, the Patron of which is H.M. the Queen, and it provides accommodation where postgraduate male students, mainly from overseas Commonwealth countries, and also from the U.S.A., live and study in peaceful, gracious surroundings.



The quadrangle of London House is not unlike an Oxford or Cambridge College quadrangle, or one of those of the famous Inns of Court. The building stands, dignified and mellow, on three sides of a large lawn, and plans are in hand to extend the building along the fourth side. The amenities include study-bedrooms for about 280 students, bathrooms and showers on each floor, a magnificent dining hall, a cafeteria and snack bar, a well-stocked library, a chapel, three common rooms, and a billiards room.

There, thousands of postgraduate students from the Commonwealth—potential leaders in many walks of life—have spent some of the most impressionable years of their lives.

London House provides modern, centrally heated accommodation, and, through the London House Association, which comprises distinguished professional men, students can be put in touch with individuals, firms, or societies who may be of assistance to them in their studies.

The students have their own rugby,

STUDENTS pay from 7s. to 13s. 6d. a day for "study-bedrooms". Mr. B. B. Ong, from the Federation of Malaya, at work in his room, is one of about 280 students in residence.



IN THE CLOSE (l. to r.) are Dr. P. D. De Villiers, South Africa; Lt.-Col. G. L. Sprunt, Controller of London House; and R. Allen Murdock, Kenya.

cricket, squash, tennis and golf teams, and apart from games, there are many organised social activities to cater for a wide diversity of tastes.

London House owes its existence to the inspiration of those prominent men in Britain who were determined that at least some of the many overseas postgraduate students living in London should be saved from the loneliness, and the comparative drabness, to be found in certain private lodgings.

The founder was the late Mr. F. C. Goodenough; and after his death in 1935 his son, the late Sir William Goodenough, Bart., succeeded him as Chairman of the Trust and continued to expand his father's work. Sir William died in 1951, and the present Chairman is Marshal of the Royal Air Force Viscount Portal of Hungerford. A strong personal link with the Goodenough family is still maintained.

## Long Waiting List

Additions have been made to London House since the war, and the demand for accommodation still grows; there is, in fact, a waiting list of considerable size.

Study-bedrooms cost from 7s. to 13s. 6d. a day, excluding meals, which is considered a very reasonable rate for first-class accommodation near the centre of London.

The Dominion Students' Hall Trust spends about £50 a year on each resident, so that every resident may be said to hold an "invisible scholarship".

About seventeen Commonwealth countries are represented by residents together with Americans and a proportion of United Kingdom students.

"These numbers", said Brigadier E. C. Pepper, the Warden of the House, in a Paper he delivered to the Royal Society of Arts, "represent a cross-section of professional and business postgraduate work, and the academic and professional successes gained are very large. Indeed, I hope that it is not too complacent to say that London House has become established as a permanent and not

(Continued overleaf)



TIME for a quiet talk—a meeting of minds—in the quadrangle of London House. The students (l. to r.) are P. Rowe (physics), Canada; D. Ramanathan (Law), Ceylon; and T. Doull (Law), South Africa.



IN THE LIBRARY (above) are (l. to r.) Jim Grainger, aged 23, of Canberra, Australia, a student of dentistry at the Royal College of Surgeons; Peter J. Judah of Kingston, Jamaica (Law at Lincoln's Inn); and John Shoniwa, aged 32, of Southern Rhodesia, who is taking postgraduate Constitutional Law at Oxford, and who also attends the Middle Temple in London. Below: Breakfast in the dining hall.



# Mainly for Women

ASSORTED TOPICS AND EVENTS

## African Girls' 'Energy Output'

Experiments at a Mwanza School in Tanganyika

BREATHING through a fitted mouthpiece into a rubber bladder inside a small white box strapped to their backs, African girl student-teachers at the Bwiru Girls Secondary School, Mwanza, Tanganyika, have been assisting in research to discover how much energy women use in daily chores, such as carrying water, digging shambas, or pounding groundnuts.

There are 230 Tanganyikan girls at the school receiving secondary and middle school education, and training as domestic science teachers. Sixteen of them have been helping with the "energy output" research for more than a year—with the full approval of the Principal of the school, Miss D. G. Rogers, who was a dietitian in Britain for many years.

