

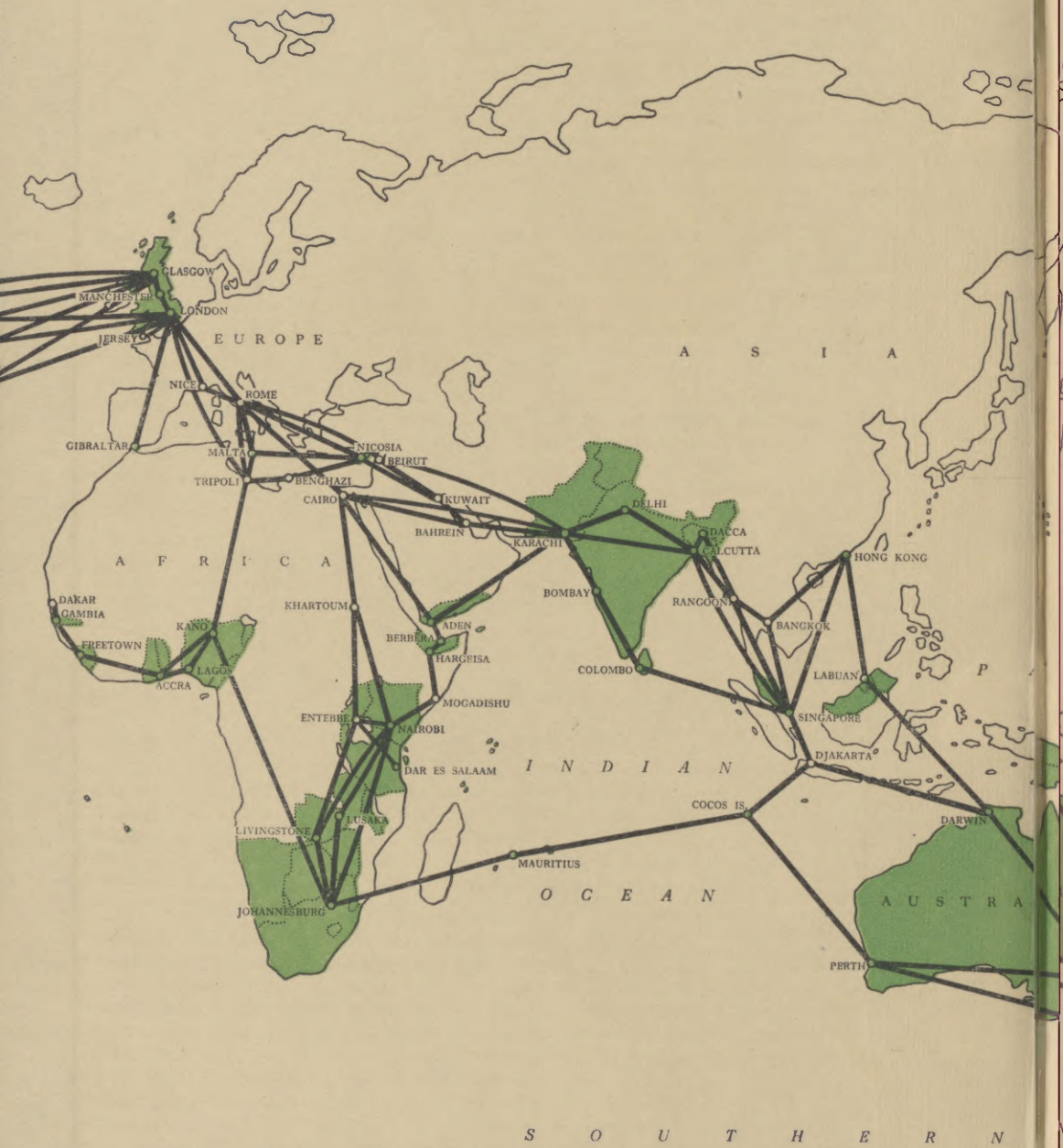


BRITAIN

AN OFFICIAL HANDBOOK

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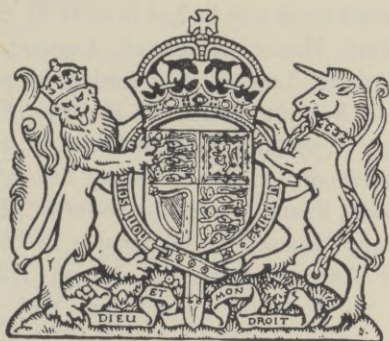


Her Majesty Queen Elizabeth II

A picture taken after the Coronation on 2nd June 1953. Her Majesty is wearing the Imperial State Crown and holding the Orb and the Sceptre.

BRITAIN

An Official Handbook



1955 EDITION

LONDON
HER MAJESTY'S STATIONERY OFFICE

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Introductory Note

AN OFFICIAL HANDBOOK on these lines appeared first in 1946 as part of the British Information Services overseas. Experience had shown that there was in existence no one book prepared primarily for the oversea reader and designed to answer the questions about Britain which are most frequently asked in oversea countries by their writers and teachers, their officials and administrators, their economists and businessmen, and other leaders of their public life. In meeting this need the handbook, which has a limited free distribution overseas, has proved valuable; five revised or rewritten editions have been issued; and the book is now established as a main foundation of the reference and library services provided by the official British Information Services in oversea countries.

In 1954, *BRITAIN: AN OFFICIAL HANDBOOK* was for the first time placed on sale throughout the world. The results have justified the preparation of this further revised edition (1955), and it is hoped to continue the publication as an annual.

The handbook, which is prepared by the Reference Division of the Central Office of Information with the co-operation of other Government Departments and of many national organizations, contains factual and statistical information, compiled from authoritative and official sources, about the United Kingdom, its people and its institutions. It does not claim to be comprehensive, nor does it attempt to describe the part played by Britain in Commonwealth and world affairs. Its principal purpose is to provide basic data on the main aspects of national administration and national economy and to give an account of the part played by the Government in the life of the community.

In considering its contents, readers in the United Kingdom are asked to remember the original purpose of the book—its oversea distribution. Should any readers need additional or more detailed information they are referred to the Annual Abstract of Statistics and the Monthly Digest of Statistics issued by the Central Statistical Office, and to the standard works of reference and Government publications, some of which are listed in the bibliography at the end of this handbook. They are asked to note that the Central Office of Information reference papers listed in the bibliography as obtainable free of charge are available only at United Kingdom Information Offices overseas and for visitors to Britain.

In general, the contents of the handbook refer to the United Kingdom as a whole, but where separate facts or figures are available for England and Wales, Scotland, and Northern Ireland, these have, in some cases, been given.

REFERENCE DIVISION,
CENTRAL OFFICE OF INFORMATION, LONDON.

December 1954

I. THE BRITISH ISLES

THE PHYSICAL BACKGROUND

The British Isles form a group lying off the north-west coast of Europe, with a total area of about 121,600 square miles. The largest two islands are Great Britain proper (comprising the greater parts of England, Wales and Scotland) and Ireland (comprising Northern Ireland and the Republic of Ireland). Off the southern coast of England is the Isle of Wight and off the extreme south-west are the Isles of Scilly; off North Wales is Anglesey. Western Scotland is fringed by numerous islands and to the far north are the important groups of the Orkneys and Shetlands. All these form administrative counties or parts of counties, but the Isle of Man in the heart of the Irish Sea and the Channel Islands between Great Britain and France have a large measure of administrative autonomy and are not part of England, Wales or Scotland.

England (including the county of Monmouth on the Welsh border), with a total area including inland water of 32,558,774 acres, is divided into 41 geographical or 50 administrative counties; Wales, with 4,780,533 acres, into 12 counties. Scotland, including its 186 inhabited islands, has a total area of 19,463,016 acres, and is divided into 33 counties.

Care must always be taken when studying British statistics to note whether they refer to England as defined above, to England and Wales (considered together for many administrative and other purposes), or to Great Britain which comprises England, Wales and Scotland. The position is further complicated by the fact that the county of Monmouth is sometimes included with Wales. The 'United Kingdom'—formerly the United Kingdom of Great Britain and Ireland, now the United Kingdom of Great Britain and Northern Ireland—is Great Britain with the addition of the six counties of Northern Ireland, 3,488,643 acres. Statistics and other data sometimes include but sometimes exclude the Isle of Man, 141,263 acres, and the Channel Islands, off the coast of France, 48,083 acres, which are strictly not part of the United Kingdom. Since southern Ireland became a separate country and independent republic, official statistics do not normally refer to the British Isles as a whole.

The latitude of 50° North just cuts across the southernmost part of the British mainland (the Lizard Peninsula) and latitude 60° North passes through the Shetland Islands. The northernmost point of the Scottish mainland, Dunnet Head, is in latitude 58° 40'. The prime meridian of 0° passes through the old Observatory of Greenwich (London), while the easternmost point of England reaches nearly 1° 45' East and the westernmost point of Ireland is approximately 10° 30' West. In general terms the British Isles lie mainly within the rectangle 50–60 degrees North and 0–10 degrees West. It is thus rather under 600 miles in a straight line from the south coast of Britain to the extreme north and rather over 300 miles across in the widest part. Owing to the numerous bays and inlets no point in the British Isles is as much as 75 miles from tidal water.

The seas surrounding the British Isles are everywhere shallow—usually less than 50 fathoms or 300 feet—because the islands lie on the continental shelf. To the north-west along the edge of the shelf the sea floor plunges abruptly from 600 feet to 3,000. These shallow waters are important because they provide excellent fishing grounds as well as breeding grounds for the fish. The North Atlantic Current, the drift of warm water which reaches the islands from across the Atlantic, spreads out over the shelf and its ameliorating effect on the air is thus magnified. The effect of tidal movement is also increased by the shallowness of the water.

Despite their small area, the British Isles include rocks representing all the major geological periods. It is largely because of their long and complicated geological history that the British Isles have a range of scenery almost unrivalled in any other area of comparable size.

In the main island of Great Britain the hilly and mountainous areas lie to the north and west, so that it is possible to draw a broad distinction between Highland Britain and Lowland Britain. An irregular line joining the mouth of the Tyne in the north-east with the mouth of the Exe in the south-west marks the division between these two contrasted parts of Britain.

Highland Britain thus includes the whole of Scotland; the broad upland running from north to south through the north of England and known as the Pennines; the well-known Lake District in the north-west of England; practically the whole of Wales; and the south-western peninsula coinciding approximately with the counties of Devon and Cornwall. Highland Britain is built up almost entirely of rocks older in age than the Coal Measures and there are large tracts of the surface lying more than 1,000 feet above sea level. Many parts of the surface have only thin, poor soils, with the result that large stretches of moorland are found over the Highlands of Scotland, the Pennines, the Lake District, the mountains of Wales and in parts of south-west England. In most areas the farmer has only cultivated the valley lands and the plains where soils are deeper and richer, so that human settlements are sometimes widely scattered, and villages and towns may be separated by uplands with few if any habitations.

Lowland Britain, comprising south-east England and the Midlands, is built up almost entirely of rocks younger than the Coal Measures, which are less resistant to weathering and have broken down to form deep fertile soils. Scarcely any part of Lowland Britain reaches 1,000 feet above sea level, so that practically the whole, with the exception of a few patches of poor soil or rocky land, has been cultivated, and farmland stretches over the whole area except where interrupted by urban and industrial settlements. Elaborate land drainage systems have been developed through the centuries to bring under cultivation the fertile soil of the low-lying Fenland of Lincolnshire and other nearby areas in East Anglia.

Towards the end of Britain's long geological history, when the ancestors of present-day man had already settled in the country, came the great Ice Age, and at one period or another during this time the whole of Britain north of a line joining the Thames and the Bristol Channel was covered by ice caps and ice sheets. The ice naturally accumulated on the higher ground and swept from the mountains of Scotland, northern England and Wales any loose rock or soil which had previously been formed, so that when the ice eventually disappeared the hills stood out as barren rocky areas, while a thick mantle of glacial debris, boulders, boulder-clay, sands and gravels, lay distributed widely over the lower ground. The ice had blocked up previous drainage channels and left large lakes, which have since gradually dried up, leaving deposits of sand, silt and mud, often affording soils of great fertility.

In Ireland, where the solid rocks are covered deeply by the debris left by ice sheets, the great central plain has large boggy areas, due to interruption of the previous natural drainage. The mountains and hill masses of Ireland are irregularly disposed round the fringes of the island, and in the higher parts the moorland cover resembles that of the higher parts of Highland Britain.

Because of the complex geology and the varied relief which results, Britain enjoys not only very attractive and contrasting scenery within short distances but a characteristic, ever different, coastline. The ancient rocks of Highland Britain often reach the coast in towering cliffs; elsewhere the sea may penetrate in deep lochs, as along

much of the west coast of Scotland. Bold outstanding headlands are notable features in other parts of the varied coastline: the granite cliffs of Land's End; the limestone masses or forbidding slates of the Pembrokeshire coast; the red sandstone of St. Bees Head; and the vertically jointed lavas of Skye and the island of Staffa. Even around Lowland Britain there are striking contrasts. In some parts the soft, white limestone—the chalk—gives rise to the world-famous white cliffs of Dover or the Needles off the Isle of Wight. Near at hand are accumulations of sand and shingle, and such tracts as Chesil Beach, Dungeness and the sandspits of the Norfolk coast have their own peculiar beauty. The eastern coast of England between the Humber and the Thames estuary is for the most part low-lying, and for hundreds of years some stretches of it have been protected against the sea by embankments. These have occasionally been breached, as in the flood disaster of January 1953, which was caused by the abnormal concurrence of violent gales and exceptionally high tides.

The marked tidal movement around the British Isles sweeps away much of the sand and mud brought down by the rivers and makes the estuaries of the short British rivers valuable as natural havens. In times past every little cove round the rocky coasts afforded shelter to a fishing village from the waves of the North Sea or the giant rollers of the Atlantic.

Situated for the most part on the border land between Highland and Lowland Britain are the outcrops of the Coal Measures containing nearly all Britain's coal. The older coal workings and collieries are usually found where the coal seams are at or near the surface and where the early miners followed them up the deep valleys into the highlands, as in Yorkshire. The modern deep collieries seek the coal where it lies beneath a cover of younger rocks and amid the farming lands of Lowland Britain. This also is well seen in Yorkshire where the newer pits are ever moving farther and farther east into farming country. Most of the coalfields of Britain, including those of the great Central Lowlands of Scotland, have given rise to industrial regions, so that the old rural pattern of British settlement, based essentially on the occurrence of good soils suitable for intensive farming, has been largely overlaid by the newer urban industrial pattern which is still growing and spreading.

Britain does not suffer from extremes of climate. It lies entirely in middle latitudes and the dominant winds are south-westerly. The weather from day to day depends mainly on a succession of depressions or lows, with intervening ridges of high pressure, which tend to approach the British Isles from the Atlantic and to pass over in an easterly direction. Long periods of settled weather associated with stable air masses are the exception rather than the rule.

Throughout the British Isles winters can usually be described as mild compared with other countries in the same latitude. The warmest parts of the British Isles, the extreme south-west and the Scilly Isles, have an average January screen temperature of 44° to 47° F. Except on exposed mountains, temperatures as low as 10° F. are rare and 0° F. has been recorded only during exceptionally cold winters.

The summers are warm rather than hot. The average for July, usually the warmest month, ranges from 64° F. in the London area to about 55° F. in the extreme north. Temperatures of 90° F. and above are infrequent, and 100° F. has scarcely ever been recorded.

Because the dominant south-west winds are humid this is the rainy quarter and there is a great contrast between the extremely heavy rainfall of the western mountains—in some areas over 150 inches a year—and the relatively dry east coast tracts where the average may be less than 20 inches a year. The average rainfall of the

United Kingdom as a whole is about 40 inches a year. Although the English farmer may complain of droughts, the rainfall is much more regular than in many other countries. A period of as long as three weeks without rain is exceptional, and confined to limited areas.

Although Britain's fogs, to a large extent accentuated by the smoky atmosphere of London and other big cities, have attained world-wide notoriety, severe fogs are nowadays less frequent and are seldom widespread, though occasionally, as in the winter of 1952-53, fog persists for many consecutive days in certain areas. Although on most days there is some sunshine, the hours of sunshine throughout the year are relatively low owing to broken cloud cover; the average per cent of the possible total ranges from less than 20 in the Scottish Highlands to rather more than 40 locally in the south and south-east coasts of England.

With its mild climate and varied soils, Britain has a diverse pattern of natural vegetation cover. When the islands were first settled, oak woodland doubtless covered the greater part of the lowland, giving place to thin forests of Scots fir on higher or sandy ground, interrupted by extensive marshlands and perhaps some open moorland. In the course of the centuries nearly all the forests have been cleared so that forest and woodland now occupy only about 6 per cent of the surface of the country. Midland Britain appears to be well wooded because of the numerous hedgerows and isolated trees.

The hilly moorland with its heather (and cotton grass in the wetter parts), with its numerous hill grasses and the bracken fern, is a semi-natural wild vegetation. Most of Lowland Britain consists either of grass pastureland, representing centuries of careful management, or ploughland. Because the rainfall varies little in quantity from month to month, streams rarely dry up and grass remains green throughout the year.

THE DEMOGRAPHIC BACKGROUND

The people who now inhabit the British Isles are descended mainly from the people who inhabited them nearly nine centuries ago. The last of a long succession of invaders and colonizers from Scandinavia and the continent of Europe were the Normans, a branch of the Norsemen or Scandinavian Vikings who, after settling in northern France, intermarrying with the French, and assimilating the French language and customs, crossed to England and conquered it in 1066.

It is neither possible nor suitable to attempt in this chapter to estimate the relative importance of various early peoples—pre-Celts, Celts, Romans, Anglo-Saxons and the Norsemen, including the Danes—in the ancestry of the present English, Scots, Welsh and Irish. It is significant, however, that over most of England and the Lowlands of Scotland the language which soon came to predominate was English, mainly a marriage of Anglo-Saxon and Norman-French, while the use of Celtic languages persisted in Wales, Cornwall, the Isle of Man, the Highlands of Scotland and Ireland.

The available records do not permit of any precise estimates of the size of population or of the extent or direction of population movement until the beginning of the nineteenth century. It is believed that at the end of the eleventh century the population of Great Britain was of the order of two million, while at the end of the seventeenth a reasonable contemporary estimate put the population of England and Wales at 5½ million and the population of Scotland at about one million. Natural increase was the main factor in this slow growth, though it was kept down in Britain, as in all countries before the development of medical science, by high death rates and particularly by very high infant and maternal mortality. Immigration

from the continent of Europe, e.g., of Flemish weavers, was an influence at certain times.

From the beginning of the nineteenth century, information about the British people, their number, sex, age, geographical distribution, births, deaths, marriages, occupations, language and family structure, is relatively plentiful and reliable. Most of it is derived from two main sources: the periodic census of population which gives a national snapshot at a particular moment of time, and the regular flow of statistical information based on statutory registration of births, marriages and deaths.

The Census

Censuses of the people of Great Britain were taken regularly every ten years from 1801 to 1931. There was no census between 1931 and 1951, but a count of the population by age and sex was a by-product of the national registration which was instituted at the outbreak of the second world war in September 1939.

Censuses were taken on 8th April 1951 by the appropriate authorities in the United Kingdom, the islands of the British Seas and the Republic of Ireland.¹ This was the first simultaneous population count covering all these areas since the censuses of 1911. The co-operation of the Republic of Ireland in arranging a simultaneous census was of particular value, owing to the considerable sea and land traffic and the movement of population between that country and the United Kingdom.

Preliminary reports of the censuses of England and Wales, Scotland and Northern Ireland were obtained, in advance of the main statistical operations, direct from summaries supplied by the local census officers. They are, therefore, provisional, though no material correction to their figures is expected to be necessary. They relate only to the numbers of the population by sex for each country and for administrative areas within each country, except that in the Scottish report there is a table indicating by counties the number and percentage of the population returned as speaking Gaelic. A number of local reports giving final detailed information for major administrative areas (counties, county boroughs or, in Scotland, large burghs) have since been published, but the compilation of detailed final reports on a national scale must await the completion of the local series. To obtain advance information on the many matters covered by the Census, an analysis was made of a representative one per cent sample of the returns for Great Britain.

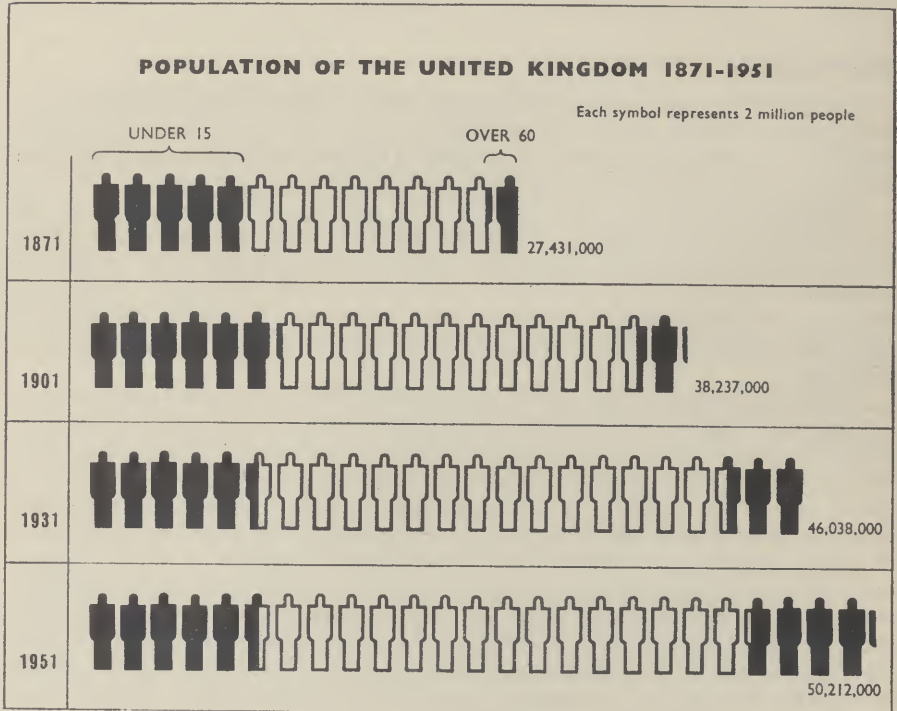
The short demographic account of the United Kingdom given in this chapter is based mainly on census reports (including the 1951 Census One Per Cent Sample Tables) and on the regular returns of births, marriages and deaths, though some use has been made of other special investigations.

Total Population

The enumerated population of the United Kingdom at the census taken on 8th April 1951 was, to the nearest thousand, 50,212,000, excluding 158,000 persons in the Isle of Man and the Channel Islands, which are not strictly parts of the United Kingdom. This represented a population density of about 533 persons per square mile, which is one of the highest in the world and is still rising.

¹ These authorities are: the General Register Office, Somerset House, London; the General Registry Office, Edinburgh; the General Register Division of the Ministry of Finance of the Government of Northern Ireland; the Governments of the Isle of Man, of Jersey and of Guernsey and its associated islands; the Central Statistical Office of the Republic of Ireland.

The population has increased by about 2½ million since mid-1939, by about 4 million since 1931, by about 6 million since 1921 and by about 43 million—or about sevenfold—since 1700. The main causes of this increase were a progressive reduction in death rates and a continuance of high birth rates into the beginning of the twentieth century. The population is still increasing, though relatively slowly, and at the end of 1953 the resident population of the United Kingdom was estimated at 50,674,000.



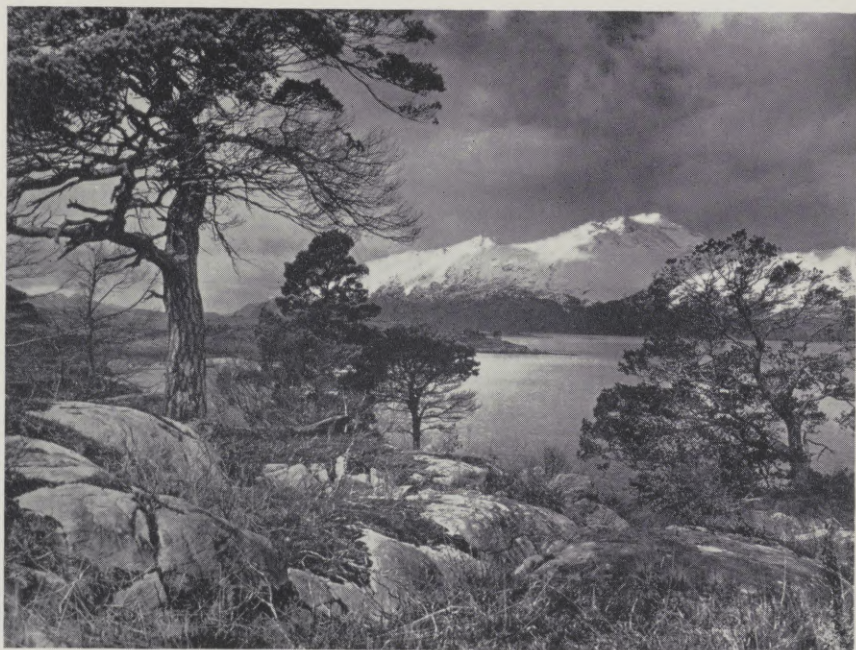
*Birth and Death Rates.*¹ During the nineteenth century the annual birth rate was usually about 3½ per cent. The annual death rate was just over 2 per cent. Both birth and death rates fell over the last 30 years of the century, but the natural increase of the population changed but little. It rose from 1·2 per cent in 1851 to 1·4 per cent in 1881, and fell to 1·1 per cent in 1901.

These fertile years, with their comparatively high death rates in all age groups, produced a population of low average age and at each successive census the population of any age group exceeded the corresponding figure at the preceding census. When, therefore, death rates in all age groups fell by an average of about 33 per cent, as they did between 1880 and 1910, the result was first a very low crude death

¹ Birth and death rates are the ratios of live-births and deaths to the population or population-group concerned. Strictly speaking, the ratios of total live-births and total deaths to total population should be referred to as crude birth and death rates (in contrast with age-specific or other specific rates). In common usage, however, the word 'crude' is often omitted, particularly in reference to birth rates.



On the edge of the South Downs. The village of Poynings, Sussex.



Loch Maree, in the
West Highlands of
Scotland.



Wales. Giltar Point on the South Pembrokeshire Coast.

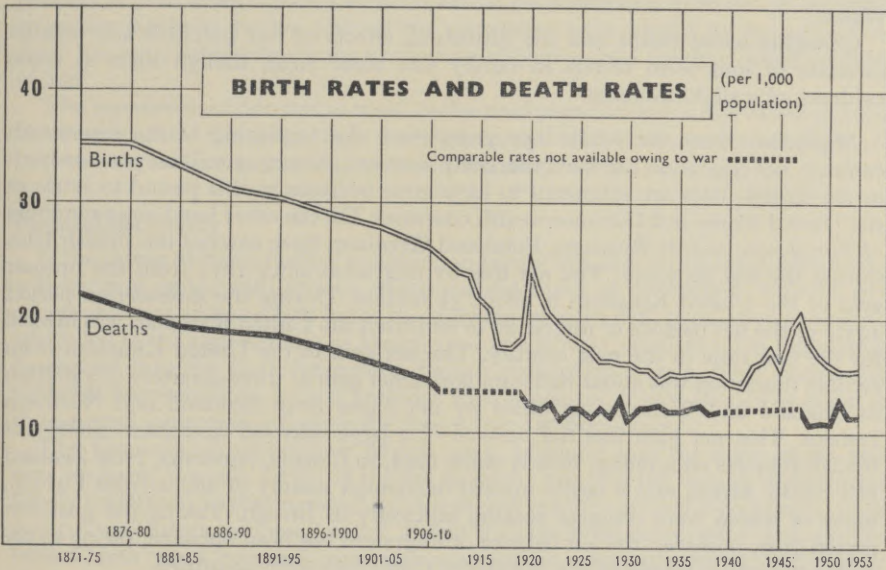


Glen Ballyemon, one of the glens of Antrim, Northern Ireland.

rate which helped to maintain the population increase in spite of a fall in the birth rate, and, secondly, a gradual increase in the average age of the population.

After the first world war the birth rate fell to less than half the nineteenth-century rate. Even so, the population continued to increase slowly, though its average age rose more rapidly.

Owing to the changing age composition, crude death rates remained nearly stationary at around 1·2 per cent though the death rates continued to fall heavily in all age groups, particularly among pre-school children, school children, and adults in their thirties and forties. From 1932 onwards the birth rate steadied itself and thereafter rose slowly up to the outbreak of war, after which all orderly movement was interrupted by the disturbed conditions of the war years. The 1947 birth rate (20·7 per thousand of the population) was the highest since 1921, but the 1948, 1949, 1950, 1951 and 1952 birth rates were progressively lower, though higher than pre-war. The 1953 birth rate was 15·8 per thousand of the population, and was slightly higher than that of 1952.



Mortality Causes. The causes of the decline in mortality include better nutrition, rising standards of living, the advance of medical science, the growth of medical facilities, improved health measures, better working conditions, education in personal hygiene, public and private schemes to make the health services generally available, and the smaller size of the family, which has reduced the strain on mothers and enabled them to take greater care of their children.

Mortality from acute infectious diseases and from tuberculosis and infant and maternal mortality have declined very sharply. Mortality from the main acute infectious diseases of childhood is less than one-thirtieth, and mortality from tuberculosis is less than one-tenth of the rates prevailing in the mid-nineteenth century. Infant mortality has fallen by about 80 per cent since 1900, and between 1934 and 1942 maternal mortality was halved and has since continued to fall. The reported mortality from many of the chronic diseases of middle and old age has risen during the twentieth century, and this rise, though exaggerated by the

improvement in diagnosis, is at least partly real. Medicine has not yet discovered effective measures to combat some of these diseases, and improvement in positive health does not always bring increased immunity or resistance to them.

Fertility Trends. The fall in births during the twentieth century has taken place in spite of an increase in the marriage rate and a drop in the usual age of marriage for women. It is due mainly to a decline in the number of children born per married couple (the average size of the family). Couples married in the mid-Victorian era produced on the average five to six liveborn children. Among the couples married in the years 1925-29 the figure may be estimated at 2.2.