Supervising the experiments is Miss Fiona Ritchie, aged 25, from Dunfermline, Scotland, a Scientific Officer with the East African Institute for Medical Research. She worked as an assistant in the Physiology Department of the University of Edinburgh; then, over a year ago, Dr. E. G. Holmes, Director of the East African Institute, persuaded her to work in Mwanza.

One of her aims is to help establish the nutritional needs of Africans. She is also comparing their standard of "resting metabolism" (whereby food is broken down and built into body tissues) with similar studies of Europeans.

As they work, the girls—all volunteers—breathe through the mouthpiece into a container in the

white box on their backs. This respirometer records the volume of expired air, and the bladder collects 0.3 per cent of each breath for analysis.

Typical of the cheerful girls who took part in the experiments was Shija, who spent twenty minutes at a time clearing and digging the rich lakeside soil at the school with a large hoe. Other volunteers included Mariam, who carried water or crushed groundnuts; Bupe, from the Southern Highlands of Tanganyika, who walked easily from the lake with a 42-lb. can of water on her head; and Paula, who wielded a ten-pound length of wood to pound groundnuts or maize in a deep wooden vessel cut from a tree.

When the girls had finished digging, water-carrying and pounding, Miss Ritchie emptied the air from the bladders into glass gas-sample tubes. Then came the laboratory analyses of the mixture of oxygen, carbon dioxide and nitrogen. When she has found how much oxygen there is, she can calculate how many calories of energy have been used by the girls in their work; for when food is "burnt" it requires a certain amount of oxygen to produce so many calories of energy.

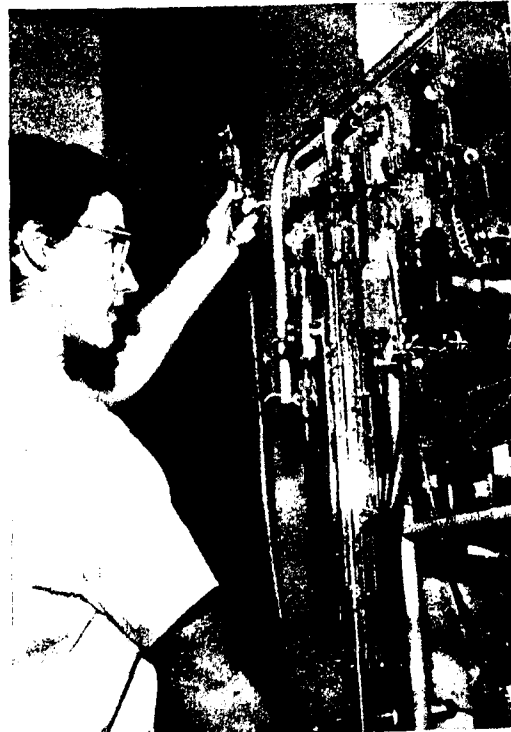
Similar work has been done in Britain and West Africa, but this is the first project of its kind in East Africa. It could not be so successful without the happy and wholehearted co-operation of the Bwiru schoolgirls.



Miss Fiona Ritchie, from Dunfermline, Scotland, is in charge of the experiments.



Mariam, one of the girl volunteers, pounds maize. She is wearing a respirometer to trap a small percentage of her breath for examination in Miss Ritchie's laboratory.



Using a complicated array of glass tubes and rubber pipes, Miss Ritchie analyses breath obtained from her volunteers. The oxygen content of the exhaled air will enable her to calculate how many calories of energy have been used by the girls in their work.



Shija finds that wielding a "jembe" in a mask is an even more energetic task than usual. One of the ultimate aims of this important research—the first of its kind in East Africa—is to help establish the nutritional needs of Africans.



Enjoying a cup of tea after the opening of a new Ceylon Tea Centre in Manchester are (l. to r.) Mr. F. Boswell, the manager; Mrs. Lorna Perera and Mrs. Maisie Sinnadurai, demonstrators; Mr. D. M. Forest, Commissioner of the Ceylon Tea Centre in the U.K.; Mrs. Menik de Alwis, receptionist. In 1959 Britain imported 137.5 million pounds of tea from Ceylon.