At first the decline in family size was most marked among the professional and salaried classes. Among couples married between 1900 and 1930 the families of manual workers were about 40 per cent larger than those of non-manual workers, but this class difference appears to have been diminishing. The decline in family size has been considerably slower among Roman Catholics than in the rest of the population, and slower in Scotland and Northern Ireland than in England and Wales.

Changing social habits and the disturbing effects of war preclude any reliable estimate of long-term trends in family size since 1939, though there is some evidence of a slight increase.

Migration. Over the whole 150 years since the beginning of the nineteenth century, net migration has been markedly outward. About 25 million persons born in the British Isles are estimated to have gone overseas in this period to settle in the United States and Commonwealth countries. On the other hand large numbers of Europeans, mainly Russians, Poles and Germans, have entered the British Isles during the last 80 years. The net loss by migration since 1871 from the present area of the United Kingdom is about 3½ million. During the inter-censal period 1931-51 the net balance of migration to and from the United Kingdom was inward for the first time in the past century. The net gain to the United Kingdom from civilian migration was about half a million, a net gain of three-quarters of a million to England and Wales being offset by net losses from Scotland and Northern Ireland. This net gain was the balance of a large outward movement mainly of British subjects emigrating, mostly since 1945, to Canada, Australia, New Zealand and South Africa, and a larger inward movement mainly of aliens from Europe, many of whom were refugees seeking sanctuary in Britain. Taking the post-war period only, however, the net balance of migration has been outward, owing to the high net outflow (some 85,000 a year) to Commonwealth countries.

Age Distribution. The continuous fall in death rates and the low inter-war birth rates are beginning to increase the proportion of elderly people, and thus to reduce the proportion of the working population to the total population. The small age groups born between the wars have been and are still coming to maturity. The size of the age groups reaching retirement age increases yearly, as these groups were born during a period of rapidly expanding population. The continuing fall of the death rate in all age groups has still further increased the number of old persons. Moreover, the higher birth rates since 1942 have arrested the compensating fall in the number of dependent children. In December 1953 the age distribution of the United Kingdom was estimated as follows:

Under 15	..	..	22.7 per cent
65 and over	..	..	11.1 per cent
15 to 64	..	..	66.2 per cent

During the present decade an unusually large proportion of the population of

Britain will be between 40 and 50 years of age. Assuming that mortality rates continue to fall, and disregarding migration, it can therefore be shown that:

- (1) over the next 15 years the population of working age will remain roughly constant;
- (2) the number of old people (over 65) will increase over the next 30 years by about three million.

These predictions are independent of the future course of births.

Sex Ratio. Total births of boys usually exceed those of girls by about 5 per cent, but owing to the higher stillbirth rate and infant mortality among boys, and the higher male death rates in all age groups, women have for the past 100 years outnumbered men from adolescence onwards and in the total population. Their predominance increases with age and is now nearly 50 per cent among persons over 70 years of age.

The fall in mortality has affected the sex ratio by increasing the proportion of old persons in both sexes, which has made female predominance in those age groups a weightier factor in the sex ratio of the population as a whole. At the same time there has been a slight rise in the proportion of boys among children under 15 years of age.

The proportion of females to males in the total population has not varied greatly, however, as these two effects have counterbalanced each other. At present there are between six and seven per cent more females than males.

Population Policy

If the future brings a further reduction in family size, the decline of annual births will become rapid, with serious effects on the trend of population. Fear of this eventuality was an important factor in a growing concern with population problems, which led to the appointment in March 1944 of a Royal Commission on Population to inquire into the facts concerning British population trends, their causes and probable consequences; and to 'consider what measures, if any, should be taken in the national interest to influence the future trend of population'.

The Commission reported in March 1949. It found that the main cause, and very probably the only cause, of the fall in family size was the spread of deliberate family limitation. In the course of the nineteenth century powerful economic, social and cultural forces combined to tell against the continued acceptance of an uncontrolled birth rate. Changes in economic organization were reducing the importance of the family as a productive unit, while the Factory and Education Acts were extending the period during which children were an unrelieved expense to their parents. The result was that, in all classes of society except the wealthiest, married couples with young children to support were at an economic disadvantage compared with childless couples; and parents with a family of several young children were at a disadvantage as compared with those with only one or two.

The Commission's recommendations aimed at reducing the economic disadvantages of parenthood. It proposed increased family allowances; reform of income tax to reduce the disadvantages of parenthood for the well-to-do; the building of more houses with more than three bedrooms; the further development of family health and welfare services; and research and education in population questions.

Regional Distribution and Trends

The distribution of the population of the British Isles at the 1951 Census and at certain previous censuses back to 1841 is shown in Table 1.

TABLE 1
POPULATIONS 1841-1951

		1841	1871	1901	1931	1951 ^a
England (excluding Monmouth- shire)	Persons	14,867,882	21,299,771	30,509,234	37,359,045	41,147,938
	Males	7,259,028	10,352,934	14,714,157	17,839,205	19,754,275
	Females	7,608,854	10,946,837	15,795,077	19,519,840	21,393,663
WALES AND MONMOUTH- SHIRE	Persons	1,046,266	1,412,495	2,018,609	2,593,332	2,596,986
	Males	518,558	706,000	1,014,456	1,293,805	1,269,912
	Females	527,708	706,495	1,004,153	1,299,527	1,327,074
SCOTLAND	Persons	2,620,184	3,360,018	4,472,103	4,842,980	5,096,415
	Males	1,241,862	1,603,143	2,173,755	2,325,523	2,434,358
	Females	1,378,322	1,756,875	2,298,348	2,517,457	2,662,057
GREAT BRITAIN	Persons	18,534,332	26,072,284	36,999,946	44,795,357	48,841,339
	Males	9,019,448	12,662,077	17,902,368	21,458,533	23,458,545
	Females	9,514,884	13,410,207	19,097,578	23,336,824	25,382,794
NORTHERN IRELAND	Persons	1,648,945	1,359,190	1,236,952	1,243,000 ^b	1,370,921
	Males	799,711	647,285	589,955	601,000 ^b	667,819
	Females	849,234	711,905	646,997	642,000 ^b	703,102
TOTAL GREAT BRITAIN AND NORTHERN IRELAND	Persons	20,183,277	27,431,474	38,236,898	46,038,357	50,212,260
	Males	9,819,159	13,309,362	18,492,323	22,059,533	24,126,364
	Females	10,364,118	14,122,112	19,744,575	23,978,824	26,085,896
ISLE OF MAN	Persons	47,975	54,042	54,752	49,308	55,213
	Males	23,011	25,914	25,496	22,443	25,749
	Females	24,964	28,128	29,256	26,865	29,464
JERSEY	Persons	47,544	56,627	52,576	50,462	57,296
	Males	21,602	24,875	23,940	23,424	27,282
	Females	25,942	31,752	28,636	27,038	30,014
GUERNSEY AND ASSOCIATED ISLANDS	Persons	28,521	33,969	43,042	42,743	45,474
	Males	12,943	15,433	21,140	20,675	22,094
	Females	15,578	18,536	21,902	22,068	23,380
IRISH REPUBLIC	Persons	6,528,799 ^c	4,053,187	3,221,823	2,933,000 ^d	2,960,593
	Males	3,222,485	1,992,468	1,610,085	1,497,000 ^d	1,506,597
	Females	3,306,314	2,060,719	1,611,738	1,436,000 ^d	1,453,996
TOTAL	Persons	26,836,116	31,629,299	41,609,091	49,113,870	53,330,836
	Males	13,099,200	15,368,052	20,172,984	23,623,075	25,708,086
	Females	13,736,916	16,261,247	21,436,107	25,490,795	27,622,750

Source: Census Reports.

(^a) The figures for England, Wales and Monmouthshire, Isle of Man, Jersey, Guernsey and Associated Islands given in this column are provisional.

(^b) Estimate (Censuses were taken in 1926 and 1937, but not in 1931).

(^c) The Military and Navy are not included in these figures.

(^d) Estimate (Censuses were taken in 1926 and 1936, but not in 1931).

The populations of England, Wales, Scotland and Northern Ireland and of each of the principal regions of England were in every case greater in 1951 than in 1931, whereas in the period 1921-31 the populations of Wales, Scotland and Northern Ireland had declined. The greatest increases were in the eastern, southern, midland and south-western districts of England, and in Northern Ireland. The smallest increase was in Wales.

The population of the United Kingdom taken as a whole is predominantly urban and suburban. During the nineteenth century, when the labour demands of newly developing industry drew great numbers from the countryside to the towns, the urban element continuously and rapidly outgrew the rural element. At the end of the nineteenth century 75 per cent of the British population was living within the boundaries of urban administrative areas and the large conurbation (see footnote (d) Table 2) was already the dominant type of British community. By 1911 the economic and social limits of these conurbations extended far beyond the administrative boundaries of the cities which formed their core, owing to the building of outer suburbs which linked up neighbouring towns. Since 1921 nearly 40 per cent of the population has lived in the seven great conurbations whose centres are the cities of London, Glasgow, Birmingham and Wolverhampton, Manchester, Liverpool, Leeds and Bradford, and Newcastle upon Tyne.

During the twentieth century the general character of urbanization changed, the later increases in urban areas being relatively much smaller and much more due to the natural growth of the towns than to the withdrawal of rural population. Moreover, two new and decided trends became apparent: first, the outer rings of conurbations and the suburbs of large cities began to increase in population much more rapidly than the large cities themselves; secondly, there was a considerable migration, particularly of young adults, to the expanding new light industries and suburban residential areas springing up in and around London and Birmingham. This movement was intensified by the heavy unemployment of the inter-war years which affected with particular severity the textile and heavy engineering industries of Scotland, Northern England and South Wales.

The combined effect of these two trends was that the outer rings of the London and Birmingham conurbations increased most in population while the remoter country areas and some industrial towns of Scotland, Wales and Northern England declined. In urban areas in England and Wales, the medium-sized towns of between 50,000 and 100,000 inhabitants increased most rapidly, while the populations of very large or very small towns tended to decline.

The second world war halted suburban building and for a time reduced the population of conurbations and large cities, but by the end of the war many people had returned to the neighbourhood of their pre-war homes. In 1951 many large cities and towns had larger populations than in 1939, but the populations of others, notably London, were reduced. The decrease in the County of London was about two-thirds of a million, and in spite of an increase in the population of the outer ring, the population of Greater London in 1951 (8,346,000 to the nearest thousand) was 382,000 less than in 1939. The populations of many urban and rural areas surrounding Greater London have continued to increase very rapidly.

After 1939—and therefore probably at least in part as a result of the war—there was a marked change in the relative rates of growth of rural and urban areas as a whole, and of small, medium-sized and large towns. For the first time in 100 years the population of administrative rural areas grew faster than that of urban areas, while within urban areas the greatest growth occurred in towns of 40,000 to 75,000 inhabitants, and smaller towns appeared to be increasing almost as fast.

Table 2 shows the distribution of the population by urban and rural districts and the populations of the standard administrative regions, of the seven major conurbations and of 16 large cities.

TABLE 2
DISTRIBUTION OF THE POPULATION (a)

Thousands

	1921	1931	1939(b)	1951
Urban and rural districts				
England and Wales:				
Urban districts	30,035	31,952	34,183	35,322
Rural districts	7,851	8,000	7,277	8,423
Scotland:				
Cities and burghs ..	3,311	3,362	3,525	3,563
Landward areas ..	1,572	1,481	1,482	1,533
Northern Ireland:				
Urban districts ..	638(c)	678(c)	684	728
Rural districts ..	619(c)	602(c)	611	643
Standard regions of England and Wales				
Northern	3,020	3,041	3,003	3,140
East and West Ridings ..	3,726	3,920	3,976	4,096
North Western	6,014	6,196	6,237	6,444
North Midland	2,759	2,946	3,065	3,378
Midland	3,501	3,743	3,987	4,422
Eastern	2,215	2,424	2,691	3,096
London and South Eastern	9,495	10,339	11,046	10,902
Southern	1,954	2,135	2,317	2,648
South Western	2,546	2,615	2,673	3,021
Wales	2,656	2,593	2,465	2,597
Conurbations(d)				
Greater London	7,488	8,216	8,728	8,346
West Midlands	1,773	1,933	2,079	2,237
West Yorkshire	1,614	1,655	1,658	1,692
South East Lancashire ..	2,361	2,427	2,421	2,421
Merseyside	1,263	1,347	1,357	1,382
Tyneside	816	827	825	835
Central Clydeside ..	1,638	1,690	1,783	1,758

TABLE 2 (contd.)

DISTRIBUTION OF THE POPULATION (a)

Thousands

	1921	1931	1939(b)	1951
Cities				
Birmingham	919	1,003	1,053	1,112
Liverpool	803	856	822	790
Manchester	730	766	728	703
Sheffield	491	512	522	513
Leeds	458	483	497	505
Bristol	377	397	419	442
Nottingham	263	269	279	306
Kingston upon Hull	287	314	318	299
Bradford	286	298	288	292
Newcastle upon Tyne	275	283	293	292
Leicester	234	239	263	285
Stoke-on-Trent	240	277	271	275
Coventry	128	167	220	258
Glasgow	1,034	1,088	1,128	1,090
Edinburgh	420	439	472	467
Belfast	415(c)	438(c)	439	444

Source: Census Reports.

(a) Population of the areas as they were in each year except for conurbations, the figures for which relate to roughly the same geographical areas throughout.

(b) Mid-year estimate.

(c) 1926 and 1937 census figures.

(d) Areas of urban development where a number of separate towns have grown into each other or become linked by such factors as a common industrial or business interest or a common centre for shopping or education.

Language

In England, Wales, Scotland and Northern Ireland, English is the language predominantly spoken. In Wales, however, Welsh, a form of British Celtic, is the first language of most of the population in some of the central and northern counties and (according to the Census One Per Cent Sample Tables) was spoken by about a quarter of the population at the time of the 1951 census. According to the 1951 census of Scotland nearly 100,000 persons, mainly in Ross and Cromarty, Inverness, Argyll, and Lanark, speak the Scottish form of Gaelic,¹ while a few scattered families in Northern Ireland speak the Irish form of Gaelic. The Manx and Cornish varieties of Celtic are no longer effectively living languages, although Manx is used in addition to English for certain official pronouncements in the Isle of Man.

French is still the official language of Jersey, but, in Guernsey, English is now

¹ Most of the islands off the west coast of Scotland where Gaelic is spoken are included in the counties of Ross and Cromarty, Inverness, and Argyll.

used for all official proceedings. English is generally spoken throughout the Channel Islands, although a Norman French patois is still spoken there by some people.

Social Patterns

A general summary of trends in social organization, similar in scope to the foregoing summary of population trends, is not practicable. Human relations and behaviour are too complex and too little susceptible to precise statistical treatment, while sources of sociological information are incomplete and not always reliable. It may be useful, however, to review some of the evidence relating to the structure of British households and the extent and use of leisure in Britain in order to provide a background for the consideration, in later chapters, of a number of planning problems, particularly those of town planning, housing and transport.

Number and Composition of Households

In Great Britain, as in other countries, most people live as members of private households (usually families). Less than 5 per cent of the population was enumerated by the censuses of 1911, 1921, 1931 and 1951 in institutions (hotels, schools, hospitals, etc.).

In 1911 there were about nine million private households¹ in Great Britain. By 1951, according to the Census One Per Cent Sample Tables, there were about 14½ million households, an increase of about 60 per cent. This expansion seems out of proportion to the 19 per cent increase in the total population for the same period. It was in fact comparable with the increase in the population of persons over 24 years old and the slightly larger increase in the number of married persons. In other words, the increasing age of the population meant more but smaller families. The average size of household in Great Britain fell from 4.5 persons in 1911 to 3.2 in 1951. In England and Wales the number of persons living in households of one or two persons almost tripled between 1911 and 1951. At the end of this period such households constituted about 40 per cent of private households and comprised about 20 per cent of the population in private households. About two-thirds of the persons living alone in 1951 were 60 years of age or over, while in at least 43 per cent of families of two persons, at least one member of the household was 60 or over.

It has been difficult to increase the number of separate dwelling-places (houses or flats) sufficiently rapidly to overtake the increasing number of private households, and this difficulty was aggravated by the suspension of house-building and destruction of property during the second world war. There were in 1951 only some 13.3 million structurally separate dwelling-places in Great Britain, so that over 2 million households had to share a home (see page 321). It is unofficially estimated that about three-quarters of all dwellings in Great Britain are terraced or semi-detached houses (usually of 4 to 6 dwelling-rooms including bedrooms) while the remaining quarter consists of detached houses and flats in approximately equal numbers. The proportion of flats is greatly above average in Scotland (estimated at about 60 per cent) and considerably above average in London (estimated at 17 per cent).

Of the 14½ million private households in Great Britain, 11½ million were estimated in the 1951 Census Sample to be of the simplest type, comprising married couples or widowed persons with their children, if any, or persons living alone. More specifically, they comprised 3.2 million married couples with no children, 900,000 widowed persons living alone, 6.9 million married couples or widowed persons with children of any age, 600,000 single persons living alone. Over a third

¹ Counting persons living alone as one-person households.

of all married couples living alone were 60 years old or over; less than a quarter of the married couples under 40 years of age in these simplest types of household had no children; and the majority of the single persons living alone were over 40 years old.

Nearly another million households were of these simple types except for the inclusion of parents or non-married brothers or sisters of the head of the household. Only 2 million households contained persons less closely related to the head than parent or brother or sister, or contained non-relatives. There were nearly a million families consisting of married couples, or married or widowed persons with children, who were without their own homes, and the majority of these were living in the homes of their parents. Apart from these satellite family groups, 1,102,700 households contained an aggregate of 1,240,000 other persons unrelated or distantly related to the head of the household, the bulk of whom were presumably of the status of boarders. Of these more than half a million constituted sole individual additions to the more normal types of families with married heads. There were nearly 300,000 households consisting of two persons who were distantly related or were unrelated to one another.

Over 8 million households (57 per cent of all households) were estimated in the 1951 Census Sample Tables to be without children under 16, while another 3·1 million contained only one child.

In Great Britain as a whole it was estimated that, in 1951, 180,000 households had resident domestic servants, who numbered, in all, 205,000. Of these, about half were in households of one or two other persons, and over a quarter were in the households of single or widowed or divorced persons, 40 years old or over, living alone except for a servant. A sample analysis of 1931 census data covering only England and Wales estimated 706,800 resident domestic servants in private households, which compares with 178,000 in England and Wales in 1951.

Work and Leisure

The great majority of British males over 15 years of age are in full-time gainful employment, and the majority of females are either housewives or in full-time gainful employment (see p. 226). In many cases housewives also undertake part-time or even full-time employment.

Agreed hours of full-time work for the majority of occupations are usually about 44 hours a week, with some variation on each side. Actual weekly hours worked by men average a little longer owing to overtime working, and actual hours worked by women and girls average a little less (see p. 243). To these hours must often be added the time taken in travel to and from work. According to a sample survey made in August 1943, over 75 per cent of wage earners in large towns spent half an hour a day travelling to and from work, mainly by public transport, while over 30 per cent spent over an hour in such daily travel. This survey was made in exceptional war-time conditions, and the average time taken in travelling to work may have slightly decreased outside Greater London in spite of the continuing movement of population away from the centre of large towns. In Greater London, however, a sample survey made in 1949 showed that the average time taken in travelling to and from work was 88 minutes a day.

In addition, there is often a long journey from home to the main shopping centre in both urban and rural areas. According to a sample survey made in 1946 it averaged about 18 minutes each way, and in many rural areas took much longer. In most areas there are, of course, a few shops much closer at hand. Most housewives in urban areas go to the shopping centre at least once a week.

One consequence of the distance from home to work and to shops is the growth

of the habit of eating away from home. Food rationing restrictions during the second world war and the early post-war years tended to increase this habit, which has also been encouraged by the establishment of factory and office canteens and the provision of midday meals in schools. About half the total number of school children and many adults take some meals regularly outside their homes.

According to a sample survey made in 1947, only 6 per cent of housewives employ any paid help, and only 1 per cent¹ have a resident servant. Housewives appear, in general, to have rather less leisure and considerably fewer periods of continuous leisure of over one hour than other persons in Britain:

Most employees, in addition to 1½ or 2 days' holiday each week and 6 statutory public holidays a year (see p. 243), get at least one week's continuous holiday in the year. In fact, about half the population take at least a week's holiday away from home every year, mostly in July and August. Some two-thirds of these spend their holiday by the sea in Britain. About 4½ per cent of holidaymakers go abroad.

At least a quarter of the adult population is interested in playing or going to watch outdoor sports²; the most popular are Association football and cricket. In England alone about 23,000 football clubs—mainly amateur clubs—are affiliated to the English Football Association, excluding another 9,000 clubs in the armed forces, universities and schools. Some 750,000 youths and men play in weekly football matches during the winter months, apart from those playing in informal games; spectators at professional football matches number between one and two million weekly. Cricket is played by children, youths and men of every walk of life, especially in England. Attendance at first-class cricket matches is somewhat smaller than at professional football matches, but the 'Test' matches with the cricket teams of Commonwealth countries have become of nation-wide interest. Cricket is less popular in Scotland, where golf has pride of place. Race meetings throughout the country draw large crowds, while many other sporting events, for instance rugby football matches in the winter months and, in the summer, tennis tournaments, especially the annual lawn tennis championships at Wimbledon, have their smaller but devoted public. Amateur athletic associations flourish throughout the country, and every form of outdoor pursuit from swimming, hiking, cycling and motoring³ to hunting, shooting and fishing has an enthusiastic following, though many sports, such as sailing, gliding, and rock-climbing, are practised only by relatively few keen amateurs.

Although climatic and physical conditions in Britain afford few opportunities for ski-ing and mountaineering, numbers of people go abroad regularly for these pursuits, and the whole nation was stirred by the news of the first ascent of Mount Everest on 29th May 1953 by members of the British Expedition.

The spread of television has added a vast new audience of indoor spectators to the crowds who go to watch sports and other outdoor events. In June 1954 more than one household in five had a television set and viewers are fairly evenly distributed among all sections of the population, irrespective of income. The number of television licences is increasing rapidly; in the year from June 1953 to June 1954

¹ This estimate has been shown to be approximately correct by the analysis of households employing servants made in the 1951 Census Sample Tables (see p. 15).

² A recent social survey of Derby showed that half the adult population in that town, including two-thirds of the men, were at least occasional spectators of sporting events, and that over one-fifth, including over half those under 25 years of age, actually participated, most of them regularly.

³ There are about 5 million motor vehicles licensed at the height of summer, of which over 2½ million are cars and over one million are motor cycles. Many of the cars, however, are used partly, if not primarily, for business purposes.

the number rose by almost a million (from 2,415,305 to 3,411,046). Some districts, however, are still outside the regular range of the transmitters (see p. 370).

Television has caused a considerable fall in cinema attendances and has materially affected leisure habits in many ways. The cinema remains, however, the most popular form of indoor entertainment outside the home. A third of all adults, including two-thirds of those under 25 years of age and one out of two school-children go to the cinema, on average, at least once a week. Attendances at theatres are much smaller, though most people visit them occasionally. There are only some 400 to 500 theatres in the country, compared with over 4,500 cinemas, yet the recent survey of Derby showed that half of the adult population of that town went to the theatre more than twice a year. About a quarter of the adult population of Derby sometimes went to concerts, and in the country as a whole there is known to be an enthusiastic and growing public for concerts, ballet and opera.

Dancing is popular especially with those under 25 years of age. There have been estimated to be some 400 to 500 ballrooms in Great Britain, and dances and other social gatherings are also often held in other halls or in club-rooms. The Derby Survey showed that in that town nearly half the adult population, including 60 per cent of the men, belonged to a social, sporting or cultural club and that over a third of them visited such a club at least once a month.

One traditional social rendezvous, the public house, has maintained and even increased its popularity, although there has been a marked decrease in drunkenness and in consumption of alcohol per head since the nineteenth century. The public house now attracts a very wide circle of casual customers (both men and women) as well as many 'regulars', who meet for a drink and a chat, and perhaps to play some traditional public house game such as darts. On the other hand many people, especially the married and the elderly, spend much of their leisure at home—reading, listening to the radio, viewing television, or pursuing hobbies. The most widespread hobbies are practical, for example, knitting and needlework for women and gardening for men. The standard of town and country gardens is high.

A number of people, young and old, find their main free-time interest in some form of group activity of a serious nature, connected, for example, with the churches, trade unionism, politics, social welfare and reform, or with cultural pursuits such as amateur dramatics or music. People with such interests are, of course, in a minority,¹ but they constitute an important and characteristic feature of British life and, indeed, an essential ingredient in the working of British democracy.

¹ The figures from the Derby Survey show that 8 per cent of adults in that town belong to intellectual or cultural clubs or societies, 11 per cent are members of some political party, 13 per cent go to church every week (although 9 out of 10 homes have a bible), and 3 per cent hold some church office.

II. GOVERNMENT AND ADMINISTRATION

THE MONARCHY

The United Kingdom is a monarchical state, formed originally in the ninth century by the unification of all England under a Saxon king, and later expanded by the conquest of Wales and Ireland¹ by kings of England and by the dynastic union of the English and Scottish thrones in the person of James I of England and VI of Scotland. The United Kingdom is also a member nation of the Commonwealth, of which the Queen is the head.

The form of the Royal title is varied for the member countries of the Commonwealth to suit the particular circumstances of each. India, as a republic, owes no allegiance to the Crown, but accepts the Queen as the symbol of the free association of the member nations and, as such, as the head of the Commonwealth.²

Agreement was reached at a meeting of Commonwealth representatives in December 1952 on the form of the Queen's title in the various parts of the Commonwealth, and legislation was passed by the Parliaments concerned to enable the necessary changes to be made. The Royal Title in the United Kingdom is: 'Elizabeth the Second, by the Grace of God of the United Kingdom of Great Britain and Northern Ireland and of Her other Realms and Territories Queen, Head of the Commonwealth, Defender of the Faith'.

The seat of the monarchy is in the United Kingdom. In the other member nations of the Commonwealth which owe allegiance to the Crown, the Queen is represented by a Governor-General appointed by the Crown on the advice of the ministers of the country concerned. The function of the Governor-General is to act in relation to the administration of public affairs according to the constitutional practice obtaining in his country in regard to the exercise of the powers of the Crown. As the Queen's representative he is wholly independent of the United Kingdom Government; and he is sometimes a national of the country in which he holds office. In the Dependencies—the Colonies, the Protectorates and the Trust Territories—the Queen is represented by Governors, High Commissioners or Residents, who are appointed by the Crown and perform the constitutional functions of the Crown, but who have in addition varying executive and legislative powers, and are responsible to the United Kingdom Government for the good government of the countries concerned.

Each of the member nations of the Commonwealth has its own separate constitution, governed by different laws and customs, and subject to different powers of change. The scope of this chapter will be confined to a description of one of those nations—namely the United Kingdom—and the machinery and processes through which its constitution works.

Succession

The monarchy is the most ancient secular institution in the United Kingdom. Its continuity has been broken only once in over a thousand years; and in spite of

¹ In 1920 the United Kingdom was diminished by the separation of the 26 counties of southern Ireland.

² The position of Pakistan will be similar when its new republican constitution is adopted.

interruptions in the direct line of succession, the hereditary principle upon which it was founded has never been abandoned. Queen Elizabeth II is a descendant of the Saxon king Egbert, who united all England in 829.

The permanence of the monarchy has been ascribed to the fact that the constitution of the United Kingdom is governed by conventions rather than by formal law. Conventions are those parts of the rules and practices under which a system of government works, which are not part of the law of the land in the sense that violation of them may lead to proceedings in a court of law, but which are nevertheless indispensable to the machinery of government. Since they are based upon usage, they are not absolutely binding; and they may therefore be adapted to changing conditions without serious disturbance to existing organs and forms.

The title to the Crown derives from the Act of Settlement, 1701, which laid it down that 'the Crown . . . shall remain and continue to the said most excellent Princess Sophia¹ and the heirs of her body being Protestants'. Subsequent Succession to the Crown Acts have confirmed this declaration; and although succession is not bound to continue in its present line, it cannot now be altered (under a provision of the Statute of Westminster, 1931) except by common consent of the member nations of the Commonwealth which owe allegiance to the Crown.

The inheritance of the Crown is governed by rules of descent, which provide that the sons of the Sovereign are in Order of Succession to the Throne, or, if there are no sons, the daughters in order of their own seniority. When a daughter succeeds, she becomes Queen-Regnant, and powers of the Crown or Royal Prerogatives² are vested in her as fully and effectively as though she were a king. By convention, the consort of a king takes the rank and style of her husband; but the converse does not apply, and the constitution has never attached any special rank or privileges to the husband of the Queen-Regnant.

Accession

There is no interregnum between the death of one Sovereign and the accession of another. Immediately on the death of his or her predecessor the new Sovereign is proclaimed at an Accession Council to which all members of the Privy Council are summoned. The Lords Spiritual and Temporal, the Lord Mayor, Aldermen and other leading citizens of the City of London, and the High Commissioners in London of the member nations of the Commonwealth are also invited to attend.

Coronation

The coronation of the Sovereign follows the accession after an interval which may last for a year or more. The ceremony, which has frequently been modified in detail to bring it into conformity with the customs of the time, has remained much the same in substance for nearly a thousand years. The service used at the coronation of Queen Elizabeth II was derived from the service used at the coronation of King Edgar at Bath in the year 973.

The coronation service is held at Westminster Abbey in the presence of representatives of the peers, the Commons and all the great public interests in the United Kingdom, of the Prime Ministers and leading members of the other Commonwealth countries, and of representatives of foreign States.

¹ The Electress of Hanover, grand-daughter of James I.

² 'The residue of discretionary or arbitrary authority which at any time is legally left in the hands of the Crown.' Professor A. V. Dicey's *Law of the Constitution*.

Acts of Government

The Queen is the personification of the State. In law, she is the supreme authority, an integral part of the legislature, the head of the judiciary in England and Wales, Northern Ireland, and Scotland, the commander-in-chief of all the armed forces of the Crown and the temporal head of the established Church of England. In practice, as a result of a long evolutionary process, during which many restrictions on the Royal Prerogative have been imposed, these powers have changed from being the weapon of the monarchy to being the means of giving effect to the public will. Today, the Queen acts only on the advice of her ministers which she cannot constitutionally ignore. She reigns, but she does not rule. The United Kingdom is governed by Her Majesty's Government in the name of the Queen.

Within this framework, and in spite of the fact that the trend of legislation during the past hundred years has been to assign powers directly to ministers without any necessity for royal intervention, there are still important acts of government which require the participation of the Queen.

The Queen summons, prorogues and dissolves Parliament; she opens the new session with a speech from the throne; and she must give Royal Assent before a Bill which has passed all its stages in both Houses of Parliament becomes a legal enactment. The Queen is 'the fountain of justice', and in spite of the fact that the judiciary is now completely independent of the executive 'all jurisdictions of the courts are either indirectly or immediately derived from the Crown'. As 'the fountain of honour', the Queen makes appointments to peerages, knighthoods and other honours; to all important State offices,¹ including judges, officers in the armed forces, governors, and diplomats; and to all leading positions in the established Church of England. The Queen's consent and approval are required before a minister can take up office or a Cabinet be formed. In the realm of international affairs, by virtue of her pre-eminence as head of the State, the Queen has the prerogative power to conclude treaties, to cede or accept territory, to declare war and to make peace.

Other prerogative powers of the Crown relate to the creation of corporations by Royal Charter; the erection and supervision of harbours; the guardianship of infants and persons of unsound mind; the administration of charities; coinage; the grant of franchises, e.g., markets, ferries and fisheries; the right to treasure trove; and the sole right of printing or licensing others to print the Bible, the Book of Common Prayer and State papers.

There is clear ministerial responsibility for all these acts of government, as is shown in the three ways in which the royal will can be constitutionally expressed: by Order-in-Council (see pp. 32-33) made 'by and with the advice of the Privy Council'; by Order, Commission or Warrant under the sign manual, which generally bears the signature of one or more responsible ministers; or by Proclamation, Writs, Patents, Letters or other documents under the Great Seal affixed by the Lord Chancellor in obedience to a Royal Warrant countersigned by a minister.

Ministerial responsibility for the exercise of powers by the Crown does not detract from the importance of the participation of the Sovereign in the smooth working of government; for although the Queen has no personal authority and must show complete impartiality in every field, she must be informed and consulted on every aspect of the national life to the widest possible extent. The Queen holds meetings of the Privy Council, gives audiences to her ministers and other

¹ In 1901 the Demise of the Crown Act provided that the holding of any such office should not be affected by the death of the Sovereign and that no fresh appointment should be necessary.

THE ROYAL FAMILY

QUEEN VICTORIA, 1819-1901
 m. Prince Albert of Saxe-Coburg and Gotha (Prince Consort)

Pss. Alice, 1843-1878
 m. Grand Duke Louis of Hesse

3 brothers and
 4 sisters

Pss. Victoria, 1863-1950
 m. Marquess of Milford Haven

2 brothers and
 4 sisters

George Louis, Pss. Alice, b. 1896, m. Pr. Earl Mountbatten,
 2nd Marquess, 1885, m. Pr. 1899, m. Cr. b. 1900, m.
 1892-1938, m. Andrew of Prince of
 Cse. Nacsojda Greece Edwina Ashley
 of Russia Sweden

Lady Pamela, b. 1929
 Lady Patricia, b. 1924, m.
 Baron Brabourne

2 sons

Philip, Duke of Edinburgh, b. 1921, m. Pss. ELIZABETH (QUEEN ELIZABETH II)

4 sisters

Order of Succession to the Throne
 Duke of Cornwall
 Princess Anne
 Princess Margaret
 Duke of Gloucester
 Prince William
 Prince Richard
 Duke of Kent
 Prince Michael
 Princess Alexandra
 Princess Royal
 Earl of Harewood
 Viscount Lascelles
 Hon. James Lascelles
 Hon. Gerald Lascelles
 Henry Ulrick Lascelles

QUEEN VICTORIA, 1819-1901
 m. Prince Albert of Saxe-Coburg and Gotha (Prince Consort)

KING EDWARD VII, 1841-1910
 m. Pss. Alexandra of Denmark (QUEEN ALEXANDRA, 1844-1925)

KING GEORGE V, 1865-1936
 m. Pss. Mary of Teck (QUEEN MARY, 1867-1953)

Henry, Duke of Gloucester, b. 1900, m. Lady Alice Montagu Douglas-Scott

Edward, Duke of Kent, b. 1935
 Pr. John, b. 1905-1919
 Pr. Alexandra, b. 1942
 Pr. Michael, b. 1942

Pr. William, b. 1941
 Pr. Richard, b. 1944

Hon. Gerald Lascelles, b. 1924
 m. Angela Dowding
 Henry Ulrick Lascelles, b. 1953

In the Order of Succession the sons of the Sovereign and their descendants have precedence over the daughters. The daughters and their descendants have precedence over lateral lines.

KING EDWARD VIII (abdicated 1936), m. Wallis Simpson

KING GEORGE VI, 1895-1952, m. Lady Elizabeth Bowes-Lyon (QUEEN ELIZABETH The Queen Mother)

Mary, Pss. Royal, b. 1897, m. Earl of Harewood (d. 1947)

Pss. Margaret, b. 1930
 Philip, Duke of Edinburgh

Pss. Anne, b. 1950.50
 Charles, Duke of Cornwall, b. 14.11.48

Earl of Harewood, b. 1923, m. Marion Stein
 Hon. James Lascelles, b. 1953

DATES RELATING TO QUEEN ELIZABETH II

Marriage: 20 Nov. 1947
 Accession to throne: 6 Feb. 1952
 Coronation: 2 June 1953
 Official Birthday Celebration: Early in June

holders of office at home and overseas, receives accounts of Cabinet decisions, reads dispatches and signs innumerable State papers.

Such is the significance attached to these royal functions that provision has been made by Acts of Parliament for a Regent to be appointed to fulfil them if the Sovereign is totally incapacitated, or if the Heir Apparent or the Heir Presumptive is under the age of eighteen on accession to the throne. In the event of the Sovereign's partial incapacity or absence abroad, provision is made for the appointment of Counsellors of State to carry out those of the royal functions which are delegated to them. The latest of these Acts—the Regency Act, 1953—laid down that the first potential Regent should be the Duke of Edinburgh and thereafter the Princess Margaret and then those in succession to the throne who are of age.

Ceremonial

Ceremonial has always been associated with the kings and queens of the British Isles, and in spite of the changes that have taken place with the altered outlook of both the Sovereign and the people, certain customs and usages are the same today as they were many centuries ago.

The formal ceremony of Presentation still takes place, although now at the Afternoon Presentation Parties held by the Queen, which have superseded the former Courts. Royal marriages, the birth of royal children and royal funerals are still marked by ancient ceremonial, although to a lesser degree than in former days. The birthday of the Sovereign, formerly the occasion of many royal and public functions, is today officially celebrated early in June by Trooping the Colour on the Horse Guards Parade.

State banquets still take place when a foreign monarch or head of State pays a visit to the United Kingdom; investitures are still held at Buckingham Palace, although today honours may be bestowed without the personal attendance of the recipient upon the Sovereign. State processions are still an integral part of royal ceremonial; they grace such social occasions as the Ascot Race Meeting, known as Royal Ascot; and they add significance to the opening of Parliament, when the Queen drives in state from Buckingham Palace.

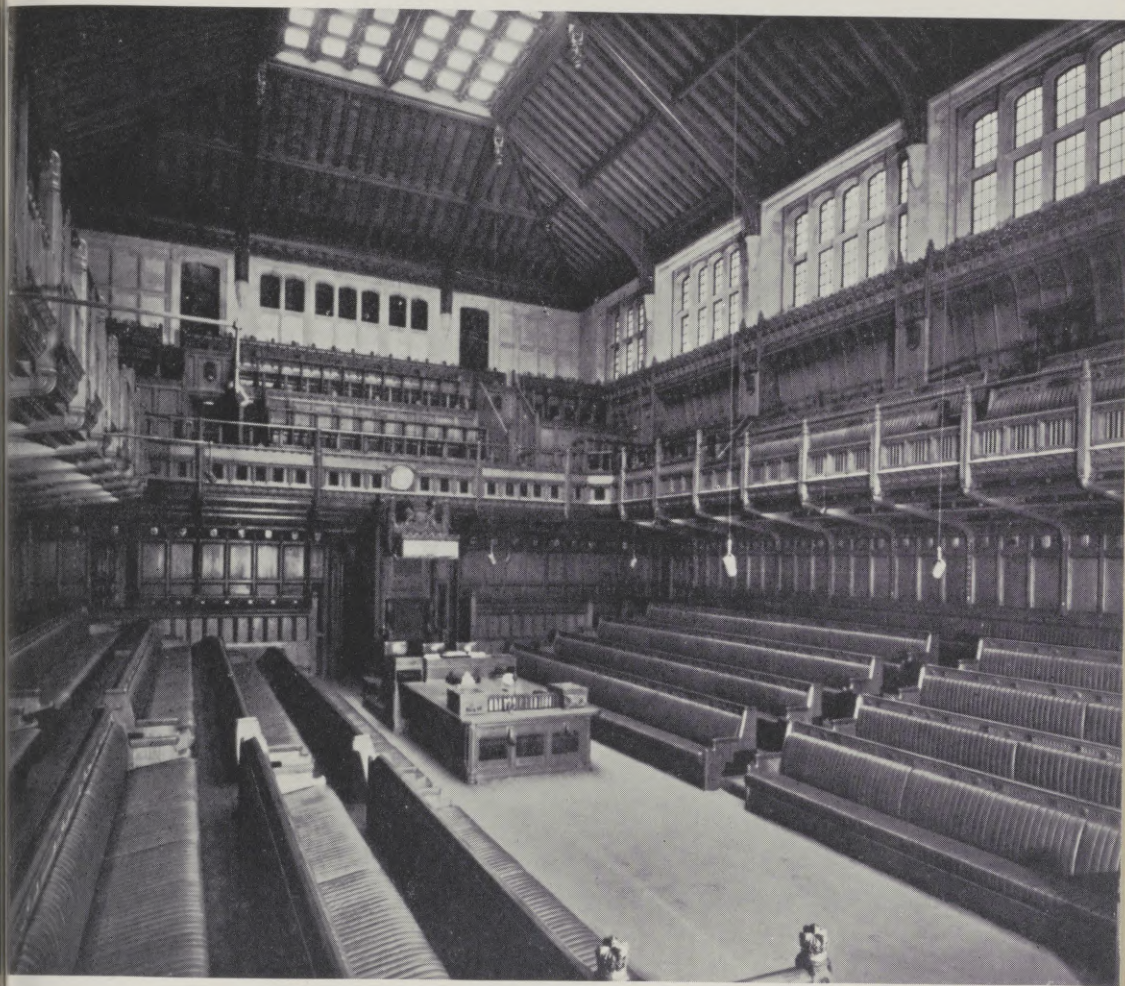
The Sovereign is the leader of society by order of general precedence dating from the fourteenth century and sustained until the present day by royal ordinances, ancient usage, established custom and the public will. The Queen's presence at the inauguration of scientific, artistic, industrial, and charitable works of national importance ensures nation-wide interest and support.

PARLIAMENT

The supreme legislative authority in the United Kingdom is the Queen in Parliament, that is to say the Queen and the two Houses of Parliament—the House of Lords and the House of Commons—which together represent all the elements in the nation.

The three sections of 'Parliament' in this sense are outwardly separate: they are constituted on entirely different principles; they do different work in different places and they meet only on occasions of great symbolic significance such as the Coronation or the opening of Parliament by the Queen in person, when the Commons are summoned by the Queen to the House of Lords. As a law-making organ of State, however, Parliament is a corporate body and cannot legislate without the concurrence of all its parts, except in the case of measures passed under the Parliament Act, 1949.¹

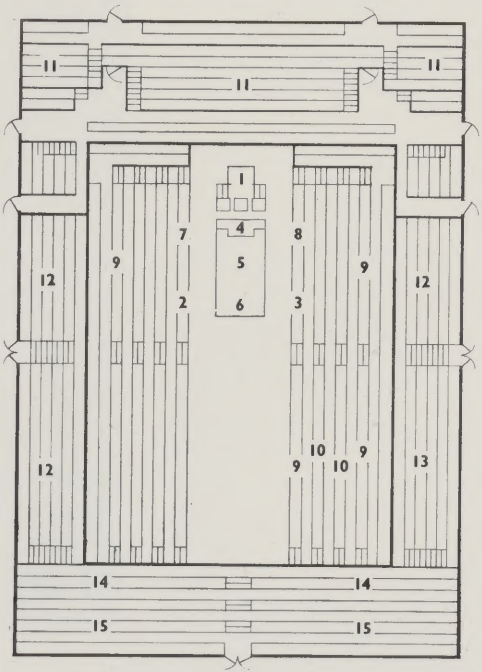
¹ See p. 30.



The House of Commons Chamber. The Speaker's chair is behind the table. Government members sit on the Speaker's right, Opposition members on his left.

A Plan of the House of Commons:

1. The Speaker.
2. The Prime Minister.
3. Leader of the Opposition.
4. Clerks of the House.
5. The Table.
6. The Mace.
7. Government Front Bench, occupied by Ministers.
8. Opposition Front Bench.
9. Back Benches.
10. Minor Opposition Parties.
11. Press Gallery.
12. Members Gallery.
13. Commonwealth Gallery.
14. Peers and Distinguished Strangers Gallery.
15. Strangers Gallery.





The Cabinet Room
at No. 10 Downing
Street, London, the
residence of the Prime
Minister.



Local Government. Salisbury
City Council in session.

There are other Parliaments in Britain besides the Parliament at Westminster; for instance, the ancient legislatures of the two Channel Island Bailiwicks and of the Isle of Man, each of which legislates on domestic matters although the United Kingdom Parliament retains the supreme authority.¹ There is also the Northern Ireland Parliament, created to perform specific functions by an Act of the United Kingdom Parliament.² The Northern Ireland Parliament consists of the Governor (as representative of the Queen), a Senate and a House of Commons, and is federal in type, certain legislative and fiscal powers being reserved to the Parliament of the United Kingdom. The Parliament at Westminster, however, has no rival authority, and within practical limits there is nothing that it cannot legally do.

By the passing of the Parliament Act, 1911, the normal life of a Parliament was fixed at five years (although it may be and often is dissolved in less than that time); and since one Parliament cannot bind its successor (for otherwise the succeeding Parliament would not be sovereign or supreme), each assembly has a period of time of up to five years during which it may legislate exactly as it chooses. During its life, it can make or unmake any law; it can destroy by statute the most firmly established convention of the constitution; it can legalize past illegalities and thus reverse the decisions of the courts; and it even has power to prolong its own life by legislative means beyond the normal period of five years without consulting the electorate.

In law, therefore, the supremacy of Parliament is absolute. In practice, Parliament does not attempt to exert its supremacy in this way. In the first place, pressure of business in recent decades has resulted in a large and increasing amount of delegation of legislative authority to ministers (see p. 30), and of specific powers to local authorities and to public corporations of various kinds. Powers delegated in this way could, of course, be withdrawn by Parliament, but existing demands on parliamentary time make such a development extremely unlikely. Secondly, the system of party government in the United Kingdom effectively discourages Parliament from acting in too arbitrary a fashion; any Parliamentary majority which abused its powers would almost certainly suffer severely at the hands of the electors.

The Meeting of Parliament

A 'Parliament' in the sense of a Parliamentary period begins and ends with a proclamation made by the Sovereign on the advice of the Privy Council. Such a proclamation on the one hand dissolves an existing Parliament and on the other orders the issue of writs for the election of a new one and appoints the day and place of its meeting.

¹ The channel of communication between the United Kingdom Government and the local legislatures is the Secretary of State for the Home Department, who advises the Crown on the exercise of the Royal Prerogatives. The Queen is represented in each of the Channel Island Bailiwicks and in the Isle of Man by a Lieutenant-Governor.

² Under the Government of Ireland Act, 1920, the Northern Ireland Parliament has power to make laws for the peace, order and good government of Northern Ireland in relation to all domestic matters except those reserved to the United Kingdom Parliament, provided that such laws do not conflict with legislation passed by the United Kingdom Parliament and extending to Northern Ireland. Matters reserved to the United Kingdom Parliament include the postal services, the judiciary, the imposition of customs and excise duties and of income and profits taxes, and certain other services. The Northern Ireland Parliament has no power to legislate concerning such matters as defence and foreign relations. There are, however, 12 members representing Northern Ireland constituencies in the House of Commons at Westminster, where they provide the representation without which, traditionally, taxation cannot be enforced.

Formerly the death of a Sovereign involved the dissolution of Parliament, since Parliament meets on the personal summons of the monarch. Since 1867, however, when the Representation of the People Act of that year made the duration of Parliament independent of the demise of the Crown, both Houses stand adjourned only until their members have taken the Oath of Allegiance to the new Sovereign, which occurs immediately after the Accession Council has made the order for Proclamation.

The time between the meeting of a Parliament and its prorogation or dissolution is called a session. Parliament is usually prorogued by a commission under the Great Seal, which appoints the day and place of its meeting in a new session. The date so appointed may be brought forward or deferred by a subsequent proclamation. The effect of a prorogation is at once to terminate all business until Parliament shall be summoned again, when any measures not yet passed must be re-introduced, unless it be decided that they are to be abandoned.

During the session, either House may adjourn itself on its own motion to such date as it pleases. An adjournment does not affect uncompleted business. A reassembly of the House can be accelerated or delayed either by proclamation or by virtue of powers specially conferred by each House on its Speaker.

The average length of a session is about 160 sitting days divided by custom into the following periods: one from November until Christmas lasting about 30 sitting days, one from January to Easter of about 50 sitting days, one from Easter until Whitsun of about 30 sitting days, and one from Whitsun until the end of July lasting about 40 sitting days. In addition, in recent years, the session has usually concluded with a short period of about 10 sitting days in October, after the long summer recess.

The House of Lords

In November 1954 the House of Lords consisted of some 800 peers (including 26 spiritual peers), as follows: (1) princes of the royal blood (who by custom take no part in proceedings), (2) all hereditary peers (other than minors and those who had not then applied for a writ of summons) of England and the United Kingdom,¹ (3) 16 hereditary peers of Scotland elected from their own number for each Parliament in accordance with the provisions of the Act of Union, 1707, (4) five representative peers of Ireland elected for life,² and (5) several Lords of Appeal in Ordinary appointed to perform the judicial duties of the House and holding their seats therein for life. The spiritual peers are the archbishops and senior bishops of the Church of England.

Temporal peerages are conferred by the Sovereign on the advice of the Ministers of the Crown, as a mark of distinction. All, except the judicial peerages, are hereditary and, with the exception of the Scottish and Irish peerages, they carry with them, for men over 21 years of age, a right to a seat in the House of Lords. A summons to Parliament cannot be withheld from a peer who is entitled to it, although of the peers who receive the writ of summons only about one-tenth take any active part in the work of the House. Party politics have little effect upon the membership of the House, which remains relatively stable over a long period of time.

The House of Lords is presided over by the Lord Chancellor, who is the Speaker of the House. The permanent officers include the Clerk of the Parliaments, who is

¹ Peerages created since the Act for the Union of England and Scotland, 1707, are all peerages of the United Kingdom.

² By the Act for the Union of Great Britain and Ireland, 1800, the Irish peers were entitled to elect 28 representatives, but since 1920 no new peers have been elected.

charged with keeping the records of proceedings and judgments and who pronounces the words of assents to Bills; the Gentleman Usher of the Black Rod, who enforces the orders of the House; and the Serjeant-at-Arms, who attends the Lord Chancellor.

The House of Commons

The House of Commons is a popular assembly elected by an almost universal adult suffrage and containing members from all sections of the community regardless of income or occupation. There are at present 625 members¹ of the House of Commons, each representing a single-member constituency.

Members of the House of Commons hold their seats during the life of a Parliament. They are elected either at a General Election which takes place after Parliament has been dissolved and a new one summoned by the Sovereign, or at a by-election which is held when a vacancy occurs in the House as a result of the death or resignation of a member during the life of a Parliament. Election is decided by secret ballot in which all United Kingdom citizens (except members of the House of Lords) and all citizens of the Commonwealth and of the Republic of Ireland who are resident in the United Kingdom are entitled to vote, provided that they are 21 years old or over, and unless they suffer any legal incapacity to vote. A register containing the names of all electors is prepared and published yearly by registration officers, who, in England and Wales, are usually the clerks of local councils, and in Scotland are the lands valuation assessors. All entitled to vote are entitled to stand for election, except undischarged bankrupts, and such persons as clergymen of the established Churches of England, Scotland and Northern Ireland and of the Roman Catholic Church, and certain officers of the Crown.

The chief parliamentary officer of the House of Commons is the Speaker, who is elected by the members as president of the House immediately after a new Parliament is formed. Other parliamentary officers of the House are the Chairman of the Committee of Ways and Means, and the Deputy-Chairman, who may act as Deputy-Speaker; both these officers are elected by the House. In addition there are the party officials, i.e. the Government and Opposition Whips. Non-parliamentary or permanent officers of the House, i.e. those who are not members of Parliament, include the Clerk of the Commons, who is charged with keeping the records, endorsing Bills, signing Orders, etc.; the Serjeant-at-Arms, who attends the Speaker in the House; and the Chaplain to the Speaker.

Parliamentary Privilege

Both Houses of Parliament enjoy certain privileges and immunities designed to protect them from unnecessary obstruction in carrying out their duties. These privileges apply collectively to the Houses and individually to each member.

In the House of Commons, the Speaker formally claims from the Crown for the Commons 'their ancient and undoubted rights and privileges' at the beginning of each Parliament. These include freedom from arrest²; freedom of speech; and the right of access to the Crown, which is a collective privilege of the House and is exercised by the Speaker on its behalf. Further privileges include the right (rarely exercised) to debate in secret; the right to control internal proceedings; and the right to pronounce upon legal disqualifications for membership and to declare a seat vacant on such grounds.

¹ In November 1954 the Parliamentary Boundary Commissions made recommendations involving an increase to 630 members.

² This does not imply freedom from arrest for a criminal offence or for contempt of court.

The privileges of the House of Lords are (1) freedom from civil arrest for themselves and their servants for a period of 40 days before and after a meeting of Parliament, (2) freedom of speech, (3) freedom of access to the Sovereign for each peer individually, (4) the right to commit for contempt, (5) the right to try and be tried by their fellow peers for treason or felony, and (6) the right to exclude disqualified persons from taking part in the proceedings of the House. These privileges are not formally claimed by the Speaker as in the House of Commons; they exist independently without grant.

The Party System

The party system has existed in one form or another since the seventeenth century, and has now become an essential element in the working of the constitution.

The present system is based upon the fact that there are three effective political parties in the United Kingdom: Conservative, Labour and Liberal, each of which lays rival policies before the electorate. Whenever there is a General Election, these parties (and any minor parties that may be in existence at the time) may all put up candidates for election in each of the constituencies into which the United Kingdom is divided for the purpose. Independent candidates may also stand. As a rule, the electorate has a choice of three candidates (Conservative, Labour and Liberal)¹; and by its choice it indicates which of the opposing policies it would like to see put into effect.

The party which wins the majority of seats (although not necessarily the majority of votes) at a General Election forms the Government. By tradition, the leader of the majority party is appointed as Prime Minister by the Sovereign, usually on the formal advice of the retiring Prime Minister; and its most outstanding members in the House of Lords and the House of Commons receive ministerial appointments on the advice of the Prime Minister. The larger of the two minority parties becomes the official Opposition with its own leader and its own council of discussion or unofficial Cabinet; while the members of any other parties or any Independents who have been elected may support the Government or the Opposition according to their party's or their own view of the policy being debated at any given time.

In the General Election which took place on the 25th October 1951, 82.6 per cent of the electorate voted, compared with 70 per cent in 1945 and 84 per cent in 1950. The number of votes cast for the principal parties is shown in Table 3.

TABLE 3*

Party	1945	1950	1951
Labour	11,967,985	13,248,957	13,949,105
Conservative and Supporters	9,960,809	12,450,403	13,730,642
Liberal	2,227,400	2,634,482	730,597
Communist	102,780	91,746	21,640

* These figures exclude those few constituencies for which candidates were returned unopposed.

¹ In the General Election of October 1951, the choice was between Labour and Conservative in most constituencies. In a few constituencies, two of the parties agreed to support the same candidate. Liberal candidates numbered 109, and the number of candidates representing other political parties was very small.

The distribution of seats in the House of Commons resulting from the General Elections of 1950 and 1951 is shown in Table 4.

TABLE 4

1950		1951 (e)	
Labour	315	Conservative and Supporters	320
Conservative and Supporters	297	Labour	295
Liberal	9	Liberal	6
Others (a)	3	Others (c)	3
The Speaker (b)	1	The Speaker (d)	1
	625		625

(a) Two Irish Nationalists and one Independent Liberal.

(b) Returned unopposed.

(c) Two Irish Nationalists and one Irish Labour Party.

(d) Returned as Conservative member for Cirencester and Tewkesbury, and elected Speaker on 31st October.

(e) After three years and 41 by-elections the distribution of seats has changed very little; in November 1954 it was: Conservative and Supporters 321, Labour 294, Liberal 6, Others 3.

The effectiveness of the party system rests to a considerable extent upon the fact that Government and Opposition alike are carried on by agreement: that is to say, the minority agrees that the majority must govern and, therefore, accepts its decisions; and the majority agrees that the minority should criticize and, therefore, sets time aside for that criticism to be heard. As far as is compatible with effective government, the Prime Minister meets the convenience of the Leader of the Opposition and the Leader of the Opposition meets the convenience of the Prime Minister. Through the respective Whips there is a measure of agreement on the subjects to be debated and on the time to be allowed; sometimes even on the information to be provided and the proposed line of attack. In this way, Parliament has a chance of hearing a full discussion on policy from every point of view.

Outside Parliament, party control is exercised by the national and local organizations; inside Parliament, it is exercised by the Whips, who in addition to their other functions are expected to keep their forces effective by all means in their power. For the Government, this work is done by the Parliamentary Secretary to the Treasury, the junior lords at the Treasury, and the political officers of the Household—the Treasurer, the Comptroller and the Vice-Chamberlain. The Opposition Whips have no official position and are not paid from public funds, but their parliamentary duties are the same.

Parliamentary Procedure

Parliamentary procedure is based on forms and rules, many of which date back to the beginning of the sixteenth century and even earlier.

Each House has its own Standing Orders, but the system of debate is much the same in the two Houses, except that in the House of Commons the Speaker has a much greater measure of control. In the House of Lords, the office of Speaker could be held by a commoner, since the Woolsack on which the Lord Chancellor

sits as Speaker is technically outside the precincts of the House. In fact, the office is always held by a peer, but it carries with it only a limited authority to check or curtail debate. The Lords, unlike the Commons, claim the right to overrule their Speaker forthwith on issues of procedure.

In the Commons, the Speaker has the prime duty of controlling debate. It is his responsibility to see that parliamentary time is used to the best possible advantage and, therefore, although he must carefully guard against abuse of procedure or any infringement of minority rights, he has power to limit unreasonable obstruction and his rulings on points of order cannot be challenged at the time. The Speaker has the right to allow or disallow a closure motion (i.e. a motion to curtail or end discussion so that the matter may be put to the vote), to check irrelevance in debate, and to refuse to admit delaying tactics. In cases of grave and continuous disorder, he may even adjourn the House or suspend the sitting.

Voting in the House of Commons is carried out under the direction of the Speaker, and it is his duty to pronounce the final result. If an equal number of votes is cast, the Speaker must give the decisive vote; by regular practice he does this in such a way as to avoid change and leave the question to be debated on another occasion.

The Speaker has the responsibility of deciding what is a Money Bill (a Bill dealing only with national taxation and finance, see p. 29); and who, in case of doubt, is the Leader of the Opposition. He is also responsible for such extraneous matters as the decision whether a *prima facie* case has been made against persons accused of breach of privilege; the issue of warrants for elections to fill vacancies in the House; and the appointment of the chairmen of the Standing Committees.

All proceedings of either House (with the exception of secret sessions) are public, and a verbatim record is published daily in the official reports *Parliamentary Debates (Hansard)*.

Parliamentary Functions

The main functions of Parliament today are (a) to make laws regulating the life of the community, (b) to take formal action, cast in legislative form, to make available finance for the needs of the community and to appropriate the funds necessary for the services of the State, and (c) to criticize and control the Government (see pp. 31-32). By custom, Parliament is also consulted before the ratification of certain international treaties and agreements, in spite of the fact that the making of treaties is a Royal Prerogative (see p. 19) exercised on the advice of the Government which, strictly speaking, is under no obligation to obtain Parliamentary approval at all. In practice, there are two types of agreement about which Parliament is consulted: treaties which could not be implemented without legislation; and treaties of such political importance that the Government feels obliged to arrange a debate on the matter before becoming committed. In the case of other treaties requiring ratification it is customary to presume Parliamentary acquiescence unless disapproval is expressed within 21 days from the date on which the treaty was laid before Parliament.

In the past, legislation was initiated from both sides of the House; but in present-day practice almost all Bills are brought forward by the Government in power as a result of policy decisions taken in the Cabinet at the instigation of those Government Departments which will be responsible for their administration when the Bills become law. The chief exceptions are Private Bills,¹ which relate solely to some

¹ Such Bills begin with a petition, and promoters must give notice of their intention to all persons and bodies whose interests may be affected by their proposals. Committees are small, consisting of five members in the Lords and four members in the Commons.

matter of individual, corporate or local interest, and Private Members' Bills, which are Public Bills introduced by members on their own initiative on certain days set aside expressly for the purpose.

Bills may be introduced in either House, unless they deal with finance or representation, when they are always introduced in the Commons (see p. 30). As a rule, however, no Bills likely to raise much political controversy are introduced in the Lords, as the House of Commons is considered a more suitable place of origin for measures of that kind. Bills do not necessarily always apply to the United Kingdom as a whole. Some Bills deal exclusively with Scottish matters; some apply only to England and Wales; and others to England, Wales, and Northern Ireland.