The 1960 British Hosiery and Knitwear Exhibition included lightweight thick-knit sweaters, traditional twin-sets, separates, swim-wear and hosiery in a variety of materials and an attractive range of colours; also these warm woollen ship-pers, called "Scuffs".

At the same Exhibition was shown the ever-popular tartan, with a new fashion "twist". The girl on the left is wearing "Edinburgh" separates, featuring a classic line sweater of pure wool with the back, sleeves, "V" neck and welt in fine-gauge knit. It is worn with tartan slacks.



## PICTURE PARADE



British ballerina, Alicia Markova, with the Indian dancer, Ram Gopal, in London, shortly before they danced together for the first time in the traditional Indian love poem "Radha Krishna".



Members of the W.R.A.F. (Women's Royal Air Force) have a new hat—made of blue-grey worsted silicone serge. The sergeant is a clerk.



Miss Eileen Joyce, the Australian pianist, with Mr. Handel Manuel, conductor of the Madras Musical Association, on her recital tour of India.



Four of a group of eight girls from Ghana who are training in London to be receptionists for Ghana Airways are given a lesson in poise at a School of Deportment.

## Commonwealth Fortnight in Norwich



THE ancient city of Norwich, in the flat lands of eastern England, was visited by the touring Commonwealth Exhibition, which began its career in Liverpool in November 1959 and will be seen by hundreds of thousands of men, women and children in the U.K.

In the top photograph (left) Mrs. Vijaya Lakshmi Pandit, India's High Commissioner in the U.K., and Mr. C. J. M. Alport, Minister of State, Commonwealth Relations, talk with Miss Alaba Senbanjo, a Nigerian student at Norwich City College. Mrs. Pandit opened the Exhibition in Norwich.

His Excellency Y. T. M. Tunku Ya'Acob, the Malayan High Commissioner, also went to East Anglia to see the Exhibition. He watched approvingly (left, bottom photograph) while his wife presented a silver bracelet and ear-clips to Miss Denise Cochrane, aged 14, of the Harris Secondary School for Girls, Lowestoft.

The events held during this Commonwealth Fortnight made an enormous impact on the life of both City and County. During his visit there, the Deputy High Commissioner for Canada, Mr. George Ignatieff, complimented Norwich on "really massive support" of the enterprise. Visitors were able to see films of Commonwealth countries, an exhibition of paintings and sculpture by Commonwealth artists, a display of Commonwealth stamps, and a pictorial display of railways of the Commonwealth. Other features of the occasion included a Commonwealth Essay Competition for all schoolchildren in the County, and a Commonwealth edition of "Twenty Questions", arranged by the B.B.C. before an invited Norwich audience.

More than fifty voluntary societies invited Commonwealth speakers to address their meetings, and in local stores special displays of Commonwealth products were viewed with keen interest.



## AUSTRALIAN YOUNG FARMERS IN BRITAIN

SIX Australian young farmers enjoyed a six-month trip to Britain—their prize for winning the 1960 P. and O. Shipping Company's award for the best young farmer in each Australian State.

Here are three of them (seated) viewing a collection of model clothes in London by Norman Hartnell, the Queen's dress designer, who also designed Princess Margaret's wedding dress. They are (l. to r.) Bill McInnes, aged 24, from Quirindi, New South Wales; Patricia Wundersitz, aged 19, from Maitland, South Australia; and Mary Busher, aged 23, of Dardanup, Western Australia.

Main purpose of the young farmers' tour was not to see fashions, but to study British farming methods and modern agricultural equipment.



# LAKE OF PITCH

TRINIDAD SUPPLIES THE WORLD WITH NATURAL ASPHALT



**THE CRUDE ASPHALT** is a mixture of bitumen, silt, clay and water. It is plastic—the photograph on the right shows how soft is the centre of the lake—but it can bear the weight of men and machines.

FROM an island of The West Indies comes the world's chief supply of natural asphalt, which is in great demand for road-making and has many industrial uses.