The process of passing a Public Bill is the same in the House of Lords as in the House of Commons: the Bill receives a formal First Reading on introduction; it is then printed; and after a period of time (which varies between one and several weeks depending on the type of Bill, subject matter, etc.) it may be given a Second Reading as the result of a debate on its general merits or principles. It is then referred either to one of the Standing Committees appointed for the purpose by the Committee of Selection¹ and composed of members of all parties in the same proportion as in the whole House, or, in the case of more important measures, to the whole House sitting in Committee if the House so decides on a motion. During the Committee stage, members may suggest appropriate amendments, which will be incorporated into the Bill if the majority of the Committee agree. When this stage is finished, the Bill is reported to the House, and a further debate takes place during which the Committee's amendments may be altered, additional amendments may be suggested and incorporated and, if necessary, the Bill may be recommitted to Committee. Finally, it is submitted for a Third Reading and, if passed, it is sent on from the Commons to the Lords or from the Lords to the Commons (depending on its place of origin), where it enters on the same course again.

An exception to this procedure is made in the case of Money Bills, of which the two most important are the Finance Bill, which authorizes annual taxation and amends existing taxation, and the Appropriation Bill, which authorizes expenditure on the Supply Services from the Consolidated Fund.² As a general rule, these Bills must be introduced in the House of Commons upon Resolutions in a Committee of the whole House and, since their purpose is to raise money for the Crown as a means of providing for payment of the various services performed by the Crown, they may be initiated only by a Minister of the Crown.

All Bills which have passed through their various parliamentary stages are sent to the Sovereign for Royal Assent, which is automatically given either by the Sovereign in person or (usually) by commission. The right of veto has not been exercised since the early eighteenth century.

The majority of Bills introduced in the House of Lords pass through the Commons without difficulty because of their non-controversial nature; and they are then returned to the Lords to be brought forward for Royal Assent. However, should any Lords Bill be unacceptable to the Commons, it would never reach the Statute Book, for no debating time would be allotted to it—at any rate until a new Government came into power, when it might be revived. The Lords, on the other hand, are unlikely to be able to prevent a Bill passed in the Commons from becoming law. In the normal course of events, they either accept a Bill from the Commons and return it unchanged; or they amend it and return it for the consideration of

¹ A body of 11 members nominated at the beginning of every session by the House in proportion to party strength in the Commons.

² See also pp. 246-7.

members of the other House, who frequently agree to the amendments made. They cannot require the Commons to agree to amendments; nor can they delay a Bill indefinitely. They have no powers in respect of Money Bills or Bills dealing with the duration of Parliament; and since the passing of the Parliament Act, 1949, any other Bill which has been passed by the House of Commons in two successive sessions may be presented for Royal Assent without the consent of the Lords, provided that a year has elapsed between the date of the Second Reading of the Bill in the Commons and the date on which it is finally passed in that House. These limitations to the powers of the Lords are based on the fundamental principle that the function of the Upper House, which is a non-representative assembly, is not to thwart the will of the people, but to use the combined experience and wisdom of its members to ensure that that will is precisely and reasonably interpreted.

Parliamentary Committees

There are three kinds of Parliamentary Committee, all of which exist to a varying degree to relieve the full assembly of Parliament of some of the details of its more specialized and complex work. They are: regular Standing Committees (see p. 29) which are concerned with current legislation; official Parliamentary Committees such as the Committee of Privileges, the Public Accounts Committee (see p. 248) and the Estimates Committee (see p. 249), which are concerned with particular aspects of Parliamentary work; and a number of informal committees, consisting of members either of one party or of all parties, such as study groups concerning themselves with particular issues (e.g., the Parliamentary and Scientific Committee, see p. 353), parliamentary party committees (e.g., the Labour Policy Committee) and backbenchers'¹ organizations (e.g., the 1922 Committee, a Conservative group). These groups have grown up spontaneously and have a varying degree of influence upon the development of Government policy.

Delegated Legislation

Delegated legislation, which is legislation not by Act of Parliament but by Orders-in-Council, Orders, Warrants, Regulations and Rules, has been part of the Parliamentary system for at least six hundred years. One of the earliest recorded examples is to be found in a statute of 1337 which laid down that no wool should be exported from England 'till the King and his Council do otherwise provide'. Parliament, however, made but sparing use of its power to delegate legislation (except during a period of social, political and economic change in the second half of the fifteenth and most of the sixteenth centuries) until the end of the nineteenth century, when a changing conception of the part to be played by the State in the life of the community made inroads upon Parliamentary time and thus caused the system to be adopted on a more extensive scale. With the ever-increasing scope of Government activity in domestic affairs during the past fifty years, pressure on Parliamentary time has become even more acute; as a result the system of delegated legislation has become generally accepted and there are at present few Acts of Parliament which do not contain provisions for its use.

The advantages of the system of delegated legislation, which empowers ministers and other authorities to regulate administrative details after a Bill has become an Act, are said² to be: (1) that it shortens and clarifies Bills before Parliament, thus enabling Parliament to deal with a greater volume of business and to give fuller attention to matters of policy and principle which are its primary concern; (2) that

¹ Members who are neither ministers nor, as a rule, ex-ministers.

² From an official minute written in 1893 and quoted in *Concerning English Administrative Law*, by Sir C. T. Carr. Oxford University Press. 1942. pp. 33-34.

it encourages flexibility, for administrative details can be worked out as and when the necessity arises 'with greater care and minuteness, and with better adaptation to local and other special circumstances than they possibly can be during the passage of a Bill through Parliament'; (3) that it is invaluable in an emergency, for it is 'the means by which the legislature can dispense with its own deliberative procedure and arm the executive with power to take immediate action'; and (4) that it provides a speedy, convenient and accurate means of giving effect to the policy of Parliament.

In order to minimize the risk—inherent in the system—that delegated legislative powers might supersede or weaken Parliamentary government, such powers are normally delegated to the Queen-in-Council or to authorities directly responsible to Parliament—to Ministers of the Crown, to Government Departments for which ministers are responsible or to organizations whose legislation is subject to confirmation or approval by ministers who thereby become responsible to Parliament for it. Moreover the Acts of Parliament, by which particular powers are delegated, frequently provide for some measure of Parliamentary control over the legislation made in exercise of them. There are cases in which an instrument¹ must be approved by Parliament or the House of Commons before it can have permanent operation ('affirmative resolution procedure'), or in which Parliament or the House of Commons may secure the annulment of an instrument by a resolution passed within a certain number of days of the instrument being laid before it ('negative resolution procedure'), and others in which drafts of proposed instruments must be laid before Parliament or the House of Commons before they are made and must then be subject either to affirmative or negative resolution procedure. The resolution, in the case of an instrument to be annulled after it has been made, takes the form of a Prayer to Her Majesty that the instrument be annulled (after which the instrument may be annulled by Order-in-Council).

As a further safeguard, the principal Act generally defines the precise limits of delegated legislative power; and if these limits are surpassed, the courts can be moved to declare that the action taken is *ultra vires*. Certain Acts also require direct consultation with organizations which will be affected by delegated legislation before such legislation is made.

Parliamentary Control

Parliament's function of controlling the Government in power is exercised in the final analysis by the power of the House of Commons to pass a resolution of 'no-confidence' in the Government, or to reject a proposal which the Government considers so vital to its policy that it has made it a 'matter of confidence'; and thus to force the Government to resign.

The financial control necessary to ensure that money shall be spent only with the authority of Parliament and for the purposes authorized by Parliament is described on pp. 246–50. Methods of general control are provided by:

- (1) the institution of Question Time, which is a daily hour of parliamentary time during which members may question any minister on matters for which that minister is responsible, and may thus focus the attention of the public on the day-to-day processes of government;

¹ Almost all delegated legislation of the central government is enacted by means of 'statutory instruments', made in accordance with the provisions of the Statutory Instruments Act, 1946, which repealed and replaced the Rules Publication Act, 1893. Instruments of delegated legislation made under the Act of 1893 were known as 'statutory rules and orders' ('S.R. & O.').

- (2) the practice whereby the consideration of the Estimates in Committee of Supply¹ has ceased to be a consideration of the financial requirements of the Government and has become an occasion, initiated by the Opposition, for the examination² of the Government's administrative policy;
- (3) the practice of bringing on a debate by moving the adjournment of the House, which is permitted only if the matter is deemed by the Speaker to be definite and urgent and to be the responsibility of the Government, and if 40 members rise in their places to support it, or 10 members rise and the House grants leave on a division;
- (4) the right of members to raise any matter on the motion of adjournment of either House at the end of each day's sitting; and
- (5) the power to confirm or annul ministerial Orders and Regulations (see pp. 30-31).

In addition, Government policy and action are fully discussed in the important debates which take place during the proceedings at the opening of Parliament and in the motion for the adjournment of the House before a recess.

THE PRIVY COUNCIL

Before the emergence of the system of Cabinet government in the eighteenth century, the King-in-Council or the Privy Council was the chief source of executive power in the State. As this system developed, however, the Privy Council declined in importance; many of its powers were transferred to the Cabinet, and much of its work was handed over to newly created Government Departments. The present-day Privy Council exists mainly to give effect to policy decisions made elsewhere.

Apart from Cabinet Ministers, who must be Privy Counsellors and are sworn of the Council on first assuming office, membership of the Privy Council (which is retained for life) is accorded by the Sovereign on the recommendation of the Prime Minister as an honour to persons who have reached eminence in some branch of public affairs. There are at present over 300 Privy Counsellors.

Procedure and Functions

The Privy Council is convened by the Clerk to the Council. At meetings where the Sovereign is present, three Privy Counsellors form a quorum, but in practice never less than four are summoned to attend. The whole Privy Council is called together only on the death of the Sovereign or when the Sovereign announces his or her intention to marry.

Meetings of the Privy Council are presided over by the Lord President of the Council, who is appointed by Letters Patent under the Great Seal. The duties of the Lord President in connection with the Privy Council are to attend the Sovereign's person, to manage the debates in council, to propose matters from the Sovereign at the council table and to report to the Sovereign the resolutions of the Council thereon. Since 1660 the office of Lord President has been a political appointment held by a member of the party in power, who is usually a leading member of the Cabinet, free to undertake duties of a general nature.

The Privy Council is responsible for the making of Orders-in-Council, of which there are two kinds differing fundamentally in constitutional principle: those made in virtue of the Royal Prerogative as, for example, in the ratification of

¹ See p. 247.

² Such an examination must relate to a matter included in the Estimates.

treaties; and those which are authorized by Act of Parliament and are a form of delegated legislation (see p. 30). Members of the Privy Council attending meetings at which Orders-in-Council are made do not thereby become personally responsible for the policy upon which the Orders are based; this rests with the ministers in whose Departments the draft Orders were framed, whether they are present at the meeting or not. All Orders-in-Council must be published in the *London Gazette*.¹

The Privy Council also advises the Crown on the issue of Royal Proclamations—documents whose lawful use is restricted to prerogative acts such as summoning, proroguing or dissolving Parliament, and which are of the same validity as Acts of Parliament.

Committees of the Privy Council

Advisory functions still belong to the committees of the Council, whose meetings differ from the meetings of the full Council in that the Sovereign cannot constitutionally be present. These committees may be prerogative, such as the committee which deals with matters relating to Jersey and Guernsey, and the committees for medical research, scientific and industrial research, agricultural research and nature conservation; or they may be provided for by statute as are those for the universities of Oxford and Cambridge and for the Scottish universities, and that which deals with applications for the grant of charters to municipal corporations.

The Privy Council Office

The administrative work of the Privy Council committees is carried out in the Privy Council Office, which is an ancient prerogative Department under the control of the Lord President of the Council. It is also carried out in the Office of the Lord President of the Council.

Judicial Committee of the Privy Council

The Judicial Committee of the Privy Council is the final court of appeal on certain legal issues arising in Australia, New Zealand, Ceylon, and in the United Kingdom dependent territories.² Its appellate jurisdiction derives from the principle of English common law which recognizes 'the right of all the King's subjects to appeal for redress to the King-in-Council' if they believe that the courts of law have failed to do them justice.

Appeals come to it either where a right of appeal in limited categories of cases has been specially created, e.g., by Statute, Order-in-Council or Letters Patent, or by special leave of the Queen-in-Council on the advice of the Judicial Committee. Appeals are heard by a board of three or five drawn from the committee, depending on the significance of the case, the quorum being three. Invitations to sit on the board are issued by the Lord Chancellor, who thus determines which members of the committee shall hear particular appeals. In practice, boards are generally selected from the Law Lords of the United Kingdom—the Lord Chancellor, ex-Lord Chancellors and Lords of Appeal in Ordinary—although ex-judges of English and Scottish courts are asked to sit when business is heavy. Chief Justices and certain judges from other Commonwealth countries have usually been sworn of the Privy Council and may be invited to sit on the committee's boards.

¹ An official periodical published by the authority of the Government.

² Until 1949, right of appeal to the Judicial Committee of the Privy Council also existed in Canada, India, South Africa and Pakistan, but these countries then abolished the right. The Republic of Ireland abolished the right by the Constitution (Amendment No. 22) Act, 1933.

HER MAJESTY'S GOVERNMENT

Her Majesty's Government is the body of ministers charged for the time being with the administration of national affairs.¹

Composition

The leading minister in the Government is the Prime Minister. The remaining ministers include:

- (1) ministers who are in charge of Departments, e.g., the Secretary of State for Foreign Affairs, the Secretary of State for the Home Department and Minister for Welsh Affairs, the Minister of Health, and the Minister of Labour and National Service;
- (2) ministers who hold traditional offices to which no specified departmental duties are attached and who are therefore free to assist the Prime Minister by taking responsibility for any special work that may require ministerial supervision at any time, e.g., the Lord President of the Council²;
- (3) the Chancellor of the Exchequer, who is in charge of the Treasury and is responsible for economic affairs;
- (4) the Lord Chancellor, who is the principal adviser of the Government on matters relating to the law and the constitution;
- (5) the Law Officers of the Crown, i.e. the Attorney-General, the Solicitor-General, the Lord Advocate for Scotland and the Solicitor-General for Scotland, who are also legal advisers to the Government, and are charged with conducting certain prosecutions of unusual importance, and with defending the rights of the Crown;
- (6) Ministers of State, who are now often appointed to deputize for ministers in charge of Departments³ where the work is particularly heavy, but who may have no departmental duties;
- (7) Parliamentary Secretaries and Under-Secretaries, whose primary function is to relieve their senior ministers of part of the burden of their Parliamentary duties, e.g., by taking part in debate and by answering Parliamentary Questions. With the advice of the Departmental officials, they also assist their ministers in supervising the administration of their Departments.

All senior ministers are appointed by the Crown on the recommendation of the Prime Minister.

The majority of ministers are members of the House of Commons, since the approval of that House is necessary for the general policy (and frequently for the specific proposals) of the Government. There must, however, always be some ministers in the House of Lords, partly because the Ministers of the Crown Act, 1937, limits the number of ministers who may sit in the Commons while receiving salaries from the Crown, and also because every Government must be assured of spokesmen of standing to expound and justify its intentions and its actions to the Lords.

¹ See pp. 26-27, *The Party System*.

² The Lord President of the Council is responsible to Parliament for the work of the Department of Scientific and Industrial Research, the Medical Research Council, the Agricultural Research Council, the Nature Conservancy and the Atomic Energy Authority.

³ Departments which have a Minister of State are the Foreign Office (two), the Colonial Office and the Board of Trade. The Secretary of State for Scotland also is assisted at ministerial level by a Minister of State.

The Prime Minister

The office of Prime Minister as head of the Government has been in existence since the middle of the eighteenth century. The office is a conventional one in that it is not defined by statute or rule of common law, and the Prime Minister's official title is First Lord of the Treasury. In 1905, however, the Prime Minister was given precedence as the fourth person in the realm after the Royal Family.¹ The unique position of authority enjoyed by the Prime Minister derives on the one hand from his status as leader of the majority party in Parliament and on the other from his power to submit his own choice of ministers to the Sovereign and to obtain their resignation or dismissal individually.

It is the duty of the Prime Minister to inform the Crown of the general business of the Government; to control the Cabinet over which he presides; to exercise a general supervision over Departments, settling Departmental differences where possible and approving important Departmental decisions where Cabinet reference is not required; to take the final decision in all matters of high policy affecting the welfare of the nation, particularly as regards foreign affairs and defence; to be prepared to speak in Parliament both on general subjects and on all the most important Government Bills; and to answer to Parliament for all actions by the Government, both at home and abroad. Only the Prime Minister can recommend to the Sovereign a dissolution of Parliament if he wishes to put the Government's policy to the country before the normal time for a General Election has come. The Prime Minister's other responsibilities include recommending the appointment of Church of England archbishops, bishops, some senior dignitaries, and incumbents of Crown livings, as well as that of the Lord Chief Justice and of the holders of other high judicial offices, Lords Lieutenant of Counties,² Trustees of National Museums and Regius Professors in certain universities. He also makes recommendations for the awards of most civil honours and distinctions.

The Cabinet

The Cabinet is a conventional organ of government composed of a number of ministers selected by the Prime Minister. Membership is not fixed by statute, although certain ministers are always appointed; the number of members varies nowadays between 15 and 25.

The system of Cabinet government came into being as one of the results of the passing of the Bill of Rights in 1689. In origin it was an informal gathering of those Privy Counsellors who were also ministers, meeting at first with, and later without, the Sovereign. The Cabinet assumed its present shape when the accession of the Hanoverian kings with their limited knowledge of the English language, the British constitution and the British way of life had severely curtailed the personal participation of the Sovereign in executive government and made it essential that a substitute should be found.

The Cabinet is not in itself an executant in that it has no legal authority, its decisions being valid by convention and not by law. It is designed to formulate general policy, to bring about co-operation between the different forces of the State without interfering with their legal independence, and to exercise general control. Its functions³ are:

¹ Above him in order of precedence are the Archbishops of Canterbury and York, and the Lord Chancellor.

² See footnote, p. 69.

³ As defined in the Report of the Machinery of Government Committee (Haldane Committee) *Cd.* 9230. 1918.

- (1) the final determination of the policy to be submitted to Parliament,
- (2) the supreme control of the national executive in accordance with the policy agreed by Parliament,
- (3) the continuous co-ordination and delimitation of the authority of the several Departments of State.

In the performance of its functions the Cabinet makes considerable use of a system of committees. The beginnings of this system can be traced back to the nineteenth century and it has been developed to keep pace with government business during the past fifty years. The system involves the reference of any issue either to one of the standing Cabinet committees or to an *ad hoc* committee composed of the ministers primarily concerned, which considers the matter in detail and either disposes of it or reports upon it to the full Cabinet with recommendations for action.

Cabinet Meetings

The Cabinet meets in private and its proceedings are strictly confidential. Its members are bound by their oath as Privy Counsellors not to disclose any information. The Official Secrets Acts forbid the publication of Cabinet as well as of other State papers, and a resigning minister desiring to make a statement involving disclosure of Cabinet discussions must first obtain the permission of the Sovereign through the Prime Minister. The theoretical reason for this secrecy is that a Cabinet decision is advice to the Sovereign, whose consent is necessary before it is made public. From a practical point of view, secrecy is essential in the interests of unprejudiced debate, which can take place only if there is no risk of publicity for every statement made and every point conceded.

In normal times, the Cabinet meets for about two hours once or twice a week during parliamentary sittings, and rather less frequently when Parliament is not sitting. Additional meetings may be called by the Prime Minister at any time, if a matter urgently requiring discussion should arise. During Cabinet meetings, decisions are reached on the important political and social questions of the hour, and the Cabinet settles any matters which cannot be disposed of at lower levels.

Detailed accounts of Cabinet meetings are not prepared; only the substance of documents submitted, together with a summary of the arguments and the conclusions, are recorded; and even these records have a strictly limited circulation.

The Cabinet Office

Records of the discussions of the full Cabinet and of the committees are kept by the Secretariat of the Cabinet, or Cabinet Office, which was introduced as an emergency institution during the first world war and has grown into an organ of great importance in the co-ordination of policy at the highest level. The Secretariat is responsible for the keeping of records, for providing information and advice to ministers, and for issuing directives or promulgating decisions of the Cabinet or the Prime Minister to the Departments concerned. It has a military side and a civil side. There is also a Central Statistical Office which is charged with the collection, analysis and presentation of statistics relating to the national economy.

Ministerial Responsibility

Ministerial responsibility means both the collective responsibility which ministers share for the policy and actions of the Government and the individual responsibility of ministers to Parliament for the work of their Departments.

The doctrine of collective responsibility, which was fully accepted by the middle

of the nineteenth century, imposes upon Cabinet ministers the obligation to act not as individuals but (in the interests of stability of government) as a united group. It does not require every minister to be present at every Cabinet meeting; and the obligations of individual ministers may be passive rather than active when the decision to be taken does not relate to their spheres of administrative responsibility. At the same time, every minister should be fully informed of the subject of discussion beforehand, so that if he has any objections he may voice them at the meeting. He may not repudiate, either in Parliament or in his constituency, policies which have received Cabinet approval, nor may he announce policies which have not been so approved. He must be prepared to vote with the Government on all issues, and where necessary to speak in support or defence of its policy. Any minister who feels himself unable to agree or to compromise with the view of the majority of his colleagues in Parliament or elsewhere must resign. If he does not resign, he is held to be responsible, and cannot afterwards reject criticism on the ground that he did not personally agree with the policy adopted.

The doctrine of collective responsibility also means that the Cabinet is bound to offer unanimous advice to the Sovereign, even when its members do not hold identical views on a given subject.

The individual responsibility of a minister for the work of his Department means that, as political head of that Department, he is answerable for all its acts and omissions and must bear the consequences of any defect of administration, any injustice to an individual or any aspect of policy which may be criticized in Parliament, whether he is personally responsible or not.

Since the majority of ministers are members of the House of Commons, they are available to answer questions and to defend themselves against criticism in person. Ministers who are in the House of Lords must be represented in the Commons by political subordinates qualified to speak on their behalf, i.e. by their Parliamentary Secretaries and Under-Secretaries. Responsibility, however, cannot be delegated and remains with the senior minister concerned.

Ministers are expected to take all decisions relating to their spheres of administration, unless these are of such political importance that in their opinion Cabinet sanction is required.

If any departmental decision brings a minister under fire of criticism in Parliament he may be upheld by the Cabinet, which will then treat the matter as one of confidence in itself; or he may be disowned, when he alone will be liable to lose office.

Ministerial responsibility is an effective way of bringing government under public control. It is also a check upon incompetence, for the knowledge that any departmental action may be reported to and examined in Parliament discourages ministers from making arbitrary and ill-considered decisions.

GOVERNMENT DEPARTMENTS

Government Departments exist for the most part to assist ministers in the discharge of their functions by providing information and advice as a basis for the formation of policy, and by putting that policy into effect when the necessary legislation has been passed. Both in their advisory and executive capacities Government Departments may and frequently do work with and through local authorities (see p. 60), public corporations (see pp. 118 and 124), and many Government-sponsored organizations which, while not forming part of Government Departments, are under varying degrees of Government control.

A change of Government does not generally affect the number or functions of Government Departments, although a radical change in policy may be accompanied by a corresponding change in the Departments concerned. The widening scope of Government activity has, however, led to the formation of a substantial number of new Departments in the past half-century. A few have existed for over 200 years.

The work of some Departments, e.g., the Ministry of Labour and National Service, covers the United Kingdom as a whole, while other Departments are concerned only with England and Wales, or Scotland, or Northern Ireland; some Departments, e.g., the Ministry of Education, make special arrangements for Welsh affairs.

This section outlines briefly the principal functions of the main Government Departments. Since much of their work is interconnected, they are not grouped according to the subjects with which they deal, but are arranged in alphabetical order, except for the Treasury which, in view of its unique central position, is placed first, and the Scottish and Northern Ireland Departments which are grouped at the end of the section.

The Treasury

Nominally the heads of the Treasury are the Lords Commissioners: the First Lord of the Treasury (who is now invariably the Prime Minister), the Chancellor of the Exchequer and five Junior Lords. In practice the Lords Commissioners never meet as a Board and their responsibilities are carried by the Chancellor of the Exchequer assisted by two junior ministers, the Financial Secretary and the Economic Secretary. There is also a Parliamentary Secretary to the Treasury who is the chief Government Whip in the House of Commons (see p. 27).

The main traditional functions of the Treasury¹ are the management of the financial resources of the United Kingdom Government, the control of public expenditure, and certain general questions concerning the staffing and organization of the Civil Service (see pp. 56-58). It is the Department responsible for ensuring that no more money is asked for by the spending Departments than is required for their annual needs, and for making sure that no more money is spent than is authorized by Parliament.

In addition, the Treasury has since 1947 been responsible for economic planning and for co-ordinating the activities of all the Departments concerned with economic matters, and has had special staffs for undertaking this work. The major group is known as the Central Economic Planning Staff. This group is charged with the task of achieving a comprehensive economic policy for the nation, and of co-ordinating departmental policies. A separate group co-ordinates the policies of Departments in matters connected with oversea trade and the balance of payments.

Attached to the Treasury is the Office of the Parliamentary Counsel, in which Government Bills are prepared for introduction into Parliament.

For further information on the Treasury see pp. 248-9.

The Admiralty

The Board of Admiralty has been in existence since 1708. It is served by the Admiralty Divisions of the Naval Staff and the Admiralty Departments. The Divisions of the Naval Staff deal with operational and technical policy. The Departments deal with the manning of the ships and establishments; the provision

¹ The jurisdiction of the Treasury extends to Scotland. Northern Ireland has its own Ministry of Finance (see p. 54) which works closely with the Treasury.

of warships and other vessels, aircraft, weapons and munitions, stores, fuel and other goods, equipment and reserve forces; the general organization and administration of the Fleets and establishments; and the accounting and administration of the moneys voted by Parliament for these purposes.

The Admiralty is also responsible for the Government's economic policy in the shipbuilding and ship repair industries and certain minor allied industries.

For further information on the Admiralty see pp. 95 and 349-50.

The Ministry of Agriculture and Fisheries

The Board of Agriculture and Fisheries was established in 1899, and was converted into the Ministry of Agriculture and Fisheries by statute in 1919. Its main functions are to secure the best possible output of food and to improve the general efficiency of the agricultural, horticultural and fishing industries of England and Wales¹; and it is responsible, in association with the Department of Agriculture for Scotland and the Northern Ireland Ministry of Agriculture, for the settling of general agricultural production programmes and prices of the main farm products.

The Ministry is also concerned with the encouragement, and if necessary the enforcement, of proper standards of husbandry and estate management; with the supply and in some cases the distribution of farmers' requisites such as feeding-stuffs, machinery, fertilizers and seeds; with all forms of land drainage; with the improvement of rural services such as farm buildings, water supplies and electricity; with the supply of agricultural labour and the enforcement of agricultural wages awards; with the provision of technical advice on all aspects of food production; with agricultural education and agricultural and fisheries research; with marketing schemes; with the effect of international trade negotiations on the agricultural industries of the United Kingdom; and with the international aspects of sea fishing, the regulation of whaling, the regulation of freshwater fishing and inshore fisheries.

Other measures for which the Ministry is responsible are designed to improve the quality of livestock, and to control and eradicate animal and plant diseases and pests. The Ministry is also responsible for the Ordnance Survey and for Kew Gardens.

In October 1954 it was announced that the Ministry of Agriculture and Fisheries and the Ministry of Food were to be amalgamated to form a new Department concerned with the provision and distribution of food, whether from home or abroad. During the process of amalgamation the two portfolios would be held by one minister. When the amalgamation, which might take about six months, was completed, the responsibilities hitherto discharged by the Minister of Food in relation to Scotland would be transferred to the Secretary of State for Scotland.

For further information on the Ministry of Agriculture and Fisheries see pp. 129-148.

The Air Ministry

The Air Council was established in 1918 under the presidency of the Secretary of State for Air to provide for the growing importance of aircraft in warfare by taking over responsibility for the administrative control of the Royal Air Force. The functions of the Air Ministry include strategic planning; the organization of general and technical training; the organization and control of aeronautical inspec-

¹ For the operational control of epidemic diseases of animals, e.g., foot-and-mouth disease, and for the control of plant diseases and pests the Ministry's responsibilities also extend to Scotland.

tion and of the provision, maintenance and repair of equipment; the supervision of the finance and contracts of the Air Force; the acquisition of lands required for air force purposes; and the appointment, promotion, posting and payment of all members of the Royal Air Force.

The Meteorological Office operates the State weather service. It has existed since 1854, at first under the Board of Trade, then as a self-contained unit supervised by a Meteorological Committee (which was directly responsible to the Treasury for the administration of the parliamentary grant-in-aid) and since 1920 as a part of the Air Ministry. The Office provides meteorological services for the general public, Government Departments, the Armed Forces and civil aviation, as well as organizing meteorological observations in the United Kingdom and certain of its Dependencies. In addition, the Office is responsible for the collection, publication and distribution within the United Kingdom and its Dependencies of meteorological information from all parts of the world. Research is undertaken at Dunstable (Bedfordshire), Harrow (Middlesex) and London, and at observatories at Kew (Surrey), Eskdalemuir (Dumfriesshire) and Lerwick (in the Shetland Islands).

For further information on the Air Ministry see p. 102.

The Colonial Office

The Colonial Office is the Department of the United Kingdom Government which deals with the affairs of the great majority of the non-selfgoverning countries of the Commonwealth. At the head of the Colonial Office is the Secretary of State for the Colonies, who is the Minister responsible to Parliament for the general administration of those territories. The main functions of the Colonial Office are to convey to Colonial Governments the views and wishes of Her Majesty's Government on broad matters of policy; to see that the interests of Colonial Governments and peoples are safeguarded and promoted; to provide, through its staff of professional advisers and with the help of Advisory Committees composed of men and women eminent in many fields, guidance to Colonial Governments on a wide range of matters; and to undertake expert services of many kinds, including the allocation of moneys for development purposes under the Colonial Development and Welfare Acts and the provision of administrative and professional staff for the Oversea Civil Service, which replaced the former Colonial Service on the 1st October 1954 (see below). Other functions of the Colonial Office are the care of Colonial students in the United Kingdom and the provision of information services on Colonial affairs for the United Kingdom, for other Commonwealth and foreign territories, and for the territories themselves.

The Colonial Office does not directly administer the non-selfgoverning territories with which it deals. Each of these has its own administration and an increasing measure of autonomy.

Her Majesty's Oversea Civil Service. Members of this Service are employed in the public service of the territory in which they serve and are paid by the Government of that territory. The Service merges the former administrative and professional branches of the Colonial Service. Its members are eligible for employment in any post which the Secretary of State for the Colonies is requested or authorized to fill and may be considered, as opportunity offers, for posts in Commonwealth or foreign territories for which the United Kingdom Government may be invited to recommend candidates. Recruitment into this Service is undertaken in the United Kingdom and other Commonwealth countries when suitably qualified local candidates are not available for appointment to the territorial public service.

The Crown Agents for Oversea Governments and Administrations are appointed by the Secretary of State for the Colonies to act as commercial and financial agents in the United Kingdom for the Governments of the territories for which he is responsible. They also act by special arrangement for other Governments and bodies.

The Commonwealth Relations Office

The Commonwealth Relations Office is the main channel of communication between the United Kingdom Government and the Governments of the other Members of the Commonwealth—Canada, Australia, New Zealand, South Africa, India, Pakistan and Ceylon. Through it, consultation and exchange of information takes place with the External Affairs Departments of those Commonwealth countries, either directly or through United Kingdom High Commissioners, on all subjects of mutual interest—foreign affairs, defence co-operation, economic and other matters. Where foreign policy is concerned, the Office works in close association with the Foreign Office.

The Commonwealth Relations Office is also responsible for the conduct of relations with the Federation of Rhodesia and Nyasaland¹ and for the administration of the High Commission Territories—Basutoland, the Bechuanaland Protectorate and Swaziland.

The Commonwealth Relations Office was established in 1947, replacing the Dominions Office (set up in 1925). In the same year the conduct of relations with India and Pakistan was transferred to the Commonwealth Relations Office from the India Office, which was abolished, and in 1948 the Office assumed similar responsibility in respect of Ceylon, which in that year became an equal member of the Commonwealth.

The Commonwealth Relations Office remains the Department responsible for the conduct of relations between the United Kingdom Government and the Government of the Irish Republic, which left the Commonwealth in 1949.

The Customs and Excise Department

Commissioners to collect the Customs and the Excise revenues were first appointed by the Long Parliament in 1643 (although after the Restoration the older method of collection through private contractors was again resorted to for a time). The two branches of the Revenue remained distinct until 1909, when they were amalgamated under Commissioners of Customs and Excise. The primary work of the Customs and Excise Department is to collect and administer the duties of Customs and Excise imposed from time to time in the annual Finance Acts or by other legislation, and to advise the Chancellor of the Exchequer on any matters connected with them. The Department is also responsible for preventing and detecting evasion of the Revenue laws, including smuggling and illicit distillation.

In addition to its revenue work the Department undertakes a wide range of non-revenue agency work for other Departments, e.g., the enforcement of prohibitions and restrictions on the importation and exportation of certain classes of goods, exchange currency control, and the compilation of United Kingdom oversea trade statistics from Customs import and export documents.

¹ The Federation comprises the three territories of Southern Rhodesia, Northern Rhodesia and Nyasaland. Federal matters and Southern Rhodesian territorial matters are dealt with by the Commonwealth Relations Office, but territorial matters concerning Northern Rhodesia and Nyasaland are dealt with by the Colonial Office.

For further information on the work of the Customs and Excise Department see pp. 249-54.

The Ministry of Defence

The Ministry of Defence was formally constituted in January 1947 following the passing of the Ministry of Defence Act, 1946. The Act charges the Minister with the responsibility for 'the formulation and general application of a unified policy relating to the armed forces of the Crown as a whole and their requirements'. He carries out this responsibility in accordance with general defence policy laid down by the Cabinet.

In addition to its main function of co-ordinating the policies and requirements of the three armed Services, the Ministry is responsible for the administration of certain inter-service organizations, such as Amphibious Warfare Headquarters, the Joint Intelligence Bureau and the Imperial Defence College.

For further information on the Ministry of Defence see p. 88.

The Ministry of Education

The Ministry of Education was established in 1944 to take over the powers and duties previously exercised by the Board of Education (1899-1944) in regard to the promotion of the education of the people of England and Wales and of the progressive development of institutions devoted to that purpose. The Ministry exercises this function in co-operation with the local education authorities—the councils of the counties and of the county boroughs—whose duty it is to secure the provision in their areas of adequate facilities for all forms of education. On professional matters, contact with the local education authorities is maintained through Her Majesty's Inspectorate of Schools, organized in regional divisions throughout England and Wales for its work of inspection, liaison and advice. A separate Welsh Department of the Ministry deals with education in Wales.

The Ministry is concerned with the development of primary, secondary and further education, including vocational education and education for leisure and the social and physical training of young people. It deals with the supply, training and superannuation of teachers; the building of new schools and other institutions; the school health service; the special educational treatment of handicapped children; and the provision of school meals and milk. It is responsible for the award of State scholarships and other awards for university students; for the administration of certain museums; and for the maintenance of educational relations with the countries of the Commonwealth, with foreign countries, and with the United Nations Educational, Scientific and Cultural Organization.

The Imperial Institute, which was founded in 1893, has since 1949 been the responsibility of the Minister of Education. The Institute houses permanent exhibitions of the peoples and products of the Commonwealth, shows films on Commonwealth subjects, and does much educational work in co-operation with the schools. It also arranges lectures and conferences and has study and recreational accommodation for Commonwealth students. The Institute is financially dependent on an endowment fund and on grants from the United Kingdom and other Commonwealth Governments.

For further information on the Ministry of Education see pp. 310-11.

The Ministry of Food

The Ministry of Food, which developed from the Food (Defence Plans) Department of the Board of Trade, was established as a separate Ministry in 1939. With the end of rationing and many other war-time controls it is now to be amalgamated

with the Ministry of Agriculture and Fisheries (see p. 39), with which it shares responsibility for implementing the farm price guarantees. The Ministry of Food is also responsible for administering deficiency payments schemes for cereals and livestock, support prices for eggs and potatoes, and the remaining food subsidies. The United Kingdom's balance of payments problems make it necessary for the Ministry to keep a general oversight of food imports and the Ministry has additional responsibilities where long-term contracts with oversea suppliers remain in force. The Ministry's other functions include food and drugs legislation, welfare foods (see p. 306) and nutritional policy, disposal of stocks, food defence plans and relations with various international bodies.

The Foreign Office

The Foreign Office, which is the headquarters of Her Majesty's Foreign Service, first became a separate Department of State in 1782. The Minister in charge of the Foreign Office, and responsible to Parliament for the conduct of foreign affairs and for the direction and operation of the Foreign Service, is styled Her Majesty's Principal Secretary of State for Foreign Affairs.

The Foreign Office acts as a channel of communication between the Government of the United Kingdom and the Governments of foreign States, either through the representatives of foreign States in the United Kingdom or through Her Majesty's representatives abroad, for the discussion and negotiation of all matters falling within the field of international relations, including the drawing up of international treaties and agreements. It also provides the means by which the United Kingdom Government is represented in the United Nations and on other international bodies and is kept informed of developments in foreign countries; by which British subjects and interests abroad are protected and trade promoted; and by which British policy is explained to the Governments and peoples of foreign countries. The questions dealt with by the Foreign Office are primarily of a political nature, but they also include many other matters such as questions of nationality, the issue and renewal of passports, and the immunities and privileges of foreign diplomatic representatives.

The Foreign Office is staffed by members of the Foreign Service which, as a separate and self-contained Service of the Crown formed in 1943 as a result of the amalgamation of the Foreign Office and the Diplomatic Service with the Consular and Commercial-Diplomatic Services, provides an interchangeable staff for service both at home and at United Kingdom diplomatic missions and consular posts abroad.

The Forestry Commission

The Forestry Commission was established under the Forestry Acts, 1919-47, to promote the interest of forestry, the development of afforestation, and the production and supply of timber in Great Britain; the Forestry Act, 1951, places responsibility on the Forestry Commissioners for the maintenance of reserves of growing trees, through a system of licensing of felling.

The Minister of Agriculture and Fisheries and the Secretary of State for Scotland are responsible for forest policy in Great Britain.

For further information on the Forestry Commission see pp. 150 and 350.

The Ministry of Fuel and Power

The Ministry of Fuel and Power was established in 1942, when it absorbed the former Mines and Petroleum Departments of the Board of Trade and the Board's

functions in relation to gas and electricity. It was made permanent by the Ministry of Fuel and Power Act, 1945.

The Ministry has the general duty of ensuring the effective and co-ordinated development of fuel and power supplies in Great Britain, and of promoting economy and efficiency in their distribution and consumption. The business of producing and distributing gas and electricity and of producing coal is operated by the boards of the three nationalized industries, whose members are responsible to the Minister on policy issues. The distribution of coal and coke is carried out, under Ministry control, largely by private concerns. The Ministry is also responsible for Government relations with the petroleum industry.

The Acts and Regulations governing the safety and health of workers in and about coal mines, metalliferous mines and quarries are administered by the Safety and Health Division of the Ministry, which includes the Inspectorate of Mines. The Ministry is responsible for the general co-ordination of fuel research, and the Chief Scientist's Division itself conducts or arranges for scientific research on specific projects and on matters affecting safety and health in mines and quarries.

The General Register Office

The General Register Office, which is under the Minister of Health for purposes of parliamentary control, is responsible under the Registrar General for the administration of the system of civil registration in England and Wales, for the preparation of statistics and reports relating to population, fertility, births, marriages, diseases and deaths, and for making arrangements for the periodic census of the population.

The Ministry of Health

The Ministry of Health, created in 1919 to take over the powers and duties previously attaching to the Local Government Board (established in 1871) and the National Health Insurance Commission (formed in 1912), assumed in 1920 the responsibilities in connection with mental illness formerly attached to the Home Office.

Twice since 1944 there has been a transfer of some of the Ministry's main responsibilities to newly created Departments—in 1945 those in respect of national health insurance and contributory pensions to the Ministry of National Insurance (now the Ministry of Pensions and National Insurance), and in 1951 those in respect of housing, water and sewerage services, and the supervision of local government to the Ministry of Local Government and Planning (now the Ministry of Housing and Local Government).

The main function of the Ministry of Health is now the administration of the National Health Service in England and Wales under the National Health Service Acts. The Ministry is also responsible in England and Wales for supervising the work of local authorities under certain sections of the Public Health Acts and providing for the care of the aged, infirm, blind, deaf and dumb and other handicapped persons under the National Assistance Act, 1946.

On the amalgamation of the Ministry of Pensions with the Ministry of National Insurance in 1953, the medical and surgical treatment of war pensioners—including the management of hospitals and the supply of artificial limbs, surgical appliances and invalid vehicles—hitherto the responsibility of the Ministry of Pensions, was transferred in England and Wales to the Ministry of Health (and in Scotland to the Department of Health for Scotland). The responsibility of the Ministry of Pensions for the medical treatment of war pensioners in the Channel Isles and

the Isle of Man and of those residing in the Irish Republic was also transferred to the Ministry of Health on that date.

For further information on the Ministry of Health see pp. 301-3 and 351.

The Home Office

The Home Office was created in 1782. Its head is the Secretary of State for the Home Department (the Home Secretary), who is the principal Secretary of State and is entrusted with all the responsibilities of national administration which have not been especially assigned by law or convention to the remaining Secretaries of State or Ministers. The Home Secretary is also the channel of communication between the Sovereign and his or her subjects, and between the United Kingdom Government and the Governments of Northern Ireland, the Channel Islands and the Isle of Man. In the Government formed in October 1951 the Home Secretary was appointed Minister in charge of Welsh affairs; at the same time a second Under-Secretary of State for the Home Department was appointed for Welsh affairs.

The chief matters with which the Home Office deals are: the maintenance of law and order; the efficiency of the police service; the treatment of offenders, including juvenile offenders; the efficacy of the probation service; the organization of magistrates' courts; legislation on criminal justice; the efficiency of the fire service; the care of children by local authorities and voluntary organizations; the regulation of the employment of children and young persons; the control and naturalization of aliens; the law relating to parliamentary and local government elections; public safety and public well-being; and preparations for civil defence.

The Home Office is responsible, *inter alia*, for receiving and submitting Addresses and Petitions to the Sovereign and for preparing Presentations to Parliament; for preparing patents of nobility for peers and formal proceedings for the bestowal of honours; for advising the Crown on the exercise of the Prerogative of Mercy; for the sanctioning of byelaws made by local authorities in so far as they relate to 'law and order' and 'good governance'; for granting licences to experiment with animals; for ordering the exhumation and removal of bodies; for the control of explosives, firearms and dangerous drugs; and for the administration of the State Management Scheme for controlling the liquor trade in the Carlisle district.

The Ministry of Housing and Local Government

The Ministry of Housing and Local Government was constituted in January 1951, under the title of Ministry of Local Government and Planning, to take over the housing and local government functions of the Ministry of Health and the planning functions of the Ministry of Town and Country Planning (1943-1951). It was renamed the Ministry of Housing and Local Government in November 1951. It is the Department generally responsible for local government, the loan-sanctioning authority for most purposes for which local authorities require to borrow money, and the main link between local authorities and the central Government.

The Ministry exercises powers in regard to housing, water, sewerage and other services administered by local authorities in England and Wales. In regard to these services, the position, broadly, is that the Minister is responsible to Parliament (a) for securing, so far as intervention by the central Government is necessary, the performance of duties laid upon local authorities by Parliament, whether this obligation is to be discharged by the aid of grants from national funds or not; (b) for encouraging the exercise of powers given to local authorities in regard to such services whether by grants paid out of national funds or otherwise; and

(c) for communicating with local authorities in regard to difficulties and complaints concerning any local authority services which may be brought to the Minister's notice.

As the central Housing Authority under the Housing Act, 1936, the Minister has supervisory responsibilities regarding the administration of the statutes relating to housing and the national housing programme; and he keeps in close touch with the local authorities through his officers in ten regions covering England and an officer in Wales. Local authority proposals for dealing with areas of unfit houses (slum clearance) are also submitted to the Minister and he has important functions in relation to the problem of overcrowding.

The town and country planning work of the Ministry includes the framing and execution of the national policy with respect to the use and development of land for the purpose of achieving the best use of land in the public interest. The responsibilities of the Minister in this respect include confirmation of the acquisition and disposal of land by local authorities; and the payment of grants, for planning purposes, in respect of certain cases of acquisition, clearing and compensation. The Minister also has responsibilities in connection with the establishment and work of the Development Corporations of the New Towns, and with the National Parks Commission.

For further information on the Ministry of Housing and Local Government see pp. 321, 329, 332 and 351.

The Central Office of Information

The Central Office of Information was established in 1946 as the successor to the war-time Ministry of Information. It is a common service agency for the production of information and publicity material and the supply of general publicity services required by Government Departments. Both for the home and oversea ministerial Departments it produces and distributes books, pamphlets, magazines, films, exhibitions, photographs and other visual material. It conducts all official press and poster advertising except that of the National Savings Committee, carries out social surveys, and distributes Departmental news to the Press and the BBC. For the oversea Departments, it supplies British information posts with a daily service of news-background and comment and with a comprehensive reference service. Administratively, the Central Office is responsible to Treasury Ministers, while the Ministers whose Departments it serves are responsible for the policy expressed in its work.

The Board of Inland Revenue

The Board of Inland Revenue administers the laws relating to income tax and surtax, profits tax, stamp duty, death duties, and certain other direct taxes of lesser importance; and advises the Chancellor of the Exchequer on any matters connected with them. The Board is also responsible for the valuation of real property for various purposes such as compensation for compulsory purchase, local authority rates and death duties.

The Ministry of Labour and National Service

The office of Minister of Labour was created by the New Ministries and Secretaries Act, 1916, which provided for the transfer to the Ministry of Labour of certain duties of the Board of Trade. Under the Minister of National Service Order, 1939, the title of the Ministry was changed to the Ministry of Labour and National Service and the offices of Minister of Labour and of National Service are held by the same Minister. The principal functions of the Ministry of

Labour and National Service are: (1) administration of the Employment and Training Act, 1948, and provision of facilities and services for the purposes of assisting persons to select, fit themselves for, obtain and retain employment suitable to their age and capacity, of assisting employers to obtain suitable employees, and generally for the purpose of promoting employment in accordance with the requirements of the community, including the operation of (a) a national system of Employment Exchanges, (b) Appointments Offices and the Technical and Scientific Register, (c) Nursing Appointments Offices, and (d) Government schemes for vocational training; (2) provision of a comprehensive Youth Employment Service and responsibility for the Central Youth Employment Executive; (3) collection and publication of information and statistics relating to employment, manpower, wages, earnings, hours, retail prices, industrial disputes and industrial accidents and diseases; (4) manpower policy and co-operation with other Government Departments on matters of general employment policy, including the distribution of industry and the maintenance of a high and stable level of employment; (5) registration, medical examination and calling-up of men under the National Service Acts; (6) resettlement in civil employment of men called up under the National Service Acts and released from service in the Regular Forces; (7) administration of the Disabled Persons (Employment) Act, 1944, including provision of services for industrial rehabilitation and vocational training of disabled persons; (8) employment of older men and women; (9) administration of the Factories Act, and miscellaneous work relating to safety, health and welfare of workpeople; (10) questions affecting industrial relations, i.e. relations between employers and employed, in particular with (a) assistance in the prevention or settlement of industrial disputes including the administration of the Conciliation Act, 1896, the Industrial Court Act, 1919, and the Industrial Disputes Order, 1951, (b) administration of the Wages Councils Act, 1945, (c) administration of the Catering Wages Act, 1945, and (d) encouragement of good personnel management and of arrangements for joint consultation in industry; (11) employment of foreign workers in Great Britain; (12) labour policy in the international field including relations with the International Labour Organization, and oversea questions concerning labour and employment; (13) agency work for other Government Departments in connection with National Insurance, National Assistance, repayment of income tax to unemployed persons, and the issue of passports.

The Law Officers' Department

The Law Officers of the Crown for England and Wales¹ (the Attorney-General and the Solicitor-General) are the legal advisers to the Crown and to all Government Departments and appear in Court on their behalf in cases of importance. In such cases the Law Officers are assisted by Junior Counsel to the Treasury. The appointments, which are made from among the more distinguished members of the English Bar, are generally, though not invariably, political and the office holders change with the Government.

The Attorney-General has a number of important functions in regard to the administration of justice and he has wide powers in connection with the enforcement of the criminal law. The Director of Public Prosecutions acts under his superintendence and is subject to his directions. The Attorney-General is the senior Law Officer but the Solicitor-General as his deputy acts for him in all cases where he is authorized or required to do so.

¹ For details of the Law Officers for Scotland see p. 54.

The Lord Chancellor's Department

The Chancellorship is a legislative, judicial and executive office always carrying Cabinet rank in peace time. The office is political in that it is held by an eminent ex-member of the Bench or of the Bar adhering to the political party in power.

In addition to his functions as Speaker of the House of Lords and Custodian of the Great Seal, the Lord Chancellor is in charge of more than 20 different offices and branches which are mainly concerned with legal practice and procedure. He controls the machinery of the courts of law both through his patronage and through administrative powers conferred by the Judicature Act, 1925, and other Acts; he appoints and removes Justices of the Peace¹; and he is the Minister responsible for the Judge Advocate General's Department. This Department advises the War Office and the Air Ministry on all legal matters arising out of the administration of military law, and, where necessary, reviews the proceedings of army and air force courts martial.² The Lord Chancellor is also a member of the Judicial Committee of the Privy Council, exercises ecclesiastical patronage and is connected with a number of administrative tribunals, including the Pensions Appeal Tribunals and also the Lands Tribunal which determines questions relating to compensation for the compulsory acquisition of land and hears rating appeals from local valuation courts. The Land Registry, which is responsible for maintaining a State register of title to land,³ and the Public Trustee Office, which may act as the executor or administrator of the estate of a deceased person or as a trustee under a will or settlement, are both administered under the Lord Chancellor.

The National Assistance Board

The National Assistance Board, responsible to Parliament through the Minister of Pensions and National Insurance, administers the State service of financial assistance to persons in need and unable to maintain themselves, and the non-contributory pension scheme under the Old Age Pensions Act, 1936. It has also responsibilities for assessing the needs of applicants for free legal aid (see p. 74).

For further information on the National Assistance Board see p. 299.

The Paymaster-General's Department

The Paymaster-General's Department acts as chief paying agent for Government Departments other than the Revenue Departments. The majority of payments are made through banks (to whose accounts the necessary transfers are made at the Bank of England), but cash payments can be made and the payment of pensions, mainly comprising those to retired teachers, officers of the Civil Service and the National Health Service and members of the Armed Forces, and in certain cases to their widows, is an important feature of the work of the Department.

The Ministry of Pensions and National Insurance

In 1953 the Ministry of Pensions (established in 1916) and the Ministry of National Insurance (established in 1944) were amalgamated.

The Ministry of Pensions and National Insurance is responsible (a) for the social security services established by the Family Allowances Act, 1945, the National Insurance Act, 1946, and the National Insurance (Industrial Injuries)

¹ Following the recommendation of the Royal Commission on Scottish Affairs, responsibility for the appointment of Justices of the Peace in Scotland is to be transferred, in 1955, to the Secretary of State for Scotland.

² The Judge Advocate of the Fleet is responsible for these matters in the Royal Navy.

³ Title must be so registered and guaranteed by the State in certain compulsory areas, but elsewhere registration is voluntary.

Act, 1946, and for reciprocal national insurance arrangements with other countries, and (b) for the award and payment of war pensions and allowances for disablement and death due to service in the armed forces of the Crown, or due to war injuries sustained by merchant seamen, civil defence personnel and civilians in the second world war, and for the welfare of pensioners and their dependants and war orphans. In addition to these responsibilities for war pensioners in the United Kingdom, the Ministry is also responsible for the administration of United Kingdom war pensions for pensioners resident in the Irish Republic, and for the administration of United Kingdom war pensions and the medical treatment for war disablement operating through the Pensions Office at Ottawa and for the various agency arrangements operating in different parts of the world. Financial responsibility for contractual arrangements with the two Ulster Volunteer Force Hospitals for the treatment and rehabilitation of war pensioners in Northern Ireland also rests with the Ministry.

The Ministry has two Parliamentary Secretaries, one to deal with war pensions and one with National Insurance matters.

For further information on the Ministry of Pensions and National Insurance see pp. 293-8.

The Post Office

The Post Office was set up in the seventeenth century to take over the responsibility for carrying letters, which was previously attached to the Crown. The Minister at its head is the Postmaster-General. Its work is mainly concerned with the operation of the inland postal, telegraph and telephone services and, in co-operation with other countries and interests, of the oversea postal and telecommunications services. It also undertakes certain banking functions, including the operation of the Post Office Savings Bank and the issue of money orders, and it acts as an agent for many other Government Departments in the collection of revenue (e.g., by the sale of broadcast receiving and other licences and by the sale of stamps for National Insurance contributions) and the payments of grants and allowances, such as National Insurance payments, retirement and certain other pensions and family allowances.

The Postmaster-General is the minister responsible to Parliament for broad questions of national policy concerning sound broadcasting and television services.

The Engineering Department of the Post Office carries out a considerable volume of scientific research and technical development relating to telephone, telegraph and radio systems.

For further information on the Post Office see pp. 220-5, 257 and 351.

The Department of Scientific and Industrial Research

The Department of Scientific and Industrial Research was set up as a Department of the Privy Council in 1916. It accounts for its own Vote in the Estimates and is responsible to Parliament through the Lord President of the Council.

The work of the Department covers research (except defence research) in all branches of natural science except medicine and atomic energy, and in all industries except agriculture, fishery and forestry. Its primary functions are to undertake research in the national interest for the benefit of the community and to meet the requirements of other Departments; to encourage research and the application of scientific knowledge in industry; and to encourage fundamental research at universities and elsewhere, and the maintenance of an adequate supply of trained research workers for laboratories of all kinds.

For further information on the Department of Scientific and Industrial Research see p. 344.

The Stationery Office

Her Majesty's Stationery Office was established in 1786. It is the Government's central organization for the supply of desk stationery, office equipment, office machinery, printed matter, published books and periodicals for British Government Departments at home and abroad. It is responsible for the publishing and sale of all Government publications. The Stationery Office also undertakes duplicating, addressing and distributing services for other Departments. The ministerial head of the Stationery Office is the Chancellor of the Exchequer, and questions pertaining to the Department asked in the House of Commons are normally answered by the Financial Secretary to the Treasury.

The Ministry of Supply

The present Ministry of Supply was formed in 1946 by the amalgamation of the war-time Ministries of Supply and of Aircraft Production.

The primary functions of the Ministry are to furnish supplies, which include complete atomic weapons, to the armed forces; to undertake research on, and the design and development of, equipment for these forces, principally for the Army and Royal Air Force, but including aircraft, vehicles, some guns and ammunition and other equipment for the Royal Navy. Other functions are to carry out the primary Government responsibility in the fields of engineering and electronics and in the non-ferrous and light metals industries, and the general Government responsibility for iron and steel including administration of the appropriate sections of the Iron and Steel Act, 1953, and to undertake research on and development and production of certain classes of equipment for civil use, e.g., civil aircraft and industrial gas turbines.

The Ministry also controls the Royal Ordnance factories and those experimental, storage and other establishments which are owned by the Department; it is responsible for the administration of such matters as labour supply, labour management, welfare, housing and transport in connection with these organizations.

The Board of Trade

The Board of Trade, which is headed by a President, assisted by a Minister of State who is specially concerned with oversea trade, and by a Parliamentary Secretary, was formally constituted by an Order-in-Council of 1786. It has a general responsibility in relation to the United Kingdom's commerce, industry and oversea trade, and carries the central responsibility among Government Departments for the formulation of policy in certain economic fields.

The most important of the latter are: commercial relations and negotiations with other countries, including international commodity policy and the commercial aspect of relations with international bodies; general import and export policy; policy on the United Kingdom protective tariffs; consumer protection, including, for example, policy on price control, resale price maintenance, monopolies and restrictive practices and merchandise marks; matters affecting industrial productivity, and publicity for methods of increasing it; and distribution of industry, including implementation of the Distribution of Industry Acts (see p. 117).

The Board is also responsible for the following matters: (1) statistics of trade and industry, including the Censuses of Production and Distribution; (2) the administration of certain regulative legislation, mainly in relation to patents, registered designs, copyright and trade marks, companies and bankruptcy, insurance, weights and measures, and enemy property; and (3) policy towards and relations with certain non-Government organizations concerned with trade and

industry, such as the British Standards Institution, the British Institute of Management, the British Travel and Holidays Association, the Council of Industrial Design and the National Research Development Corporation.

In addition, the Board is the 'production department' (see p. 122) for all industries and raw materials which are not the concern of other Departments, and is responsible for the management and custody of strategic stockpiles of materials.

For further information on the Board of Trade see pp. 279, 284-5 and 329.

The Ministry of Transport and Civil Aviation

In 1953 the Ministry of Transport and the Ministry of Civil Aviation were amalgamated. This amalgamation was foreshadowed in November 1951, from which time the two offices of Minister of Transport and Minister of Civil Aviation were held by the same Minister.

The Ministry of Transport, established in 1919 'for the purpose of improving the means of, and the facilities for, locomotion and transport', assumed also, in 1941, the responsibility for merchant shipping formerly exercised by the Mercantile Marine Department of the Board of Trade.

The Ministry of Civil Aviation was established in 1945 to organize, carry out and encourage measures for the development of civil aviation, for the promotion of air safety and efficiency, and for research on air navigation.

The powers and duties of the Ministry of Transport and Civil Aviation relate to the following aspects of inland transport and merchant shipping: railways; inland waterways; roads, bridges and ferries, and the vehicles they carry; harbours, docks, piers and river conservancy; national and international shipping policy; ships, their masters, officers and men; safety of life at sea; navigation (including pilotage, light-houses, and other aids to safety in navigation); wreck and salvage; and the Coast-guard Service. The Ministry is the highway authority for trunk roads and is responsible for providing and operating troopships.

In civil aviation matters, the Minister of Transport and Civil Aviation may give general directions to the publicly owned airline corporations on matters affecting the national interest. He also approves associate arrangements between airline corporations and independent air transport companies for the operation of scheduled services.

General civil aviation responsibilities include: the regulation of civil flying; air safety; the provision, administration and equipment of State-controlled aerodromes and other ground services; the negotiation of international air transport agreements; the registration of aircraft; and the licensing of aircrew and aircraft maintenance personnel.

The Ministry of Transport and Civil Aviation has two joint Parliamentary Secretaries.

For further information on the Ministry of Transport and Civil Aviation see pp. 190, 196, 208, 210, 216 and 351.

The War Office

The office of Secretary of State for War was established in 1854 as a preliminary to abolishing the office of Secretary of State at War, which had been in existence since the beginning of the century. In 1904 the Army Council was constituted on the model of the Board of Admiralty, with the Secretary of State as president and a mixed membership of military and civil personnel.

The War Office is responsible for the administrative control of the Army, including appointments, promotion, postings and payment, and its functions include the planning of operations and training; the collection and sifting of military

information; the framing of policy on the composition, weapons and equipment of the Army; the determination of financial and labour policy connected with the Army; and the supervision of War Office civilian staffs both at home and abroad.

For further information on the War Office see p. 98.

The Ministry of Works

The Ministry of Works, previously known as His Majesty's Office of Works, was established under its present title in 1943. Its main functions are: the provision of accommodation for Government Departments (including public buildings overseas), either by the design and erection of new buildings (including Government research laboratories, factories, etc.) or the leasing and adaptation of existing buildings; the maintenance of this accommodation; the design, purchase, supply and maintenance of furniture and equipment for Government Departments and certain other bodies, and the supply of fuel, household articles and stores; the maintenance of, and advisory services in connection with, ancient monuments and historic buildings, and the administration of the Historic Buildings and Ancient Monuments Act, 1953; the maintenance of certain Royal Palaces; and the management and maintenance of the Royal Parks. The Ministry is also responsible for assisting the production and distribution of certain building materials and fittings; for the supervision of the national building programme and the allocation of certain materials among various users; and for the review of research and development work in connection with building requirements and the communication of the results to industry.

By a special arrangement, announced by the Prime Minister in November 1953, the Minister of Works has been made responsible for answering questions in the House of Commons concerning atomic energy, since the responsible Minister—the Lord President of the Council—is a member of the House of Lords.

For further information on the Ministry of Works see pp. 321 and 351.

SCOTLAND

The first Secretary for Scotland was appointed in 1885 in recognition of the fact that Scotland required a separate system of administration from that of England and Wales. In 1926, all the powers and duties attached to the office were transferred by the Secretaries of State Act to a principal Secretary of State.