The remarkable "Lake of Pitch" at La Brea, in the south-west corner of Trinidad, is a rare phenomenon of Nature. Although millions of tons of crude asphalt have been extracted from it during the past 70 years or so, the supply is still exceedingly rich and of unvarying quality. The present output averages between 140,000 and 150,000 tons a year.

An early reference to this Lake occurs in the diary of Sir Walter Raleigh, the British sailor and explorer, who landed at La Brea in 1595 and used the pitch for caulking his ships. Nothing more was heard of it until the nineteenth century, when some Spanish settlers tried, unsuccessfully, to extract the material for export to Europe.

Then, in 1850, Admiral Cochrane, tenth Earl of Dundonald, wrote of the industrial uses of the asphalt, having made experiments with it while living in Trinidad. His pioneer work was to turn to profitable account a source of wealth which had long been regarded as little more than a natural curiosity. In 1888, the Crown granted a working concession over the whole lake to a company which has been extracting and refining the asphalt ever since.

Today the Asphalt Lake is the centre of a

thriving industry, providing employment for about 1,500 people, and its products are exported to all parts of the world. Britain's new London-Birmingham Motorway is one of the many modern traffic highways paved throughout with Trinidad Lake asphalt.

It is believed that the Lake may have originated during a period of local volcanic disturbances thousands of years ago when a vast underground reservoir of oil and natural gas pushed its way to the surface. In time a circular basin, over a mile in circumference, was formed; there the oil collected in huge quantities, the surplus overflowing to the seashore where Raleigh first saw it.

## Constant Movement

The raw asphalt is a mixture of bitumen, silt, clay and water. It is plastic, yet of such consistency at the surface that it can safely bear the weight of the men and machines used to excavate it and the railway trucks that dispatch it to the adjoining refinery.

The Lake is in constant movement, as fresh supplies of the material come to the surface. There is no sign of any violent disturbance below, apart from occasional jets of escaping gas; the overall movement is apparent when odd pieces of flotsam emerge near the centre of the lake, drift outwards, and are then sucked back into the black morass.

On one occasion a large tree trunk came



up through the surface in a perfectly upright position and continued to rise until it stood about 10 feet high. Then the movement stopped; the tree began to tilt slightly and, very slowly, completely disappeared out of sight. Logs cut from the tree were examined by experts, who estimated that it had been buried in the Lake for 4,000 to 5,000 years.

Until recently, the asphalt was excavated by manual labour; but in the last two or three years mechanical trench diggers, supported on rafts, have been successfully introduced to increase production. The excavations never go deeper than a few feet, because at a certain depth the rate of digging

is counterbalanced by the upward pressure of the mass.

Excavations that are left for a few days disappear entirely, so that the same areas can be worked again and again. The Lake railway lines would likewise be sucked beneath the surface if they were not constantly relaid.

Work at the lakeside refinery never stops. Big refining tanks, with a capacity of 70 to 100 tons of asphalt, are loaded directly from the rail trucks, which are hauled up an incline from the Lake to a tipping gallery. The asphalt is melted by steam circuits and its water content vaporised. It then passes through a heated screening plant, which removes small pieces of wood and any other extraneous vegetable matter, and is finally run off into wooden barrels or steel drums.

A modern shipping pier has been built from the Company's foreshore at La Brea, and the filled containers are moved from the refinery to the waiting ships by an overhead cableway.

When Sir Walter Raleigh saw the Pitch Lake of Trinidad nearly four hundred years ago, it was surrounded by wild jungle. Today the jungle is replaced by a busy industrial estate covering more than seventy acres.