The functions of the Secretary of State, who is assisted at ministerial level by a Minister of State, three Parliamentary Under-Secretaries and the Scottish Law Officers, are discharged by four main administrative Departments of equal status, each under a Secretary responsible to the Secretary of State for the discharge of the duties of the Department. The day-to-day administration of the Departments is conducted in Edinburgh, but each Department has representatives in London for liaison and Parliamentary duties. This London office is generally known as the Scottish Office, a term also used to describe the whole system of Scottish administration.

The four main Scottish Departments are the Scottish Home Department, the Department of Health for Scotland, the Scottish Education Department, and the Department of Agriculture for Scotland.

The Scottish Home Department

The Scottish Home Department was set up in 1939 to take over the work that had been undertaken previously by the Secretary of State's Office, and by the Fishery Board for Scotland and the Prisons Department for Scotland.

In the field of law and order, the Department is concerned with the police, probation and remand home services, criminal justice, legal aid and the services needed by the courts; it is directly responsible for the administration of prisons and Borstal institutions.

The Department is the central Department in Scotland for the fire service and civil defence; for the children's service; and for legislation concerning shops, theatres, cinemas and licensed premises. Licensed premises in the State Management Districts¹ are directly maintained by the Department.

Other functions of the Department are: general duties in connection with the structure and finance of local authorities, including valuation and rating and the administration of the Exchequer equalization grants; and the oversight and protection of the Scottish inshore, deep-sea and freshwater fisheries. The Department is also closely concerned, in co-operation with the Board of Trade and other United Kingdom Departments, with Scottish economic development, including the work of the North of Scotland Hydro-Electric Board and the rehabilitation of the Highlands generally.

The Department of Health for Scotland

The Department of Health for Scotland is responsible for the general supervision of the National Health Service in Scotland; for the central administration of the Housing (Scotland) Acts and for the supervision of the house-building programme and the distribution of grants to local authorities for housing purposes; and for the control, under the Town and Country Planning (Scotland) Acts, of the use of land and the establishment of new towns under the New Towns Act.

The Department is also responsible for supervising the administration of various environmental services, e.g., water supplies and sewerage; and welfare services, e.g., the care of the aged and handicapped persons; and for the medical and surgical treatment of war pensioners in Scotland (including hospital services and the supply and repair of artificial limbs, surgical appliances and invalid chairs).

The Scottish Education Department

The Scottish Education Department is responsible for supervising the administration of the Education (Scotland) Acts, for guiding the development of public education in Scotland in all its forms, for supervising the training of teachers, for issuing teachers' certificates and administering the Teachers' Superannuation Scheme, for controlling the distribution of Exchequer grants-in-aid of educational expenditure, for conducting the annual examination for the Scottish Leaving Certificate, and for exercising general supervision over Approved Schools and over the administration of the Royal Scottish Museum.

The Department of Agriculture for Scotland

The Department of Agriculture for Scotland is the successor of the Board of Agriculture which was established in 1912. The Department is responsible in Scotland for the management of agricultural property owned by the Secretary of State; for the administration and finance of various instructional, advisory and research services provided by agricultural colleges and research institutes; for the administration of subsidies and other services in connection with food production, the use of land and the economics of the agricultural industry; for the administration of agricultural improvement schemes and of labour, machinery and supply services; and for the protection of agricultural interests generally.

¹ Districts in which State management of the liquor trade is in operation.

Minor Departments

In addition to the main Departments, there are a number of minor Scottish Departments, including the Department of the Registrar General for Scotland,¹ all of which work in varying degrees under the direction of the Secretary of State. There are also the Scottish branches of the United Kingdom Departments under the direction of Controllers, who are responsible for ensuring that the execution in Scotland of the policy and procedure of their Departments is in accordance with Scottish conditions and needs.

Legal Departments

The Law Officers for Scotland are the Lord Advocate and the Solicitor-General. The Lord Advocate is in administrative control of two Departments: *The Lord Advocate's Department*, which is responsible for drafting Scottish legislation, providing legal advice on Scottish questions for other Departments, and assisting the Scottish Law Officers in certain of their legal duties; and *The Crown Office*, which exercises the powers of the Lord Advocate in relation to criminal proceedings.

NORTHERN IRELAND

There are a number of separate Departments for Northern Ireland, which are controlled by the Northern Ireland Parliament. Most of these have functions in Northern Ireland analogous to those performed for England and Wales by the United Kingdom Departments of the same name—the Northern Ireland Ministries of Home Affairs, Education and Agriculture; the Northern Ireland Assistance Board; and the Exchequer and Audit Department for Northern Ireland. Other Northern Ireland Departments cover activities which in Great Britain are divided between several Departments. These Northern Ireland Departments include the Ministries of Finance, Commerce, Health and Local Government, and Labour and National Insurance.

The Ministry of Finance

In addition to acting as Treasury to the Government of Northern Ireland, the Ministry of Finance is responsible for administrative work in connection with the erection and maintenance of public works and buildings; for Government valuation and survey; for land registry, the registry of deeds, and certain duties in connection with land purchases; for the reception and preservation of public records; for the work of the Registrar-General; for the control of Government publications; for the control and administration of charitable donations and bequests; and for the control of borrowings.

Attached to the Department is the Office of the Parliamentary Counsel, in which Government Bills are prepared for introduction into Parliament.

The Ministry of Commerce

In addition to its commercial intelligence work, and its work in connection with industrial production and the development of new, and the expansion of existing, industries, the Department is responsible for the business of the Government in relation to electricity and gas undertakings; roads and bridges and inland public transport; motor vehicles and road traffic; railways; harbours and inland waterways; fisheries; the development of the tourist traffic; the regulation and inspection of

¹ The General Registry Office.

mines and quarries; mineral development; scientific development; the registration of companies and trade unions; and the administration of the Assurance Companies Acts and the Industrial Assurance (Northern Ireland) Act, 1924. The Ministry also performs functions delegated by the Ministry of Fuel and Power (Whitehall) relating to the distribution of coal and other solid fuels.

The Ministry of Health and Local Government

In addition to its work in connection with the National Health Service, the Department is responsible for the central administration of local government services.

The Ministry of Labour and National Insurance

The Ministry is responsible for the administration of the Factories Acts and other legislation connected with industrial health and welfare; for the promotion of joint organizations for the settlement of industrial questions and of machinery of conciliation in industrial disputes; for the administration of local employment offices and the machinery for dealing with employment questions of all kinds; for the administration of the National Insurance and the National Insurance (Industrial Injuries) Act, and of the Family Allowances Act; and for carrying out certain statutory functions in connection with the National Assistance Scheme in conjunction with the National Assistance Board for Northern Ireland.

THE CIVIL SERVICE

A civil servant in Britain is a servant of the Crown (not being the holder of a political or judicial office), who is employed in a civil capacity and whose remuneration is found wholly or directly out of moneys voted by Parliament. The number of civil servants under this definition amounts to more than a million; for it includes some 400,000 Government industrial employees in such establishments as Royal Ordnance factories and Admiralty dockyards. The term 'Civil Service' is, however, generally used only to cover 'non-industrial' members of the staffs of the various Government Departments. At the end of September 1954 the total number of non-industrial civil servants employed in all Departments, at home and overseas, was 638,176; approximately one-third of this total are women.

Although the civil servant is legally a servant of the Crown, in practice, he serves the Minister (or the Board or Commission) responsible to Parliament for the Department in which he works, by advising in the formulation of policy and by carrying out policy decisions once they have been taken.

Development of the Modern Civil Service

The Civil Service in its present form is a product of the past one hundred years. Before then, Departments were wholly free to choose their own staffs, qualifying standards were unknown, there was no central supervision, and political jobbery was rife. Measures of reform instigated during the nineteenth century (mainly as the result of a report on the Organisation of the Permanent Civil Service by Sir Stafford Northcote, Secretary of the Board of Trade, and Sir Charles Edward Trevelyan, an Assistant Secretary of the Treasury, which was published in 1854) included the substitution of open competition for the practice of obtaining Civil Service appointments by favour or purchase, and the establishment of an independent body, known as the Civil Service Commission, to organize recruitment to the service. The great expansion in State planning which has taken place during the last fifty years, and the consequent expansion in the numbers of civil servants and

the scope of their duties, have led to further reorganization. During the last few decades, recruitment competitions have been adapted to a developing educational system; co-ordination between the various Departments has been improved; and the search for increased efficiency in the conduct of public business has been the task of many Government-appointed commissions and committees of inquiry. As a result, civil servants are today members of an integrated service with common conditions of employment and common traditions and standards of conduct which belong not to individual Departments but to the Civil Service as a whole.

Control of the Service

The general control of the Service is in the hands of the Treasury, as the Department responsible for ensuring that the amount of money voted by Parliament for the activities of the Civil Service is not exceeded and that the money itself is spent in the best and most economical way. The Treasury therefore examines and approves (or disapproves) all new proposals for spending public money; sanctions (or vetoes) increases of staff; regulates the salaries and conditions of employment of civil servants; supervises training for the Civil Service; and keeps the machinery of government continually under review.

The responsibility for the policy and activities of each Department lies with the Minister, who is answerable to Parliament for what the civil servants in that Department may do or say.

Structure of the Service

The Minister at the head of each important Government Department (sometimes known as the Secretary of State) is assisted by one or more junior Ministers. Directly responsible to the Minister is the permanent Head of the Department—the Permanent Secretary (sometimes known as the Permanent Under-Secretary of State)—who is normally supported in the higher direction of the work by one or more Deputy Secretaries and a varying number of Under-Secretaries and Assistant Secretaries.

Departmental Organization

The internal organization of Departments varies according to the work allotted to them by the Government of the day. Most Departments are divided into branches, divisions and sections, each responsible for some portion of the Department's activities in decreasing order of size and scope. Two branches are common to all Departments: a Finance Branch, which is responsible for financial matters and accounting; and an Establishments Branch, which is responsible for staff matters. In the larger Departments, the Establishments Branch usually contains an 'Organization and Methods' division, the members of which act in an advisory capacity as 'efficiency experts' for improving the way in which the Department arranges its work and eliminating all that is not strictly essential to the tasks in hand. Smaller Departments are advised by the 'Organization and Methods' division of the Treasury.

Classes and Grades

The engagement and position of all civil servants are covered by regulation, agreement and traditional practice, every civil servant being assured of a definite status depending upon the post which he is called upon to fill. There are four

main classes of civil servants,¹ each class containing a series of grades. The classes are:

1. The *Administrative Class*, which is responsible for advising Ministers on policy, for dealing with any difficulties which may arise in carrying out existing policy, and for forecasting the probable effects of new measures and regulations. This relatively small class, which at end-September 1954 numbered about 3,400, is recruited largely from university graduates.
2. The *Executive Class* (numbering some 67,300 at end-September 1954), which is responsible for the day-to-day conduct of Government business, including the higher work of supply and accounts, within the framework of established policy. Members of this class must have reached a recognized educational standard; after entry they may train for specialist work such as that of an auditor, actuary or statistician.
3. The *Clerical Class* (the largest of the main classes, comprising about 187,000 officers), which undertakes all the usual clerical work involved in running departmental business, e.g., the preparation of accounts and the keeping of records, the handling of particular claims in accordance with known rules, and the summarizing and annotation of documents for the assistance of senior officers.
4. The *Typing Class* (about 28,000 members), which consists of shorthand typists, copy typists and learner typists.

Other classes are: the *Professional, Scientific and Technical Classes*, which consist of some 112,600 civil servants with the necessary qualifications (e.g., doctors, lawyers, engineers, information officers and research workers) for carrying out the wide range of specialized duties which are now discharged by the Government; the *Departmental Classes*, which are not found throughout the Service generally but are confined to one or two Departments, e.g., the Tax Inspectorate of the Board of Inland Revenue, the Factory Inspectorate of the Ministry of Labour and National Service, and the Waterguard of the Customs and Excise Department (in all some 2,700) and the *Manipulative Classes*, which include large numbers (about 236,600 at end-September 1954) of postal and telegraph officers, postmen, telephonists, messengers, paper keepers, office cleaners and similar workers in Government Departments, and their immediate supervisors.

Recruitment of Staff

The recruitment of all permanent civil servants is in the hands of the Civil Service Commission, whose members are appointed by the Crown on the advice of the Government. The normal method of entry is by open competition, conducted in accordance with regulations approved by the Treasury and consisting of written examinations or interviews, or both. The points of entry into the four main classes of the Civil Service are planned to correspond to definite levels in the British educational system, and it is the Commission's duty to study the requirements of the Civil Service in the light of the education provided by the schools and universities.

In addition to holding examinations and conducting interviews, the Commission is responsible for issuing a Certificate of Qualification in respect of each successful candidate, for placing new entrants in Departments for which their qualifications

¹ Working in the United Kingdom, and also overseas in the Foreign Service (see p. 43) and in Her Majesty's Oversea Civil Service (see p. 40) and for other Government Departments such as the Commonwealth Relations Office (see p. 41).

are appropriate, and for watching the careers of those it has selected in order to ensure that current methods of recruitment are successful and up to date.

Temporary civil servants, who are not entitled to pensions, are normally recruited by the Department concerned through the Appointments Service (see p. 231) of the Ministry of Labour and National Service. No qualifying examinations are required for entrance on a temporary basis to general service.

Training

Each of the larger Government Departments has a Training Officer and a number of instructors, who organize both general and technical courses where necessary. Methods vary from Department to Department, but nearly all have systematic instruction of recruits in all classes. There are also 'refresher' courses for established staff.

Methods of training include the use of films and instructional books; discussion groups; and educational visits, which enable civil servants to study the appropriate workings of outside bodies. In addition, officers in the early years of their service are transferred from branch to branch and sometimes from Department to Department, in order that they may gain as wide an experience as possible of civil service activities.

The functions of Training Officers are co-ordinated by the Training and Education Division of the Treasury, which also undertakes the task of training the departmental instructors themselves, and provides central courses, on entry, for members of the Administrative Class.

Promotion

A period of probation (lasting from one to two years according to grade, with extensions in certain instances) is the rule for all new entrants to the permanent Civil Service. Promotions from grade to grade are made by Departments; those from class to class partly through centrally conducted competitions (open only to serving members of specified civil service classes), and partly by Departments themselves. All promotions to the Administrative Class from other classes require Treasury approval. Promotions to the highest positions in the Civil Service, e.g., Permanent Secretaries, Principal Establishments Officers and Principal Finance Officers, must be approved by the Prime Minister, who is advised in these matters by the Permanent Secretary to the Treasury.

Conditions of Service¹

Machinery for negotiation on conditions of service affecting the Civil Service as a whole is provided by the National Whitley Council² which is composed jointly of official and staff representatives. Negotiating machinery for separate sections of the Service is provided through the various staff associations, which civil servants are encouraged to join (e.g., the Civil Service Clerical Association, the Union of Post Office Workers, the Society of Civil Servants, the Institution of Professional Civil Servants, and the Association of First Division Civil Servants) and through departmental Whitley Councils (of which there are about 80).

In general, the civil servant receives a salary which, except in the very highest posts, compares reasonably with that paid for similar work outside the Service,

¹ A review of the pay of the Civil Service, including the principles which should govern it, and of other conditions of service such as hours of work and annual leave, is being undertaken by a Royal Commission set up in July 1953.

² See also footnote p. 238.

and he is entitled to regular annual increments up to the maximum of the scale of the grade to which he belongs. In addition, although he holds office at the pleasure of the Crown and may therefore be dismissed at any time, he enjoys, in practice, a considerable measure of security of tenure. Thus every permanent civil servant may reasonably expect a full career in the public service, and a pension on retirement—though this, again, is not a legal right.

Civil servants are generally 'conditioned' to a given number of hours of attendance a week. Overtime is paid to members of most of the lower salary groups if they work longer than their 'conditioned' hours. The standard working week in the Service, at present, is generally 45½ hours. The highest administrative officials, who work the longest hours, receive no extra remuneration for extra work performed. Annual leave varies according to the grade up to a maximum, at present, of 36 days a year. Sick leave on full pay, less any National Insurance benefit received, may be granted to established civil servants for up to six months in any twelve months, and on reduced pay up to a maximum of one year's sick leave in any four years.

Political and Private Activities

Civil servants may participate in political activities subject to certain special rules. Many grades are completely free to engage in national and local political activities; others are free to engage in most political activities by permission and subject to certain conditions; while others again are not allowed to take part in national political activities, but are free to seek permission to engage in local political activities. Civil servants of every grade may, of course, exercise the right of all citizens to register their private political opinions on appropriate occasions, i.e. at a general election or at local authority elections. Officially, the position and functions of a civil servant remain the same whichever political party is in power; and it is his duty to serve the Government of the day irrespective of his own political opinion.

Every civil servant may engage in such private activities as he wishes, provided that such activities do not in any way conflict with his official duties, nor with the provisions of the Official Secrets Acts of 1911 and 1920 and the Prevention of Corruption Act of 1906. A civil servant must not, however, use his official position to further his private interests; and he is therefore subject to restrictions in matters of commerce and business from which the ordinary citizen is free, e.g., he may not hold private interests in public contracts; and he may not use official information in writing, broadcasting or lecturing without the express approval of his Department. Above all, a civil servant is expected to conform to the high standards of integrity which characterize the Service to which he belongs.

LOCAL GOVERNMENT

Local government has been defined as government by elected local bodies charged with administrative and executive duties in matters concerning the inhabitants of a particular district or place and vested with powers to make byelaws for their guidance.

Government on a local basis has been part of the administrative system of the United Kingdom for many centuries. It has existed in England continuously since Saxon times. In its present shape, however, it dates back only to the later nineteenth century, when the conception of local government by popularly elected councils received statutory recognition.

The first 40 years of the present century witnessed a sharp increase in, and expansion of, environmental and social services, and a corresponding increase in

the responsibilities of local authorities upon whom the greater part of the management of these services devolved. Legislation passed in the post-war period has made some further changes; on the one hand the powers of local authorities relating to the provision of hospitals, gas and electricity supplies, and (in England and Wales) valuation for rating purposes have been transferred to national boards or to Government Departments, while on the other, local authorities (mainly the councils of counties and county boroughs in England and Wales and of counties and large burghs in Scotland) have been charged with certain additional or new responsibilities in connection with the health services, care of children, town and country planning, care of the aged and a number of other welfare services.

Recent changes have not affected the structure of local government, nor its importance as part of the administrative system as a whole. In the United Kingdom, it remains as an essential link between the individual and the central Departments of State.

Relations between Central and Local Government

As the supreme authority in the United Kingdom, Parliament controls local authorities through Acts of Parliament which require elected local councils to implement policies prescribed and defined in those Acts. The scope of local government is limited by the same means; no council may go beyond the boundary fixed for its activities by an Act of Parliament.

Legislation is supported by departmental supervision; Parliament makes certain ministers responsible for securing the efficient functioning of local government services. Departmental supervision is exercised by means of inspections, inquiries, examinations of statistics, authorization of loans, the issue of advisory circulars and statutory Rules and Orders, the approval of byelaws, and the administration of Government grants. The Ministry of Housing and Local Government is the main link between local authorities and the central Government.

Principal Types of Local Authority

For purposes of local government, England and Wales and Northern Ireland are divided into county boroughs and administrative counties. Administrative counties are further divided into three types of county district: municipal or non-county boroughs; urban districts; and rural districts, which are themselves subdivided into parishes (except in Northern Ireland). Each of these divisions is administered by a different kind of local council, as follows:

<i>England and Wales</i> ¹	<i>Northern Ireland</i>
county councils (61)	county councils (6)
county borough councils (83)	county borough councils (2)
non-county borough councils (312)	non-county borough councils and municipal town councils (9)
urban district councils (568)	urban district councils (24)
rural district councils (476) ²	town commissioners (3)
parish councils (about 7,300) or parish meetings (about 3,800)	rural district councils (32).

There are, in addition, the local authorities for London, which are unlike those in the rest of the United Kingdom. They are:

- the London County Council
- the Corporation of the City of London
- the metropolitan borough councils (28).

¹ Excluding the London area.

² Including the Isles of Scilly.

Scotland

The local authorities in Scotland are:

- county councils (33, of which two pairs are combined for certain purposes)
- town councils (197, consisting of: the authorities for counties of cities, 4; other large burghs, 20; and small burghs, 173)
- district councils (199; two counties are not divided into districts).

Functions and Services

It is the primary duty of every local authority to provide and administer such environmental and social services as it may be required to provide and administer by an Act of Parliament. It may provide additional services under the permissive powers of a general Act or under powers granted to it by Private Bill legislation.

The responsibilities of local authorities depend upon the type of council. In England and Wales and Northern Ireland, for example, county borough councils are all-purpose authorities, while the county councils and county district councils, i.e. the councils of non-county boroughs and the urban and rural districts, each have particular functions allotted to them, which they exercise independently to a considerable extent, although there is a certain degree of delegation from county councils to county district councils especially in the fields of education and planning. In Scotland, the town councils of the counties of cities are all-purpose authorities; elsewhere the county councils exercise very many local government functions. In large burghs, they administer education and in some cases police, all other functions being exercised by the town councils. In small burghs, county councils undertake a number of important functions, but housing and some other services are administered by the town councils. The smallest authorities (the parish councils or parish meetings in England and Wales and the district councils in Scotland) have a few functions which they may exercise of right.

The services provided by the councils, which are described more fully in later chapters, may be considered under three heads:

1. *Environmental Services*, which are services designed to secure and improve the citizens' surroundings. The majority are public health and sanitary services administered in England and Wales either by county, county district or parish councils (in London by the metropolitan borough councils, in Northern Ireland by the county district councils and in Scotland by the county and town councils), e.g., the inspection and abatement of nuisances, drainage, sewerage, street cleansing, refuse collection and disposal, the supervision of water supplies, measures for ensuring food hygiene (including inspection of premises where food is prepared, sold or served, analysis of food samples, etc.), rodent control and the provision of baths and washhouses. There are also the services for street lighting, public safety on the highways, and the provision of amenities such as parks and recreation grounds, which are generally administered by the same authorities. The important work of town and country planning is done in England and Wales by the county and county borough councils, except where it is delegated to county district councils, and in Scotland by county councils and the town councils of large burghs. County borough councils, as all-purpose authorities, provide and administer their own environmental services.

2. *Protective Services*, which include the fire service, the civil defence service and the police. The fire service is administered throughout England and Wales by the county borough councils, the county councils or joint boards of these authorities if neighbouring councils amalgamate; and in Scotland, by the county councils

and the town councils of most of the large burghs or by joint boards. Except for joint boards, these authorities, together with a few county district councils, and, in London, the metropolitan borough councils and the City Corporation, are also responsible for organizing the local divisions of the Civil Defence Corps.¹ The police service is administered by Standing Joint Committees in the counties of England and Wales, by Watch Committees in the county boroughs or by joint boards. In London, the City Corporation has jurisdiction over the police force in its area, while the Commissioners of Police, responsible directly to the Home Secretary and appointed by him, control the Metropolitan Police Force. The police authorities in Scotland are the county councils, the town councils of large burghs or joint committees for combined forces.

3. *Personal Services*, which are services designed to 'cultivate the best physical, mental, and moral potentialities of each individual'. The type of authority concerned depends on the nature of the services, which range from maternity and child welfare, education, care of children and housing to the provision of entertainments. Services under this heading also include certain other health services, services for the aged and infirm, and the provision and upkeep of libraries, museums and art galleries.

There are also some trading services, e.g., passenger transport, water supply, and harbour, dock and pier services, although these are now less numerous than before and during the war.

Local Authority Elections

The normal term of office of a councillor elected to any form of local government is always three years. In some cases the whole council retires every third year and another is elected immediately; in other cases elections are held annually, when one-third of the councillors retire. Procedure at local government elections is governed by local election rules.

Any person (including a member of the House of Lords) is entitled to vote at a local government election provided that he or she is a British subject of 21 years of age or over or a citizen of the Irish Republic, and is registered as a local government elector for the area for which the election is held. A person qualifies for registration as a local government elector if on the qualifying date for the register he or she is resident in the area or occupies as owner or tenant (in Scotland, owns or occupies as tenant) any rateable land or premises in the area of a yearly value of not less than £10.

Voting takes place at polling stations arranged by the council concerned, under the supervision of a presiding officer specially appointed for the purpose. Every elector is expected to cast his vote in person, although members of the armed forces may vote by proxy and (except in rural district or parish council elections) voting by post, or in certain cases by proxy, may be allowed if it is impossible for the voter to attend. No elector may give more votes in all than the total number of councillors to be elected.

Candidates for election stand either as Independents or as representatives of one of the national or local political parties. Each candidate must be nominated by two electors, as proposer and seconder; and, in England and Wales, except in elections for metropolitan borough councils, rural district councils and parish councils, eight other electors for the area must assent to the nomination. In Scotland, county and district council candidates require proposers but no assenters, town council candidates a proposer and five assenters. Eligibility for nomination as a candidate

¹ All other types of local authority also have important civil defence functions.

depends in the first place upon registration as a local government elector for the area, and thereafter upon a number of statutory qualifications and disqualifications designed to secure that the candidate is a suitable person for the office.

In parliamentary elections, the contest is between several candidates for one seat. In local government elections there are usually a good many seats to be filled, and nearly all county and non-county boroughs and metropolitan boroughs in England and Wales and the larger burghs in Scotland are divided into wards, the number of councillors elected for each ward being three or a multiple of three. The areas of all the other authorities, except county councils, may be so divided or they may be left as single units depending on their size. Counties are split up in accordance with orders made by the Secretary of State for the Home Department or the Secretary of State for Scotland, as the case may be, into electoral divisions which return members to the county council and to the district council. The London County Council is organized in three-member divisions, which are the same as the parliamentary constituencies in its area.

Internal Organization of Local Authorities

Local authorities are free to a very considerable extent to make their own internal arrangements and to choose the means and methods by which they will discharge their responsibilities. The arrangements made by most councils are briefly as follows: questions of policy and principle are decided by the whole council, which appoints committees to carry out the detailed administration of its various services. The more important of the committees of the larger authorities divide their work among sub-committees, which stand to the parent committee in more or less the same relation as do the main committees to the whole council. The execution of the policy decided upon by the council and the committees rests with salaried officers and employees, whose number may vary from about half a dozen in a small rural district to several thousand in the large counties and in the larger county boroughs.

Apart from one or two minor provisions regarding the representation of specialists on committees and the length of time certain members may hold office, committees of councils are remarkably free from legal restrictions; even those known as 'statutory' committees are constituted according to individual requirements and not according to any set pattern laid down. For purposes of classification, however, they may be divided into two kinds; ordinary committees and joint committees. Ordinary committees may be further divided into statutory committees, the appointment of which is compulsory under an Act of Parliament; standing committees, which are appointed in accordance with the standing orders of the council on a permanent basis according to the extent of the council's business; and special committees, which a council may set up for a limited period to deal with a particular problem that once solved is unlikely to recur.

Joint Committees or Joint Boards consist of representatives of more than one authority. They are usually established when local authorities co-operate for services which cannot be dealt with on purely local lines, e.g., water supply, or sewerage.

Committees of a local authority may be advisory or executive; their powers and duties are usually laid down in the appointing council's standing orders or, in the case of a county or large burgh in Scotland, in the council's administrative scheme. A council is free to delegate all its powers to committees except its powers in connection with raising loans, levying rates or issuing precepts, which are legally reserved to the council as a whole.

Every council is empowered to appoint such staff as it deems necessary to carry

out its work. Certain appointments are compulsory, e.g., the Clerk, the Treasurer, the Medical Officer of Health, the Surveyor and the Sanitary Inspector. Even the smallest parish councils employ a part-time clerk. Choice of personnel is normally left to a great extent to the individual council.

Officers are normally of three kinds: heads of departments, whose duties are mainly of an administrative and managerial kind; subordinate officers employed in a professional, clerical or technical capacity; and manual workers who are employed to do the actual physical work for which the council is responsible. As a rule, senior staff appointments are made at the instance of the committee or committees particularly concerned; while most junior appointments are made by heads of departments, who are also responsible for engaging the manual labour required. Appointments and engagements are always made in conformity with a set establishment, and committees are informed of any appointments which they have not made themselves.

Rates of pay and conditions of service for local authority staff are within the jurisdiction of the employing council (except where the proposed salary of an officer requires the approval of a Government Department, as in the case of the clerk of a county council in England and Wales). They are based on recommendations made by the Whitley Councils (see p. 238), of which there are several, including the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services, the National Joint Industrial Council for Local Authorities' Non-Trading Services (Manual Workers), the National Joint Council for County Council Roadmen, and, in Scotland, the Joint Industrial Councils for Local Authority Services. In England and Wales there are also two special joint committees, which have made recommendations with regard to the salaries and conditions of service of town clerks, county district council clerks and other local authority chief officers.

All local government officers are expected to maintain a high standard of conduct; as public servants they 'must not only be honest in fact, but must be beyond the reach of the suspicion of dishonesty'.

Local Government Finance

Local authorities derive their incomes from Government grants,¹ from local rates, from loans, from trading receipts, rents, fees and other miscellaneous sources.

Government grants are of five main types: assigned revenues, which are the proceeds of certain national taxes handed over to local authorities, e.g., the proceeds of dog, game and gun licences and of the licence fees for hawkers, pawnbrokers, money-lenders and refreshment houses; percentage grants, which are agreed proportions of local government expenditure upon services approved by Government Departments, e.g., education, health, fire, police and children's services; unit grants, which depend exactly on the service provided, e.g., housing subsidies; equalization grants, which are contributions to the general revenues of the poorer local authorities; and special grants, which are grants paid from time to time for some particular purpose.

Rates are a form of local taxation paid by the occupiers (and in Scotland also by the owners) of land and buildings in a local authority area as contributions to the cost of local services. They are levied by a poundage on the rateable value of property which in England and Wales is equivalent to the yearly rent at which the property might reasonably be expected to let if the tenant paid rates and taxes and also the cost of insurance and repairs. Valuation is undertaken by the Valuation

¹ Paid in Northern Ireland by the Government of Northern Ireland.

Officers of the Board of Inland Revenue; appeals may be made to independent Valuation Panels. In Scotland the primary basis of valuation is the annual rent payable. Valuation is carried out by assessors appointed by county councils and the town councils of large burghs, and appeals lie to a county or burgh Valuation Committee and thereafter to the Lands Valuation Appeal Court of the Court of Session.

The responsibility for levying and collecting the rates in England and Wales lies with the councils of county boroughs and county districts; in London, with the City Corporation and the metropolitan borough councils. County councils finance themselves by issuing a precept on the county districts (in London the metropolitan borough councils and the City Corporation) for the sums of money required; while parishes are financed by a special rate for the parish levied by the appropriate rural district councils. Rates in Scotland are levied by the town councils in burghs and by county councils elsewhere; to cover their expenditure, district councils issue a requisition each year to the county council; a town council has to meet an annual requisition from the county council in respect of the burgh's share of the expenditure on functions exercised by the county council throughout the county, including the burgh. In Northern Ireland, county councils are responsible for making, levying and collecting the rates, except in such parts of the county as fall within the jurisdiction of the county borough or urban district councils.

Loans may be raised by all types of local authority for items of capital expenditure which could not well be met out of current revenue, subject to the approval of the Government Department responsible for the service for which the capital is required. Such loans may be raised either on the open market or from the Public Works Loan Board, which was originally constituted under the Public Works Loans Act, 1875, to make certain local loans out of moneys provided by the Exchequer and which for a brief period (1945-52) was the only source from which local authorities could normally borrow. Freedom to borrow on the open market was restored to local authorities in January 1953.

Internal control of finance is exercised on behalf of the council concerned by a Finance Committee, whose function is to keep the financial policy of the council under constant review. External control is carried out by means of an annual audit, which in the case of all councils in England and Wales (except for certain general accounts in about two-thirds of the borough councils) is operated by district auditors appointed by the Ministry of Housing and Local Government. Borough councils must use the services of the district auditor for accounts which relate to education, national assistance, children, local health services, coast protection, motor tax, rate collection, police, fire, civil defence and town and country planning, but they may and sometimes do employ a professional firm of auditors to do other work. In Scotland, all accounts are audited by a professional auditor appointed by the Secretary of State for Scotland, and paid by the council.

THE LAW

The maintenance of public order in the United Kingdom is effected, generally speaking, by two agencies—the judiciary and the police. Both are concerned in different ways with the obedience of the citizen to the law.

Law is said to be based on the concepts of order and compulsion. In the legal sense, it has been defined as any rule which will be enforced by the courts; as it applies to a country, it is usually understood as the set of rules by which the citizens of that country will expect to regulate their conduct in relation to their fellow citizens and to the State.

There is no written code of law in the United Kingdom. The question whether a particular rule is recognized as part of law is determined by consideration of the authorities, which may be statutes, statements made by legal writers, or reports of decided cases. If none of these exist, the judge uses a process of analogy, that is to say, he bases his decision in a case on its similarity to a previous case in which judgment has already been given.

The sources of law in the United Kingdom are statute law and common law, which is law recognized by the courts as binding on some other grounds than express enactment. Statute law may include a Royal Proclamation, an Act of Parliament, and delegated or subordinate legislation, such as orders made by Ministers of the Crown and byelaws made by local authorities. The origins of common law are to be found in the customs of the realm.

The greater part of statute law applies uniformly in all four countries of the United Kingdom, although in many fields of legislation there are statutes applying to Scotland only. The Scottish common law is also different from that prevailing in England and Wales and (as a rule) in Northern Ireland, since ancient differences were perpetuated by the Act for the Union of England and Scotland, 1707, under which Scotland retained her own system of law.

The two main branches of the law in the United Kingdom, as in most other countries, are civil law and criminal law. Civil law has been defined as 'relating to the maintenance of private claims and the redress of private wrongs, which may not involve moral guilt'.¹ Criminal law deals with offences against the State and their punishment on behalf of the community.

THE COURTS

The courts that apply the law in the United Kingdom are broadly speaking divided into civil and criminal courts, although, since the distinction is a comparatively modern one, no hard and fast line can be drawn. Quite a number of civil cases are, in fact, heard in criminal courts; while occasionally a criminal case may be heard in what is primarily a civil court.

Civil Courts in England and Wales

The more important of the civil courts in England and Wales are:

The County Courts

The County Courts are so arranged that there is no part of the country more than a reasonable distance from one of them. This kind of court may be regarded as a 'popular tribunal'; something over a million cases are entered in it every year, although comparatively few ever reach the stage of trial. County Courts are presided over by a paid judge, sitting alone.

The general jurisdiction of the County Court² covers all common law actions, except cases (such as libel) where the personal reputation of the defendant is involved, provided that the amount claimed does not exceed £200. If the claim is for more than £100, the defendant may object and apply to have the case referred to the High Court. Cases which fall under the specific jurisdiction of the County Courts, e.g., those connected with agricultural holdings, rent restrictions, hire purchase agreements and other matters governed by statute or ministerial order, are tried irrespective of the amount involved.

¹ *Outlines of Central Government*, J. J. Clarke.

² In November 1954 the Government announced that legislation would be introduced to extend the jurisdiction of County Courts.

In addition to the ordinary County Courts, there are still a few local courts, with somewhat similar jurisdiction. Most of these are survivals from the mediæval borough courts, and many of them have little or no work to do at the present time. Two or three, such as the Liverpool Court of Passage, the Salford Hundred Court and the Bristol Tolzey Court, are still comparatively well used.

The Mayor's and City of London Court

This Court, which is the County Court for the City of London, is the amalgamation of two courts, the Mayor's Court, with a jurisdiction unlimited as to amount, and the City of London Court, a court for small cases. It is usually presided over by a judge appointed by the City of London.

The High Court of Justice

The High Court of Justice forms part of the Supreme Court of Judicature. The Supreme Court of Judicature largely took its present form in 1873. It is composed of the High Court and the Court of Appeal.

The High Court sits in three divisions: the Queen's Bench Division, the Chancery Division, and the Probate, Divorce and Admiralty Division. These divisions derive from the old courts of the same names which existed before 1873, and cases are distributed between them as tradition and convenience dictate.

The Queen's Bench Division is staffed by the Lord Chief Justice and 25 puisne judges, i.e. judges without special office of their own. These judges are mainly concerned with ordinary civil actions—debt cases, actions for damages, revenue cases, insurance cases, commercial cases, etc.; but they also hear criminal cases at Assizes (see p. 69).

The Chancery Division is officially headed by the Lord Chancellor; but most of the work is done by seven puisne judges who remain in London all the time. The jurisdiction of the Chancery Division derives from the ancient 'equity' system, which was introduced into the English legal system to modify the older common law system during the Middle Ages. Its purpose was to temper justice with mercy, when conscience was opposed to the rigours of the law. It was used primarily to enforce transactions which give a moral right, but a right then unknown to common law; and to provide more effectual remedies for existing legal rights. It was an addendum to the common law, with which it was fused in 1873. The work of the Chancery Division covers actions for the administration of the estates of deceased persons; partnership actions; actions connected with trusts and mortgages; some tax cases; the care of infants' estates; and company and bankruptcy matters.

The Probate, Divorce and Admiralty Division deals, as its name implies, with the proof of wills, with Admiralty and shipping cases, and with divorce cases, many of which are also heard (at present) before Queen's Bench and county court judges.

Appellate Courts

There are two Appellate Courts in civil law actions—the Court of Appeal, which is part of the Supreme Court of Judicature (see above), and the House of Lords.

There are several *ex-officio* members of the Court of Appeal, but its effective head is a judge called the Master of the Rolls, who is assisted by eight Lord Justices of Appeal. Appeals lie to the Court of Appeal from the County Courts, the Mayor's and City of London Court and the civil side of the High Court. The Court of Appeal generally sits in two or three divisions, with three judges to a division.

From the Court of Appeal, a further appeal is possible to the House of Lords, with the leave of the House of Lords or of the Court of Appeal. Such appeals are

usually heard by seven Lords of Appeal in Ordinary, who are paid professional judges with peerages for life. In addition, the Lord Chancellor and any peers who have held 'high judicial office' are entitled to sit. The House of Lords is the supreme court of appeal in civil cases in the whole of the United Kingdom.

Civil Courts in Scotland

The Sheriff Court

The Sheriff Court in its civil capacity corresponds roughly to the County Court in England and Wales, but it has a wider jurisdiction unlimited by the value of the case. It also has power to try (summarily or by indictment¹) all but the most serious crimes and offences. The initial work of the court is normally done by a Sheriff-Substitute, against whose judgment an appeal may be made to the Sheriff² or directly to the Court of Session.

Minor civil matters (actions not exceeding £5 in value) may be tried by Justices of the Peace.

The Court of Session

The Court of Session is the supreme civil court in Scotland. It was established in 1532 and consists at present of 14 judges. The Court is divided into two parts—the Inner House, which is mainly an appeal court, and the Outer House, a court of first instance, where, *inter alia*, all actions for divorce are taken. The Inner House is divided into two Divisions of equal status, each consisting of four judges; the First Division being presided over by the Lord President, and the Second Division by the Lord Justice Clerk. From the Inner House, an appeal lies to the House of Lords.

The Scottish Land Court

This is a special court in Scotland for dealing with certain agricultural matters. The Court is presided over by a legal chairman, who has the rank and dignity of a Judge of the Court of Session.

Criminal Courts in England and Wales

The criminal courts in England and Wales include:

Petty Sessional or Magistrates' Courts

Magistrates' courts are courts of summary jurisdiction, i.e. courts where accused persons may be tried without a jury.³ All kinds of minor offences are tried in this way, although if any offence coming into a magistrates' court is punishable by more than three months' imprisonment, the accused may elect to be tried in a higher court with a jury.

The less serious indictable offences may also be tried summarily in a magistrates'

¹ An indictment is a formal written accusation. An indictable offence is an offence which requires such an accusation for its prosecution.

² Scotland is divided into 12 Sheriffdoms, each provided with a Sheriff and a varying number of Sheriffs-Substitute.

³ A jury is a body of private citizens selected and sworn to declare the truth as to any particular matter on the evidence placed before them. Generally speaking, a jury consists of twelve persons, men and women, with certain property qualifications, i.e. having £10 a year in real estate or rents arising therefrom, or who, as householders, are assessed for rates at not less than £30 a year in the metropolitan area or not less than £20 a year elsewhere. The decision of a jury must be unanimous, otherwise a re-trial is ordered.

court, should the accused desire it, and in fact a large number of such cases are tried in this way. In 1953 over 95 per cent of all criminal cases in England and Wales were disposed of in magistrates' courts.

The majority of these courts are presided over by two or more unpaid 'lay' magistrates or justices of the peace, who are appointed by the Crown, in each county, and for each borough which has its own commission of the peace, on the recommendation of the Lord Chancellor, who is advised as to a county by the Lord Lieutenant¹ with the assistance of an advisory committee, and as to boroughs by separate advisory committees. There are also a few persons who are authorized by statute to act as justices, by virtue of holding some other public office, e.g., mayors of county and non-county boroughs and chairmen of county councils.

In central London, the courts are presided over by paid metropolitan magistrates; some of the larger towns also have stipendiary magistrates.

Juvenile courts for the trial of young offenders are constituted from special panels of suitably qualified justices appointed by the justices of each county or borough out of their own number. A juvenile court consists of not more than three justices drawn from the panel, and must hold its sitting at a different time from those of the ordinary summary court or in a different room.

Domestic proceedings are also tried by not more than three justices, of whom one should be a man and one a woman. The hearing of domestic proceedings is separated from other business and, as in juvenile courts, the public is excluded.

In addition to acting as judges, magistrates are required to conduct preliminary inquiries into indictable offences to determine whether or not an accused person should be committed for trial.

Courts of Quarter Session

There are two different kinds of Quarter Sessions—county sessions and borough sessions; both are normally held four times a year.

County Quarter Sessions consist of the magistrates of the county assembled together under a legally qualified chairman. In those boroughs, which hold separate Quarter Sessions, the courts are presided over by a Recorder, who is a salaried barrister, as sole judge. Trial by jury applies at both borough and county sessions.

The jurisdiction of Quarter Sessions covers the less serious indictable offences; the courts are debarred, for example, from trying any crime that carries the death sentence or detention for life.

Assizes

The Courts of Assize are branches of the High Court of Justice. They are held in the county towns and in certain big cities three times a year, a Queen's Bench judge or a Commissioner of Assize (who may be a barrister commissioned to act as a judge) presiding. The Assize judges work on circuits covering England and Wales, and travel from one county town to another in the course of their duties. They can try any indictable offence committed in the county.

At the winter and summer Assizes, civil business as well as criminal may be taken, but except in a few large towns the autumn Assize is confined to criminal cases.

The Central Criminal Court

The Central Criminal Court at the Old Bailey acts as the Court of Assize for the criminal business of London, Middlesex and parts of the Home Counties. The

¹The office of Lord Lieutenant in the county was first created in the sixteenth century. Its holder was chief among the county justices and commander of the county militia.

judges include: a judge chosen from the Queen's Bench Division in rotation for each monthly session of the Court; the Recorder of London; the Common Serjeant; and two additional judges of the Mayor's and City of London Court.

Criminal Appeals

Appeals may be made direct from the magistrates' court to the High Court on a point of law; but the more usual kind of appeal is the appeal of a convicted person against his conviction or his sentence. Appeals of this kind from a magistrates' court are heard in the counties by the Appeals Committee of Quarter Sessions, consisting of between three and twelve magistrates, and in the boroughs by the Recorder; in neither case is a jury required.

Appeals against convictions by Quarter Sessions or Assizes go to the *Court of Criminal Appeal*. Appeals may be made on any point of law, and also, by leave, on point of fact.

The Court of Criminal Appeal consists of the Lord Chief Justice and any Queen's Bench judges; three in session is the usual number.

A further appeal from the Court of Criminal Appeal to the House of Lords on a point of law can be made if the Attorney-General grants a certificate affirming that the appeal is of 'exceptional public importance'. Appeals of this kind are very rare.

Criminal Courts in Scotland

The bulk of the criminal actions in Scotland are heard in the Sheriff Court (see p. 68). In cases of breach of the peace and other petty offences the justices in Justice of the Peace Courts in the counties and the magistrates in magistrates' courts in burghs have powers of jurisdiction. Cases involving serious crime are taken in the *High Court of Justiciary*, which is the supreme criminal court of first instance. It also functions as an appeal court from inferior criminal courts. It consists of the Lord Justice General (who is also the Lord President of the Court of Session), the Lord Justice Clerk and thirteen Lords Commissioners of Justiciary who are also judges of the Court of Session. The seat of the court is in Edinburgh, but the judges go on circuit to preside at trials in other towns. Appeals to the High Court are heard by three or more judges; there is no further appeal to the House of Lords.

Courts in Northern Ireland

Both civil and criminal courts in Northern Ireland are similar to those in England and Wales with some minor modifications to suit a smaller community. The main difference is that there is no lay magistracy in the country, all petty sessional cases being dealt with by resident magistrates who correspond to the metropolitan or stipendiary magistrates of England and Wales. The inferior courts, that is to say the courts where the less serious cases are tried, are administered by the Parliament of Northern Ireland; the administration of the superior courts has been reserved to the Parliament of the United Kingdom.

The Coroner's Court

The Coroner's Court, strictly speaking, is neither a civil nor a criminal court, although it has some connection with criminal proceedings. It is the duty of a coroner to inquire into any death reported to him if there is reasonable cause to suspect that the deceased has died a violent or unnatural death, or has died a sudden death of which the cause is unknown. Various Acts of Parliament lay down the cases in which a coroner must be informed and those in which a jury must be summoned if an inquest is held. If the jury at a coroner's court returns a verdict

of murder, manslaughter or infanticide against some particular person, then that person must be committed for trial at Assizes. In Scotland, the office of Coroner does not exist. The Procurator Fiscal inquires privately into all sudden and suspicious deaths in his district and may report the results of his inquiries to the Crown Agent who considers, with the Crown Counsel, what proceedings, if any, are required.

Ecclesiastical Courts

The established Church of England has its own ecclesiastical courts, which constitute a graduated hierarchy. They include the Court of the Archdeacon, the Consistory Court of the Bishop of each diocese and the Provincial Courts of the Archbishops of Canterbury and of York.

The ecclesiastical courts, which are still courts in the full-sense of the word, have jurisdiction only in matters of purely ecclesiastical concern, such as questions of doctrine and ritual, ordination, consecration, and the celebration of divine service.

Special Tribunals

A number of special tribunals exist in the United Kingdom for the exercise of what is known as administrative justice, that is to say for the settlement of disputes or the determination of rights in cases where the public interest is the central issue.

Such tribunals are too various to permit of any formal classification, but they include professional tribunals such as the General Medical Council, the General Council of the Bar, and the Disciplinary Committee of the Law Society, which regulates the professional practice, conduct and discipline of solicitors. They also include ministerial tribunals, such as the War Pensions Tribunals, the Lands Tribunal, the Rent Tribunals, and the Local Appeal Tribunals for Insurance Benefits; and the disciplinary committees of marketing boards.

Appeals on a point of law in most cases lie from such tribunals either to a single judge of the High Court or to permanent Commissioners appointed under an Act of Parliament or to the appropriate minister.

Military Courts

The jurisdiction of military courts or courts martial is exclusively over persons subject to military law. The powers of the courts are limited to those conferred on them by statute, and if these powers are exceeded, the person injured has his remedy in the High Court.

THE JUDICIARY

The judiciary of the United Kingdom is independent. That is to say, it is free to administer the law under the protection of the law without fear or favour. All judges, from those of the House of Lords and the Supreme Courts to the 'lay' magistrates or justices of the peace, must not only be, but must appear to be, completely impartial, for it is of fundamental importance that 'justice should not only be done, but should manifestly and undoubtedly be seen to be done'.

The courts of the United Kingdom are the Queen's Courts in that 'all jurisdiction of the courts is either indirectly or immediately derived from the Crown'¹; but since the end of the seventeenth century, it has been unlawful for the Sovereign to disturb or delay the course of common justice, to attempt to force the judges to act

¹ *Blackstone's Commentaries.*

otherwise than impartially, or to use the prerogative powers of the Crown to create courts to administer any system of law other than common law.

The independence of the judiciary *vis-à-vis* the legislature is likewise strictly observed. Thus, although the Act of Settlement, 1701, laid down that the judges of the superior courts should be appointed by the Crown to hold office during good behaviour subject to a power of removal by the Sovereign on an address by both Houses of Parliament, it may be stated with confidence that no such address would ever be moved to interfere with judicial independence. By the same token, although no court in the United Kingdom would ever question the validity of an Act of Parliament which had been duly passed by both Houses of Parliament and duly promulgated and published by the proper authority, it might, through its interpretation of the statute, come to a decision contrary to the policy of the Government which introduced the Act. In such a case, it would be open to the Government to persuade Parliament to clarify or amend the statute, or even to pass a new Act to reverse the decision of the court. It would not be open to it to penalize the judge or to try to influence the court in any other way.

Administration of the Judicial System

There is no Minister of Justice in the United Kingdom. The central responsibility for the administration of the judicial system in England and Wales lies partly with the Lord Chancellor and partly with the Home Secretary.

Crown appointments to the High Court bench are made on the recommendation of the Lord Chancellor, who is also responsible for recommending to the Crown the appointment or removal of justices of the peace,¹ Recorders of boroughs and metropolitan and stipendiary magistrates. County Court judges are appointed by the Lord Chancellor (except in Lancashire, where they are nominated by the Chancellor of the Duchy of Lancaster).² The administrative business of the Supreme Court of Judicature and the appointment of court officials is partly in the hands of the Lord Chancellor and partly in the hands of the appropriate judges. The Lord Chancellor is a member of the Rule Committee which makes the rules of the Supreme Court,³ he also appoints the County Court Rule Committee and has power to alter or to disallow the rules made by it. In addition, responsibility for initiating proposals for law reform, save in the field of criminal law, lies with the Lord Chancellor, who is advised in this matter by the Law Reform Committee and the Private International Law Committee, both established in 1952.

The Home Secretary is responsible for approving appointments of clerks to justices throughout England and Wales, and for the general administration of magistrates' courts, except in relation to their judicial functions in which they can

¹ See footnote 1 p. 48.

² The Duchy of Lancaster is an inheritance which, since 1399, has always been enjoyed by the reigning Sovereign, although kept quite apart from his or her other possessions and separately administered. Full power to manage and control the Duchy is delegated by the Sovereign to the Chancellor, who is the chief officer of the Duchy Council. The Chancellorship is now a political appointment carrying with it Cabinet rank. Since the Duchy duties of the Chancellor are not onerous, he is free to perform any special functions which may be entrusted to him by the Prime Minister.

³ In its Second Interim Report (March 1951, *Cmd.* 8176), the Committee on Supreme Court Practice and Procedure set up in 1947 (primarily to make recommendations for the purpose of reducing the cost of litigation and securing greater efficiency and expedition in the dispatch of business) proposed the establishment of a Rules and Administration Committee, whose duty would be to keep under constant review the Rules of the Supreme Court and the working of the Law Courts in their bearing upon procedure. The final Report of the Committee on Supreme Court Practice and Procedure, *Cmd.* 8878, was published in July 1953.

be controlled only by the Queen's Bench Division of the High Court. The local responsibility for the administration of magistrates' courts lies with the magistrates' courts committees, of which there is one for each county and county borough.

In Scotland, the Prime Minister makes recommendations for the appointment of the Lord President and the Lord Justice General (see p. 68). Power of submission for appointment of all other judges lies with the Secretary of State for Scotland on the nomination of the Lord Advocate. The High Court of Justiciary and the Court of Session are administered by the Clerk of the Justiciary and his staff and the Principal Clerk of Session and his staff respectively. Powers of appointment and removal of justices of the peace, formerly held by the Lord Chancellor, will be transferred in 1955 to the Secretary of State for Scotland.

THE LEGAL PROFESSION

The legal profession of England and Wales is strictly divided into two classes of lawyers—barristers and solicitors. The distinction is due mainly to historical causes, and is practically unknown in other countries, except in Scotland where the cleavage between advocates and solicitors is also complete.

No hard and fast line can be drawn between the work of the solicitor and the work of the barrister, since there are many barristers who do little advocacy, and there are solicitors who do little else, and who have made considerable reputations for themselves in the courts in which they are permitted to appear. In general, however, it may be said that solicitors are professional men who undertake legal business for lay clients; while barristers advise on legal problems submitted through solicitors and conduct legal proceedings in the higher courts.

A barrister is required to have reached an accepted educational standard, to have passed the legal examinations conducted by the Council of Legal Education and to have become a member of one of the four Inns of Court—Gray's Inn, Lincoln's Inn, the Middle Temple and the Inner Temple. After ten years as a junior counsel a barrister may apply to the Lord Chancellor for a patent appointing him Queen's Counsel—a proceeding that is known as 'taking silk'. The highest appointments in the legal profession, including those of Attorney-General, Solicitor-General, and other Law Officers of the Crown, are usually open only to barristers who have become Queen's Counsel. The professional conduct of a barrister throughout his career is subject to the scrutiny of the General Council of the Bar.

The prospective solicitor must be considered suitable by the appropriate Committee of the Law Society and he must enter into 'Articles of Clerkship' with a practising solicitor of not less than five years' standing before he can begin his professional career. The term of articles lasts for three or five years, depending upon the educational qualifications of the student. An articulated clerk must pass the necessary examinations held by the Law Society and, unless he has been a barrister or is a law graduate of a university, he is generally required to attend a course of studies at a recognized law school. Once a solicitor is qualified, he becomes an officer of the Supreme Court of Judicature. He may also become a member of the Law Society.

In Scotland, the conditions for admission as, and the standing of, advocates and solicitors are much the same as those applying in the case of barristers and solicitors in England and Wales.

LEGAL AID

Schemes for free legal assistance to persons of slender means and resources have existed in some courts and to a limited extent for centuries in England and Wales

and in Scotland. The schemes were revised in 1949 when the Legal Aid and Advice Act and the Legal Aid and Solicitors (Scotland) Act received Royal Assent. These Acts were introduced to improve and extend the existing arrangements in civil proceedings so that no one would be financially unable to prosecute a just and reasonable claim or to defend a legal right, and to make the facilities already available in criminal proceedings more easily accessible to those who need them. The Acts also provided that solicitors and barristers acting for persons receiving legal aid should no longer be required to act gratuitously in civil cases, but should be remunerated for their services from public funds.

When the system set up under the terms of the Acts comes fully into operation, aid will be available for both civil and criminal cases in all courts, to plaintiff and defendant alike.

Legal Aid in Civil Cases

Legal aid in civil cases is now available to persons whose income, computed in accordance with rules applied by the National Assistance Board, does not exceed £420 a year, and whose capital, as so computed, does not exceed £500. Where an assisted person can afford to make a contribution to the costs of his case, he is liable to pay an amount which is settled with due regard to his financial resources.

In England and Wales, legal aid in civil cases is at present limited to proceedings started in the High Court or in the Court of Appeal, although eventually the scheme will cover representation in courts of all types, from magistrates' courts up to the House of Lords. The scheme is operated through the Law Society under the general guidance of the Lord Chancellor. The cost is met from a Legal Aid Fund, drawn from three sources: contributions and fees from assisted persons; costs recovered from opposite parties in litigation; and a grant from the Exchequer.

For the purposes of the scheme, England and Wales are divided into twelve areas. In each area a committee, known as an area committee and consisting of fifteen solicitors and barristers, is responsible for the scheme's initial organization and subsequent administration. Local committees are responsible for setting up legal aid centres to which anyone seeking legal aid may apply. Committees hear the facts, and if they consider that there is a *prima facie* case they give it their support. The person who wishes to bring the action is then allowed to select from a panel a solicitor and, if necessary, a barrister, who conducts the case in the normal way. To avoid overloading the courts, certain types of action, including breach of promise, and libel and slander, are excluded from the scheme.

In Scotland the Legal Aid Scheme is administered by the Law Society of Scotland through a Central Supervisory Committee, a Supreme Court Committee and twenty-one local committees. Legal aid is at present available for civil proceedings in the Court of Session and the Sheriff Courts. An applicant for legal aid in Scotland is required to show a 'probable cause' and produce in support of his application a statement corroborated according to the requirements of Scottish law.

Legal Aid in Criminal Courts

Free legal aid is already available in the criminal courts in England and Wales under the Criminal Appeal Act, 1907, the Poor Prisoners' Defence Act, 1930, and the Summary of Jurisdiction (Appeals) Act, 1933. The Legal Aid and Advice Act, 1949, makes certain procedural changes in the system and provides for the transfer of the financial responsibility for paying for free legal aid from local to central funds.

Pending the full implementation of the Legal Aid and Solicitors (Scotland) Act,

legal aid in criminal cases is afforded to poor persons in Scotland under the Poor's Roll system, which is administered on a voluntary basis by the legal profession.

In Northern Ireland, free legal aid in criminal cases is afforded to poor persons under the Criminal Justice (Northern Ireland) Act, 1945. The cost of providing free legal aid is met out of public funds.

TREATMENT OF OFFENDERS

It is a basic principle of the English legal system that the prosecution must prove the guilt of an accused person, no matter what the charge or where the trial, and that such a person must be presumed innocent until his guilt has been proved.

When a person has been proved guilty, but not until then, he becomes subject to the penal system, the underlying objectives of which are deterrence and reformation. It is held that the deterrent effect of the system lies less in the punitive treatment of the detected offender than in its total action—fear of detection, public trial and conviction and the possibility of punishment, whether by imprisonment or otherwise—and that the aim in imprisonment as well as in other forms of treatment should be to concentrate as far as possible on the social rehabilitation of the offender rather than on merely punitive measures.

The various types of penalties which may be imposed according to the law depend on the circumstances of the offence and the offender. The death sentence is passed only on persons found guilty of murder or treason; and it is the long-established practice for the Home Secretary to review every capital case before the law is allowed to take its course and to consider whether there are grounds for advising the Crown to exercise the Prerogative of Mercy. Where a reprieve is recommended, the sentence of death is commuted to one of imprisonment for life. The death sentence may not in any case be passed upon a person under the age of eighteen, upon a pregnant woman, or upon anyone who is found to be legally insane.

Administrative Authorities

In England and Wales, general responsibility for all institutions for the treatment of offenders is vested in the Home Secretary. His statutory powers and duties in this connection include the making of rules for the governance of such institutions, the nomination of the Prison Commissioners, and the appointment of Boards of Visitors.

In the discharge of his duties relating to institutions for offenders, the Home Secretary is advised by an Advisory Council on the Treatment of Offenders, which also acts as the National Working Group for the Economic and Social Council of the United Nations, and as the National Committee of the International Penal and Penitentiary Commission.

Responsibility to the Home Secretary for the administration and inspection of prisons, Borstal Institutions and detention centres in England and Wales lies with the Prison Commission and an appropriate professional and technical staff. The Prison Commission consists of not more than five Commissioners, who are appointed by the Crown, including the chairman, who is appointed to that office by the Home Secretary. There are also a number of Assistant Commissioners who are inspectors under the Prison Acts.

The oversight of each of these institutions is the responsibility of either Visiting Committees appointed by the justices for those prisons to which convicted persons are committed direct from their courts, or Boards of Visitors appointed by

the Home Secretary for the other prisons and institutions. The main functions of the committees and boards are: to act as the superior disciplinary authority of the prison or institution; to constitute an independent judicial body to which any prisoner or inmate may take a complaint or request; and to report direct to the Home Secretary, both by formal annual report and as occasion may require, on every aspect of the administration of the prison. In Borstal Institutions and preventive detention prisons, the boards also advise the Prison Commissioners on the release of the inmates on licence.

The prison systems of Scotland and Northern Ireland are the responsibility of the Secretary of State for Scotland and of the Minister for Home Affairs respectively, and are administered by the Home Departments in Edinburgh and in Belfast.

Prisons

There are various types of prison in England and Wales, e.g., general local prisons; special local prisons which, for example, may be open prisons or prisons for selected prisoners; corrective training prisons to which offenders of 21 years of age or over may be sentenced if their criminal antecedents show that they are no longer novices in crime and are in the way of becoming professional criminals; and training prisons to which prisoners may be sent if they have sentences long enough to enable a definite course of training to be undertaken, and if they seem likely to co-operate in and profit by the training. In Northern Ireland, with its smaller population, the necessity for several kinds of prison for the separation of various classes of prisoners does not arise to the same extent as in England and Wales. The Scottish system of classification of prisoners is broadly the same as that of England and Wales; but each prison in Scotland accommodates more than one classification group.