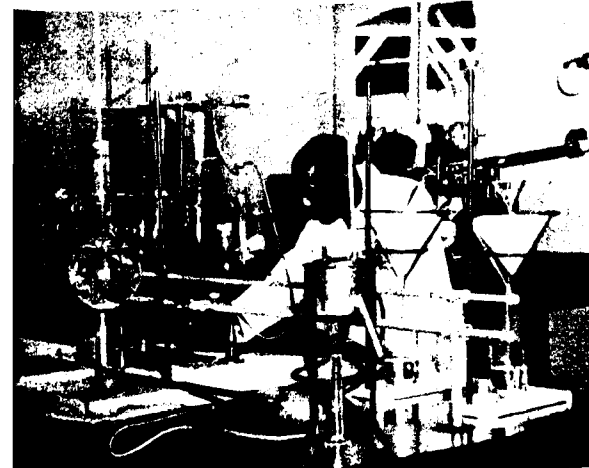
Besides the refinery and power plant, there is a testing laboratory, and workshops for the production of barrels and drums. Houses have been built for the workers in a model village, which contains welfare, sports and recreational facilities.

The Asphalt Lake has, for nearly a century, made an important contribution to the economy of Trinidad. Judging by the ever-growing world demand for its product, it will continue to do so.

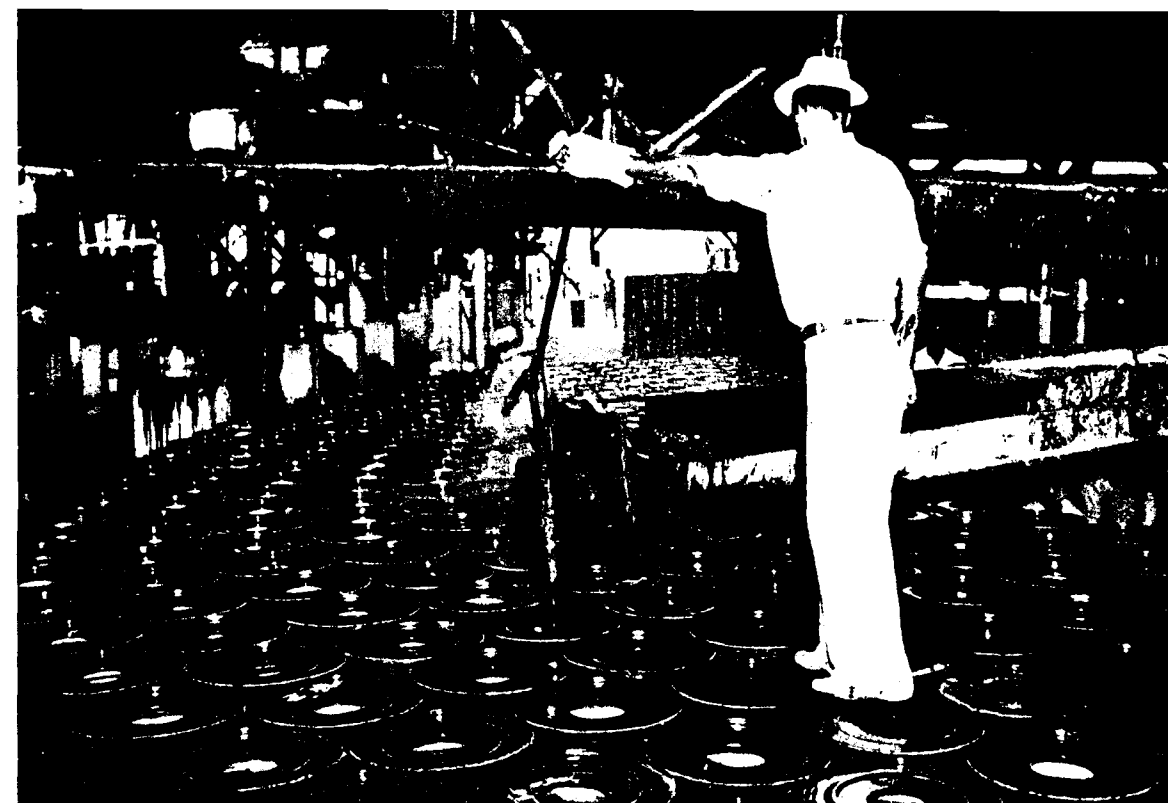
W. H. OWENS.



**MAKING BARRELS** is one of the subsidiary jobs connected with the Lake of Pitch. Altogether the undertaking employs about 1,500 people.



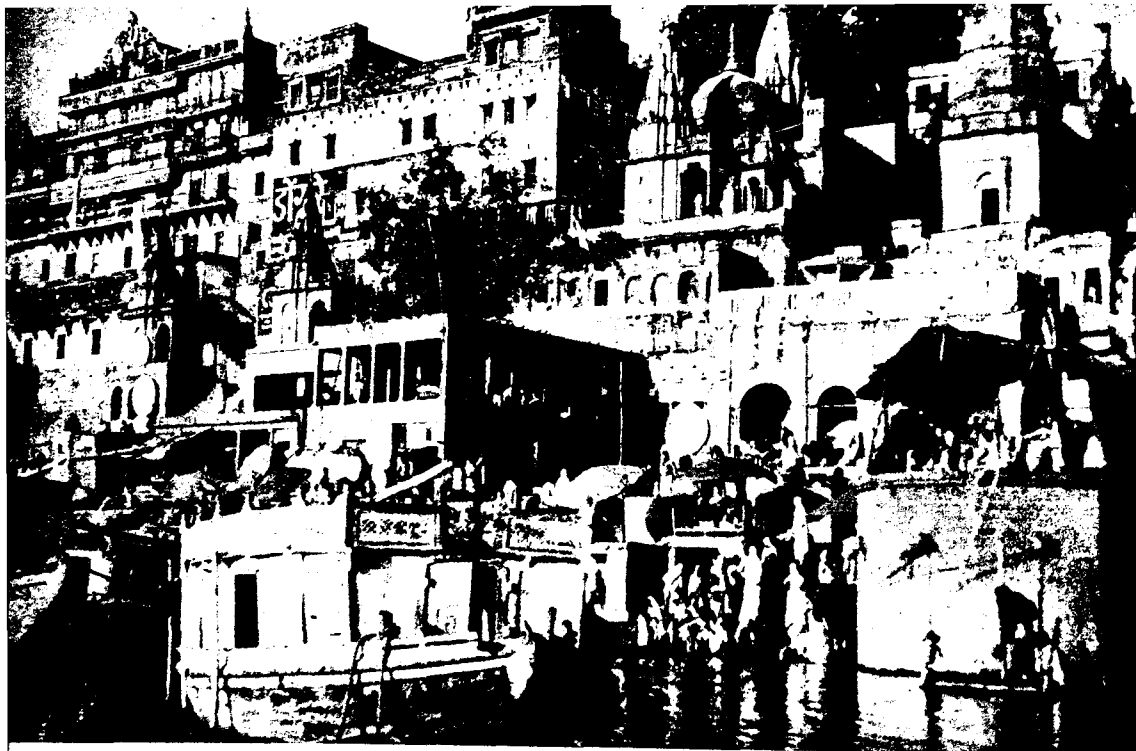
**TESTING** and research in a well-equipped laboratory near the Lake never stops. The quality of the asphalt remains as high as ever.



**FILLING** metal drums with liquid asphalt, which sets as it cools. Output averages from 140,000 to 150,000 tons a year. Millions of tons have been extracted, but the Lake shows no signs of drying up.



**THE M1**—Britain's first express motorway, between London and Birmingham—is one of many modern highways paved with asphalt from Trinidad. The Lake has, for more than a century, made a big contribution to Trinidad's economy.



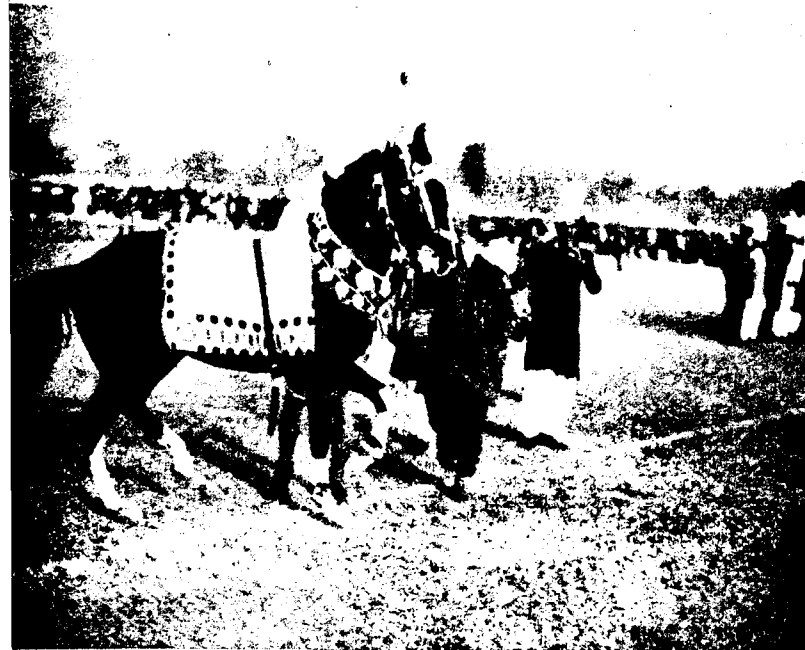
"CITY OF TEMPLES." The sacred temples and bathing ghats of Varanasi (Banaras), on the Ganges river, one of the holy cities for the Hindus of India. From M. R. Sen, 64/65 Moti Mahal, Kanpur, India.



"TRAVELLING PHOTOGRAPHER." A keen amateur photographer, one of a growing number of amateur photographic society members in East Africa. From Ibrahim Jaffari, P.O. Box 138, 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 normally be returned.



"BOXING MATCH." Watched by a referee and wearing improvised gloves, two Hausa boxers in Northern Nigeria "shape up" for a friendly fight. From Saibu A. Afegbua, Nigerian College of Technology, Zaria, Nigeria.



"THE DANCING HORSE," at a Pakistan Horse Show. Some horses in Pakistan are trained to dance to the beat of a drum. From Pervaz Gulzar, 114 Finance Road, Rawalpindi, Pakistan.



"THE LONG HAUL." Young skiers at Edmonton, Alberta, Canada, clutch a moving cable as they get a long free haul to the top of a ski slope. From J. Mason Manser, 10546 128th Street, Edmonton, Alberta, Canada.



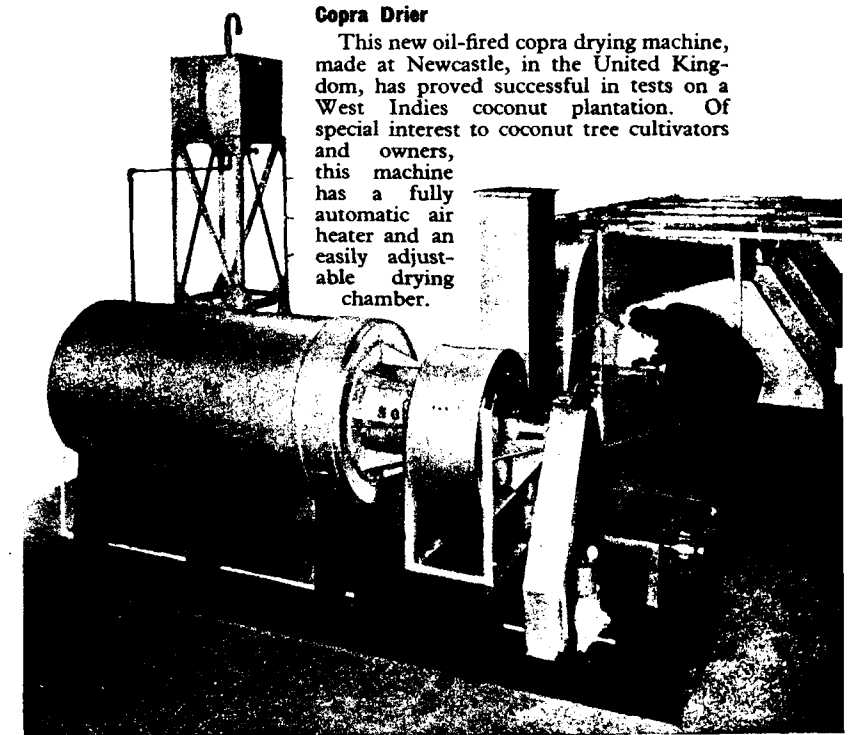
"VICTORIA BAY." Beyond this attractive bay in the Southern Cameroons can be seen the Junior Cameroon Mountain. From M. M. Eben, Colonial Development Corporation, Ekona, Tiko, Southern Cameroons.

## NEW IDEAS



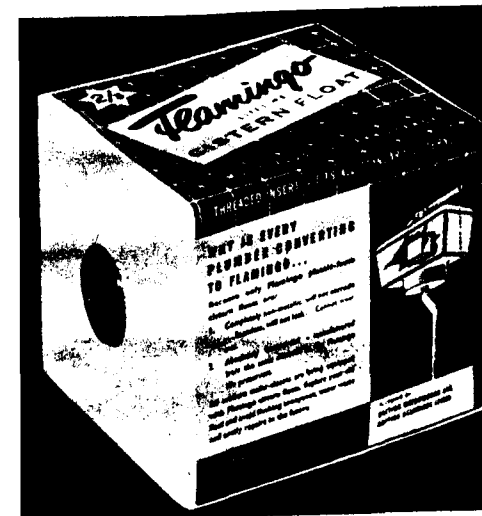
**Airport Teletape**

This Teletape Transceiver—one of six operated by British Overseas Airways at London Airport—transmits messages speedily to other offices at the airport, provides a permanent record of messages sent and received, and greatly reduces the noise level in rooms where concentration, speed and accuracy are required. The machines, in short, replace and improve upon internal telephones.



**Copra Drier**

This new oil-fired copra drying machine, made at Newcastle, in the United Kingdom, has proved successful in tests on a West Indies coconut plantation. Of special interest to coconut tree cultivators and owners, this machine has a fully automatic air heater and an easily adjustable drying chamber.



**Square Cistern Float**

A square float made of solid plastic foam is the latest idea for use in house cisterns. Completely non-metallic, the float is seamless, waterproof, and cannot wear out. It fits all standard cisterns.



**New Lightweight Tarpaulin**

This "Terylene"-cotton tarpaulin, measuring 15ft. by 12ft., is stronger than a cotton tarpaulin of twice its own weight and can easily be folded and carried (left) by one man. Other advantages are better waterproof properties, greater resistance to rotting, good resistance to rope scuffing, and the ability to dry swiftly after rain. It is being used to cover varied industrial loads; was used to cover the famous Rubens painting "Adoration of the Magi", which was sold by auction in London for £275,000, and later transported to the National Gallery.

**Onion Peeling Machine**

A machine for peeling onions quickly and efficiently has been produced by a Lancashire firm. It can peel from 12 to 20 pounds of onions in anything from 55 seconds to two minutes. Plastic baskets are recommended for feeding the onions into the machine. Ideally the dry onions should be topped and tailed, and the machine will do the rest. It can also be used for peeling beet-roots, and firms that have used it for this purpose report that 5½ tons of beet-roots can be dealt with in one day.



**Seed Germinator**

The germination of seeds, and the early growth of seedlings, can be greatly accelerated in this propagator. The secret of this container is that heat is evenly spread throughout the plastic panelling by a non-metallic element built into the base. Such "non-metallic area heating", which has many other uses, is the result of seven years of research and development in Britain.





MISS WENDY YEO from Hong Kong with her painting which was exhibited along with those by several artists from the Commonwealth at "The War on War International Exhibition in London. The late Countess Mountbatten of Burma was Chief Patron and President of the "War on War" organisation and M Vijaya Lakshmi Pandit, the High Commissioner for India in the U.K., is one of the vice-presidents. Miss Wendy Yeo has won several Slade Summer Prize and the British Arts Council Young Contemporaries' Prize. See page 14.

## Commonwealth Artists in Britain

THEY DISPLAYED A STIMULATING VARIETY OF STYLES



DURING THE COMMONWEALTH WEEKS, organised at the time Britain's Commonwealth touring exhibition visited Leeds, a successful exhibition of art was held at a local cinema. The visitors here were attracted to paintings by Beatrice and other Commonwealth artists who aroused much interest.



"MOON BIRD" by Jonathan Kingdon from Tanganyika. He organised the second Young Commonwealth Artists' Exhibition in London, and is the founder of this group.