Full-time prison officers of all ranks, except chaplains, are permanent civil servants. At the end of December 1953 prison staff of all grades in England and Wales numbered just over 4,000. About 10 per cent of this number were women.

Classification of Prisoners

Every person committed to prison is first received in the local prison serving the court from which he is committed. Subsequently, he may either serve his whole sentence at the local prison or he may be sent to another institution, depending on his age, the length and nature of his sentence, and his personal history and character.

The object of classification is first to ensure the separation of the sexes, of young persons from adults, of untried prisoners from convicted prisoners and of civil prisoners from criminal prisoners; secondly to prevent contamination, among convicted prisoners, of the better by the worse; and thirdly to provide training appropriate to their needs for those among convicted prisoners who seem likely to benefit therefrom.

Training

The main elements of prison training have been defined as (1) the provision of work which will, so far as is practicable, help to fit prisoners to earn their living after release, with technical training in skilled trades for suitable persons, (2) the provision of suitable educational facilities, and (3) the provision of every opportunity for the development of a sense of personal responsibility, including (for suitable persons) training in open conditions.

Full training can be given only in prisons set aside for the purpose, which provide vocational training courses, based on a Ministry of Labour and National Service

syllabus, at which prisoners may receive a theoretical and practical training in a number of skilled trades. The principles on which training is based, however, hold good for all prisons and are applied as far as individual conditions permit.

Employment

Prison industries are organized under the control of a Director of Industries, who has a head office staff of technical officers and supervisors, including a supervisor of farms and gardens, and industrial managers at the prisons.

Except in training prisons, where the hours are longer, prisoners spend at present about 27 hours a week in the workshops or in other employment such as building, farm work, domestic work and gardening.

All prisoners are entitled to earn a limited amount from the first day of their sentence; these amounts may be increased for satisfactory output after a specified lapse of time.

Education

Educational schemes are provided in prisons in England, Wales and Scotland by the local education authorities with the advice of the Government Departments responsible for education in their respective countries and, in England and Wales, under the organizational control of the Director of Education in the Prison Commission. Evening Institutes have also been established; and a wide range of correspondence courses is made available for those who have a serious desire to improve their education and qualifications.

Educational schemes are supplemented by periodical lectures, film displays, concerts, and dramatic performances. Prisoners may use the prison library, which in most cases is now under the management of the county, city or borough library committee; in certain cases they may also have books sent in to them by friends.

Welfare

A chaplain of the Church of England (in Scotland of the Church of Scotland) and a Roman Catholic priest are appointed to every prison. Ministers of the Methodist Church and of other denominations are either appointed or specially called in as required. The chaplain is generally responsible for welfare in the prison to which he is appointed. Regular services are held, and chaplains and other ministers may visit prisoners in their cells. Prisoners may also be visited by their relatives and friends at specified intervals and by recognized prison visitors asked to serve in this field by the Prison Commissioners. The voluntary work of these visitors is co-ordinated and guided by the National Association of Prison Visitors.

Remission of Sentence

On reception, all prisoners are credited with remission of one-third of their sentence (one-fourth in Northern Ireland), provided that this does not reduce their sentence below one month. In addition, at successive stages of a prisoner's sentence, he becomes entitled to additional privileges; for example, he is allowed to have some of his personal belongings in his cell.

For breaches of discipline in prison, the Governor or the Visiting Committee or the Board of Visitors have power to order forfeiture of remission and of privileges.

After-Care of Prisoners

Prisoners from local prisons are assisted on discharge by Discharged Prisoners' Aid Societies, which are local and voluntary bodies supported partly by private and

partly by public funds. The work of the local societies is co-ordinated by the National Association of Discharged Prisoners' Aid Societies, which depends on a grant from public funds for its administrative expenses. For persons discharged from other prisons and from Borstal Institutions, after-care is in the hands of the Central After-Care Association, which is under the management of a voluntary council appointed by the Home Secretary.

In England and Wales the Association works through local associates, usually Probation Officers, who, since the passing of the Criminal Justice Act, have added after-care to their other duties, and in Scotland through voluntary guardians. These officers make all arrangements for the reception of the prisoner after his discharge, and will advise, assist and befriend him for as long as is necessary or required by statute.

Institutions for Young Offenders

The Criminal Justice Act of 1948 provided that no court can impose imprisonment on a person under twenty-one years of age unless it considers that no other method of dealing with him is appropriate. The different types of institution which are available when institutional treatment is considered necessary are described below.

Remand Homes

Remand Homes are provided by local authorities for the safe custody of boys and girls under the age of seventeen before or during their appearance at court, for short periods of punitive detention or while the courts make inquiries about the best method of treating a young offender. There are facilities for observation, and valuable reports can be provided as a result of the short stay in a remand home.

Borstal Institutions

Borstals have been established to provide suitable training for adolescents in conditions other than those of a prison. There are 17 institutions for boys and three for girls in England and Wales, four for boys in Scotland,¹ and one for boys and one for girls in Northern Ireland. The period of the sentence is in effect four years (three years in Northern Ireland), the first part being nine months to three years' training (two in Northern Ireland) in a Borstal Institution, and the second a period of controlled freedom under supervision. The system of training seeks the all-round development of character and capacities, and is based on progressive trust demanding increasing personal decision, responsibility and self-control. There is much freedom of movement and many Borstals are conducted in open conditions. An initial period of classification ensures that each boy or girl is sent to the institution best suited to his or her character and requirements.

Approved Schools

There are 124 Approved Schools in England and Wales, 25 in Scotland and six in Northern Ireland, which provide residential education and training for young offenders and children in need of care or protection. The choice of school depends on the child's age, sex and religious denomination; the education, in general, following the lines of that given in ordinary schools, with vocational training for

¹ Girls receive Borstal training in other institutions in Scotland.

older boys and girls. The emphasis is on character training and on the provision of after-care.

In England and Wales two new forms of treatment, at Attendance Centres and Detention Centres, have been introduced on an experimental basis.

Attendance Centres

The main objects of these centres are to teach young offenders a respect for the law and to give them some instruction in the proper use of leisure. Young offenders must attend during their spare time on Saturday mornings or afternoons; activities include physical training and instruction in handicrafts. The scheme is in operation in some 30 towns and for boys over 12 and under 17 years of age.

Detention Centres

At these centres offenders over 14 and under 21 years of age may be detained for short periods, usually of three months, under discipline suitable to their age and character. The regime is designed as a 'short sharp shock' for those who need to be taught that the law cannot be defied with impunity. Two centres, one for boys of 14 to 17 years of age, and one for youths of 17 to 20 years of age, are now in operation.

Probation

The probation system is designed to secure the rehabilitation of an offender while he remains at work or at school in the community under the supervision of a probation officer, whose duty it is to advise, assist and befriend him. A cardinal feature of the system is that it relies on the co-operation of the offender. Before making a probation order, the court must explain its effects to the offender and inform him that if he fails to comply with its requirements he will be liable to be dealt with for the original offence. A probation order cannot be made unless the offender expresses his willingness to comply with all its requirements.¹ The order usually requires the probationer to keep in regular touch with the probation officer, to be of good behaviour and to lead an industrious life. It may also require him to live in a specified place, or to submit to treatment for his mental condition. A probation order is made for not less than one year and not more than three years.

There are approximately 1,200 whole-time probation officers in England and Wales, 15 in Northern Ireland and 100 whole-time and 35 part-time in Scotland. Training facilities in England and Wales are provided by the Home Office on the advice of the Probation Advisory and Training Board. In Scotland training is provided during the first year of appointment and before the officer is allowed to make probation work his permanent career.

THE POLICE SERVICE

The police service of Great Britain is organized and controlled on a local basis under the guidance of those Ministers of the Crown who are responsible for the maintenance of law and order in their respective countries. In England and Wales the responsible Minister is the Home Secretary; in Scotland, the Secretary of State

¹ In England and Wales, this does not apply if the offender is under 14 years of age.

for Scotland. In Northern Ireland the police force (see p. 83) is controlled by an Inspector-General who is responsible to Northern Ireland's Minister of Home Affairs.

POLICE IN GREAT BRITAIN

Police Forces

There are 126 separate, independent police forces in England and Wales, defined according to area of responsibility as county forces, borough forces, combined forces (which are forces whose area of responsibility extends over neighbouring counties or boroughs), the Metropolitan Police Force (which is responsible for the county of London, the county of Middlesex, parts of adjoining counties and three county boroughs) and the City of London force. In Scotland there are 33 forces, including county forces, burgh forces and combined forces.

In England and Wales and Scotland, police forces vary considerably in size according to the area and population which they serve. Thus the Metropolitan Police Force has an establishment of nearly 20,000, while the smallest force in Scotland numbers 16.

The present strength of the regular police force in Great Britain is approximately 72,000 men and 2,000 women.

Police Authorities

Police authorities are appointed for each police force in England and Wales and Scotland. In the counties of England and Wales the police authority is the Standing Joint Committee, half of whose members are members of the county council while the other half are justices of the peace. In the boroughs the police authority is known as the Watch Committee and is elected by the council from its members. The police authority of a combined force is made up of representatives of the constituent areas as prescribed in the scheme under which they combine.

In the Metropolitan police district the Home Secretary is the police authority. In the City of London the Common Council is the police authority, although it usually appoints a standing committee to deal with all police matters on its behalf.

In Scotland the police authority for the counties is the county or joint county council; in the large burghs it is the town council; where there are combined forces there is a joint police committee.

It is the statutory duty of the police authorities to establish and maintain efficient police forces for their areas. They are also responsible for the appointment of the chief officer of police in their areas, subject to the approval of the Home Secretary in the provinces of England and Wales, to the approval of the Crown in the City of London, and to the approval of the Secretary of State for Scotland in Scotland. In the Metropolitan police district the chief officer of police and his immediate subordinates are appointed by the Crown on the recommendation of the Home Secretary.

Central Authority

Co-ordination and a certain measure of central control are exercised through detailed police regulations which are issued for their respective countries by the Home Secretary and the Secretary of State for Scotland, who are required by the Police Act, 1919, 'to act in consultation one with another' in this connection. The police regulations cover the 'government, mutual aid, pay, allowances, pensions, clothing, expenses and conditions of service' of the members of all police forces to which the Act applies.

The Secretaries of State are advised on questions relating to the conditions of service of the police by the Police Council of Great Britain, a negotiating body established on Whitley Council lines in September 1953. In their supervisory responsibilities they are assisted by Her Majesty's Inspectors of Constabulary, who inspect each force, except the Metropolitan Police Force, at least once a year. There are at present four inspectors in England and Wales and one in Scotland.

Central control also derives from the fact that all police authorities receive a Government grant equal to half their net expenditure reckoned in accordance with the provisions of Orders made under the Miscellaneous Financial Provisions Act, 1950 (as regards England and Wales), and the Police (Scotland) Act, 1946 (as regards Scotland). These Orders empower the Home Secretary and Secretary of State for Scotland to withhold the grant in whole or in part, permanently or for such time as they may determine, if they are not satisfied that a police area is efficiently policed, that a force is properly maintained and administered, or that the rates of pay or allowances are as prescribed or approved by them.

Centrally Run Services

During recent years the Home Office has established a number of common services to supplement those provided by the police authorities for their own use. In England and Wales such services include a training service, which provides a number of residential district training centres and a central police college; the supply on a rental basis of all wireless equipment for the police; and a forensic science service, which provides laboratories for the use of regional groups of forces. In Scotland there is a central police college, which provides training courses for recruits and courses of higher training; but the provision and maintenance of wireless equipment is a direct charge upon the police authorities concerned and there is no centrally run forensic service. The Glasgow police force, however, operates an extensive laboratory, the service of which is available to the whole of the Scottish police, and the universities of Aberdeen, Edinburgh, Glasgow and St. Andrews render assistance when required.

In addition to the common services, a number of national services are provided by the Metropolitan Police Force, whose functions in this respect include: (a) the maintenance of the Criminal Record Office, which is a national registry of crimes and their perpetrators containing a Central Fingerprint Bureau, available to all police forces of the United Kingdom and certain foreign forces; (b) the publication of the *Police Gazette*,¹ which contains particulars of people wanted for crime, stolen property, etc., and is supplied without charge to the police forces of the United Kingdom and to certain Commonwealth and foreign forces; (c) the organization and control of the Special Branch of the Criminal Investigation Department at New Scotland Yard,² whose duties include the protection of Royalty, Ministers of the Crown, and distinguished foreign visitors; and (d) the carrying out of extradition orders made by the courts. For these services, the Metropolitan Police Force receives an additional Exchequer grant.

Police Officers

There are several different kinds of police officer in Great Britain: regular police officers who usually serve for 25 years or more and thereafter retire on pension;

¹ A Scottish *Police Gazette* is published by the City of Glasgow Police Force.

² The Metropolitan Police Force is not the only force with a Criminal Investigation Department; all provincial forces have their own Criminal Investigation Departments.

members of the first police reserve, which is composed almost entirely of police pensioners or men with previous police experience who are prepared to give whole-time paid service to a particular force in an emergency, whether national or local; members of the Special Constabulary, which consists of volunteers who perform short periods of duty without pay in their spare time from their normal occupations; the police of certain public services, e.g., the British Transport Commission Police, the Civil Aviation Constabulary, the Port of London Authority Police and other dock and harbour forces (who, although not subject to the supervision of the Home Secretary or the Secretary of State for Scotland, have duties and powers analogous to those of ordinary constables but limited to the premises and immediate neighbourhoods of their employers), the police of the defence services, i.e. the Admiralty Constabulary, the War Department Constabulary, which guards War Office lands and military property, the Royal Marine Police, who are employed chiefly in dockyards, and the Air Ministry Constabulary.

In general, entry to the regular police force is open to men between the ages of 19 and 30, although an exception may be made in the case of ex-regular Navy, Army and Air Force men of over 30 years of age. Women entrants in England and Wales must be between the ages of 20 and 35, and in Scotland between 20 and 30 years old. The standard police ranks in Great Britain, except in the Metropolitan police district, are: chief constable, superintendent, inspector, sergeant and constable. The following intermediate ranks may also be adopted where the field of operations renders them necessary: assistant chief constable, chief superintendent, chief inspector and, in England and Wales only, subdivisional inspector, station sergeant and acting sergeant. In the Metropolitan police district the chief officer is the Commissioner of Police of the Metropolis. He is assisted by a Deputy Commissioner and four Assistant Commissioners. Next in rank are commanders, then deputy commanders; thereafter the ranks are the same as in the rest of the country. In the City of London the ranks are the same as in the provinces except that the chief officer is called the Commissioner of Police and the second in command is an Assistant Commissioner.

No member of the police service may belong to a trade union, since it is a basic principle of the service that its members must not only be free from political bias, but must also be seen to be free of it. The Police Act, 1919, however, laid it down that the police should have a statutory representative organization of their own. This is known in England and Wales as the Police Federation and in Scotland as the Scottish Police Federation and all constables, sergeants and inspectors belong to it. Any part of the organization can make representations to the police authority, to the chief officers of police, or, in England and Wales, to the Secretary of State for the Home Department and, in Scotland, to the Secretary of State for Scotland. Delegates from the Joint Central Committees of the two Federations sit on the Police Council.

Police Duties

Every police officer in Great Britain is an independent holder of a public office. His powers as a constable, whether conferred by statute or by common law, are exercised by him by virtue of his office and cannot be exercised on the responsibility of any person but himself. Thus, unless acting in pursuance of a magistrate's warrant, a police officer is liable for any wrongful or mistaken action on his part, even if in committing such an action he is obeying the orders of the police authority; for he is not the servant of the police authority, and in discharging his duties must rely on his own discretion and his own knowledge of the law.

The manifold functions of a police officer as a constable range from road or street

patrolling and traffic control to arresting persons committing offences or (in certain cases) under suspicion of acting in an unlawful way. In England and Wales (although not in Scotland where the police investigate cases and report to the prosecutor) the police are responsible for initiating, and in most cases conducting, prosecutions, except those which must be dealt with by the Director of Public Prosecutions, i.e. if the offence is punishable by death; or when an offence is referred to him by a Government Department, subject to his discretion; or in any case which appears to the Director 'to be of importance or difficulty or which for any reason requires his intervention'.

In addition to their duties as constables, police officers are sometimes appointed, usually by the local authority, to be inspectors under an Act of Parliament; as such, their duties may include the inspection of weights and measures, and investigation into diseases of animals.

Police Cadets

Many police forces offer free training and paid work in police offices and stations to boys between school-leaving age and the age at which they are called up for National Service. Selection is limited to boys who are likely to become useful members of the Force. On completing their full-time National Service the cadets are eligible for appointment as constables. One police force has a similar cadet scheme for girls.

POLICE IN NORTHERN IRELAND

The Royal Ulster Constabulary

The general control of the Royal Ulster Constabulary, which is a State Force, is vested in an Inspector-General, who is responsible to the Minister of Home Affairs. The cost of the force is met from the Northern Ireland Exchequer, the County Borough of Belfast contributing a token sum of £25,000 annually towards the cost of policing the City of Belfast.

The present strength of the Royal Ulster Constabulary is approximately 2,900 officers and men. Conditions of service and pay follow closely on the lines of the police service in Great Britain, the general duties pertaining to the tasks being similar in all respects.

In addition to the Royal Ulster Constabulary, there exists in Northern Ireland an auxiliary police force called the Ulster Special Constabulary, which is also under the general control and direction of the Inspector-General. In the main, this force is a part-time force and its duties cover training and assistance to the regular force on special occasions. If necessary, however, its part-time personnel may be mobilized for full-time duty and its duties extended to cover ordinary police duties. The present strength of the Special Constabulary is approximately 10,000 officers and men.

THE FIRE SERVICE

The fire services in Great Britain are organized on a local basis, subject to a measure of central control exercised by the Secretary of State for the Home Department (in England and Wales) and the Secretary of State for Scotland (in Scotland). The Fire Services in Northern Ireland are described on p. 86. Every place throughout the United Kingdom is covered by a public fire brigade.

FIRE SERVICES IN GREAT BRITAIN

There are at present 135 local authority fire brigades in England and Wales and 11 in Scotland.

Fire Authorities

The responsibility for fire fighting functions, which was vested in the two Secretaries of State on a national basis as an emergency measure during the second world war, was restored in 1948 to local government control under the Fire Services Act, 1947. The effect of the Act was to transform the National Fire Service (established in 1941) into separate fire brigades administered, in England and Wales, by the county or county borough councils, who were created the Fire Authorities for their areas and were given powers and duties which they exercise either separately or as Combined Authorities where neighbouring councils care to make such arrangements to increase the efficiency of the service. The Act provides that each Fire Authority which is a county council (except London) must establish a Fire Brigade Committee, consisting of both county council members and representatives of the county district councils in the county, to deal on the county council's behalf with matters concerning fire prevention and control. In Scotland, the local authorities are grouped in eleven areas each with a single brigade; with the exception of Glasgow, where the town council of the city is the responsible authority, each area is administered by a Joint Committee representative of the councils of the counties and large burghs in the area.

Central Control

The Secretary of State for the Home Department and the Secretary of State for Scotland are empowered to make regulations prescribing such matters as conditions of service, standards of efficiency and the organization of training in the local fire brigades. In matters affecting the fire brigades as a whole (excluding regulations about conditions of service and similar matters) each Secretary of State is advised by a Central Fire Brigades Advisory Council, consisting of representatives of the Fire Authorities, representatives of the Chief Officers and other members of the brigades, and other persons having special qualifications for the purpose. The Advisory Councils are not concerned with the conditions of service of members of the brigades. On these subjects the Secretaries of State are advised by the National Joint Council for Local Authorities' Fire Brigades in Great Britain and the National Joint Council for Chief Officers of Local Authorities' Fire Brigades in Great Britain.

Central control is also exercised through the Inspectors of Fire Services, whose duties include advising the Secretaries of State on technical matters. In 1954 there were 10 inspectors and assistant inspectors in England and Wales and 1 inspector and an assistant inspector in Scotland.

Establishment Schemes

Each Fire Authority is required to draw up a scheme showing the establishment of officers and other ranks (both whole-time and part-time), the number and location of fire stations and the number and type of vehicles and appliances considered necessary for the provision of an all-over cover of its area. Details of establishment schemes, which must be approved by each Secretary of State for his own country, vary considerably according to the fire risks in the area concerned; but in an English county of about 1 million acres and a mixed urban and rural population of some 1½ million, for example, there might be between 70 and 80 whole-time and

part-time fire stations equipped with between 200 and 250 vehicles and appliances and served by a whole-time force of approximately 700 and a part-time force of approximately 950 officers and men.

Operational Methods

Each Fire Authority is required to appoint a Chief Officer (Firemaster in Scotland) to be the chief administrative and executive officer for the fire services in its area. The appointment must be ratified in England and Wales by the Secretary of State for the Home Department and in Scotland by the Secretary of State for Scotland. The Chief Officer or Firemaster is responsible to the Fire Authority for seeing that both the fire brigade and the fire department (which is the administrative centre and staff headquarters for the fire brigade) are organized and managed in accordance with policy laid down.

Operational control is centralized at headquarters; but it is generally exercised on a more local basis by divisional officers, in charge of geographical divisions into which most areas are divided for the purpose. Each divisional officer has at his disposal a small staff of whole-time, and a varying number of part-time, officers and men; and he is responsible for mobilizing this force in the strength necessary for dealing with any outbreaks of fire in his division. Constant communication is maintained between divisional and brigade headquarters; and if at any time an outbreak of fire should grow beyond the capabilities of a divisional force, help is sent from one or more neighbouring divisions in its area, or even from the area of another Fire Authority. Under arrangements for mutual help made by all Fire Authorities, the nearest available force is sent to the scene of a fire, regardless of area boundaries.

Firemen

Firemen in Great Britain include: whole-time firemen; part-time firemen—either 'retained' firemen, who undertake, in return for a small retaining fee, to attend fires if they are called upon to do so, or 'volunteer' firemen, who receive no remuneration; auxiliary firemen, who are enrolled as part of the local authority civil defence organization as members of individual brigades under the command of Chief Officers or Firemasters, and whose activities are restricted (except in a war emergency) to such duties as are desirable for training; and members of fire-fighting organizations with specialized functions, which are outside the scope of the 1947 Act, e.g., those maintained by the War Office, the Air Ministry, the Ministry of Transport and Civil Aviation and by some of the more important industrial and commercial concerns.

Ranks in the fire services of England and Wales (for men) are chief officer, assistant chief officer, divisional officer, assistant divisional officer, station officer, sub-officer, leading fireman and fireman. In Scotland, they are firemaster, assistant firemaster, divisional officer, column officer, senior company officer, company officer, section leader, leading fireman, and fireman. Ranks in the women's branch, which is mainly concerned with controls, administrative duties and duties of a clerical nature, are (for Great Britain as a whole) group officer, assistant group officer, senior leading firewoman, leading firewoman, and firewoman. Promotion in the lower ranks of the firefighting forces is by examination and by merit, and in the higher ranks by merit only.

Training for full-time firemen in England and Wales includes practical and theoretical instruction given to recruits at a training school, which is run either by the Fire Authority itself or by a neighbouring Authority, and refresher courses for

firemen, arranged by Fire Departments. The training of recruits and junior ranks in Scotland is carried out at a central training school which is the responsibility of the Scottish Home Department. Courses for officers and potential officers of Fire Authority brigades are held at the Fire Service College, at Wotton House, near Dorking, Surrey, which is maintained by the Home Office and the Scottish Home Department as the central training institution for the fire services.

Finance

Every Fire Authority is required to submit to the Home Secretary or to the Secretary of State for Scotland an annual statement showing its expenditure and income in connection with the provision of fire services during the preceding year. The Government pays a grant of 25 per cent of the net expenditure approved by the Home Office or the Scottish Home Department, less an annual contribution towards the expenses of the Fire Service College; the rest of the money is raised from local authority funds.

Research

The principal means by which research on fire prevention and firefighting is carried on is the Joint Fire Research Organization, the cost of which is shared equally between the Government and the Fire Offices' Committee (a Committee of the Insurance Companies dealing in fire risks). The Organization makes continuing research into all aspects of fire prevention and firefighting and controls a Fire Research Station at which practical tests are carried out.

FIRE SERVICES IN NORTHERN IRELAND

The Fire Authorities in Northern Ireland, as established by the Fire Services (Amendment) Act (Northern Ireland), 1950, are the Belfast Corporation, which controls the Belfast Fire Brigade and is responsible for the area inside the city boundary, and the Northern Ireland Fire Authority, which covers the rest of the country outside Belfast.

The Belfast Fire Brigade maintains four whole-time stations and has an establishment of 178 officers and men manning 11 appliances, while the Northern Ireland Fire Authority has one whole-time station in Londonderry and 42 other stations throughout the remainder of the area, and an establishment of 92 whole-time officers and men and 684 part-time firemen, manning 61 appliances.

Ranks of Firemen

The ranks of firemen in Northern Ireland are: for the Northern Ireland Fire Authority—fire force commander, divisional officer, assistant divisional officer, senior company officer, company officer, section leader (retained brigades only), leading fireman and fireman; and for the Belfast Fire Brigade—chief officer, divisional officer grade 2, divisional officer grade 3, assistant divisional officer, station officer, sub-officer, leading fireman and fireman. There are only a few women in the Northern Ireland Fire Services, all of the rank of firewoman.

Finance

The Fire Services (Amendment) Act (Northern Ireland), 1953, passed in December 1953, provides that for the three financial years commencing 1st April

1953 the Northern Ireland Fire Authority may receive a Fire Service Grant made up of 50 per cent of loan charges in respect of capital expenditure, subject to a maximum of £22,500, together with 50 per cent of the first £110,000 of non-capital expenditure and 25 per cent of the excess over that amount. The expenditure in excess of the Fire Service Grant will, as hitherto, be apportioned among the local authorities. The Belfast Fire Brigade, however, cannot qualify under the Fire Services Acts for the payment of Fire Service Grant.

III. DEFENCE

THE DEFENCE SYSTEM

Organization

Britain's defence policy is the responsibility of the Minister of Defence, who, under the general direction of the Cabinet, of which he is a member, is answerable for the 'formulation and general application of a unified policy relating to the armed forces of the Crown as a whole and their requirements'.

The higher direction of each of the three fighting Services is on similar lines. Supreme control is in the hands of Parliament, which makes annual financial provision for defence needs. By limiting provision to the current year, Parliament ensures an annual review of the state of each Service. It is then that the Minister must present his Estimates, expound his plans and defend his actions.

The Minister of Defence answers for all matters of policy common to the three Services and their supply. Each of the three Service ministers, the First Lord of the Admiralty, the Secretary of State for War (who deals with the Army), and the Secretary of State for Air, is responsible to Parliament for the administration of his own Service; each is assisted by a junior minister or ministers and by the permanent civil servant at the head of his Department. The Chiefs of Staff Committee, which comprises the professional heads of the three Services, is responsible for preparing and advising upon strategic plans and policy for consideration by the Cabinet.

In addition to his co-ordinating functions as outlined above, the Minister of Defence also has ministerial responsibility for certain inter-Service organizations such as Amphibious Warfare Headquarters, the Joint Intelligence Bureau and the Imperial Defence College.

Co-operation between the fighting Services is illustrated in the system of staff training for selected officers of the Navy, Army and Air Force. After about 10 years' service, they are sent to separate staff colleges at Greenwich, Camberley and Bracknell (or Andover) respectively, where they learn the elements of staff work. At a later stage in their careers some of them go to the Joint Services Staff College at Chesham, where they live and work together and where particular attention is paid to the specialist inter-Service aspects of staff work. This College caters for about a hundred students a year from the Navy, Army and Air Force, the Civil Service and the Commonwealth. Finally, there is the Imperial Defence College, which caters for a few specially selected more senior officers from the Services, the Civil Service and the Commonwealth.

Policy and Finance

As a member both of the Commonwealth and of the North Atlantic Treaty Organization, Britain has defence responsibilities which are almost world-wide. In the fulfilment of these obligations and for the purpose of deterring aggression, Britain embarked in 1951 on a programme for building up her armed forces, which aimed at increasing both manpower and supplies of armaments and equipment. The period of full-time National Service¹ had been increased from 18 months to 2 years in 1950, and between 1950 and 1954-55 annual defence expenditure rose

¹ The National Service Act, 1948, which became operative on 1st January 1949, imposes a liability on every male British subject ordinarily resident in Great Britain (subject to specified exceptions) who has attained the age of 18 but has not attained the age of 26 years for a period of whole-time service in the regular forces and a term of part-time service in an auxiliary force (see pp. 92 and 94).

from £777 million to some £1,640 million and the strength of the regular and reserve forces increased from 827,000 to nearly 1½ million.

Since its inception, the programme has been subject to periodic reviews in the light of changing conditions, and in 1952 it was announced by Mr. (now Sir Winston) Churchill that in order to keep it within the limits of national economic strength, some modifications had been made and rearmament would be spread over a longer period. This reorganization of the programme initiated the policy of 'the long haul'.

In carrying out this policy, the Government intends to maintain the defence effort at the maximum which the nation's economic capabilities permit. It is still necessary to hold a careful balance between the demands of defence and those of other sections of the economy and, in particular, to ensure by close co-operation with Britain's allies that Britain's share of the common burden does not impose an undue strain upon her balance of payments. At the same time it is the Government's aim progressively to increase the efficiency of the armed forces and to take advantage of all new developments likely to increase fighting strength and to promote economy of effort. Defence research and development continues to have high priority and the expenditure on it will increase, though this will be kept within bounds by concentration on projects of the highest importance. Still greater emphasis is being placed on the Royal Air Force. Subject to commitments and obligations, it is the Government's aim gradually to reduce the total size of the Army and to reconstitute the strategic reserve at home. In his Budget speech on 6th April 1954 the Chancellor of the Exchequer emphasized the need to obtain some definite relief from the defence burden.

The total Defence Estimates for the Service Departments for 1954-55 amount to £1,639.9 million. This compares with a total of £1,636.76 million planned for 1953-54. Actual expenditure in 1953-54 was, however, £132 million less than was originally estimated, owing mainly to delays in deliveries. The figure for 1954-55 includes provision for expenditure representing £85.36 million of the sterling equivalent of aid from the United States of America.¹ In addition, £113.5 million is estimated for defence preparations under civil votes, mainly for civil defence and strategic reserve (see p. 92).

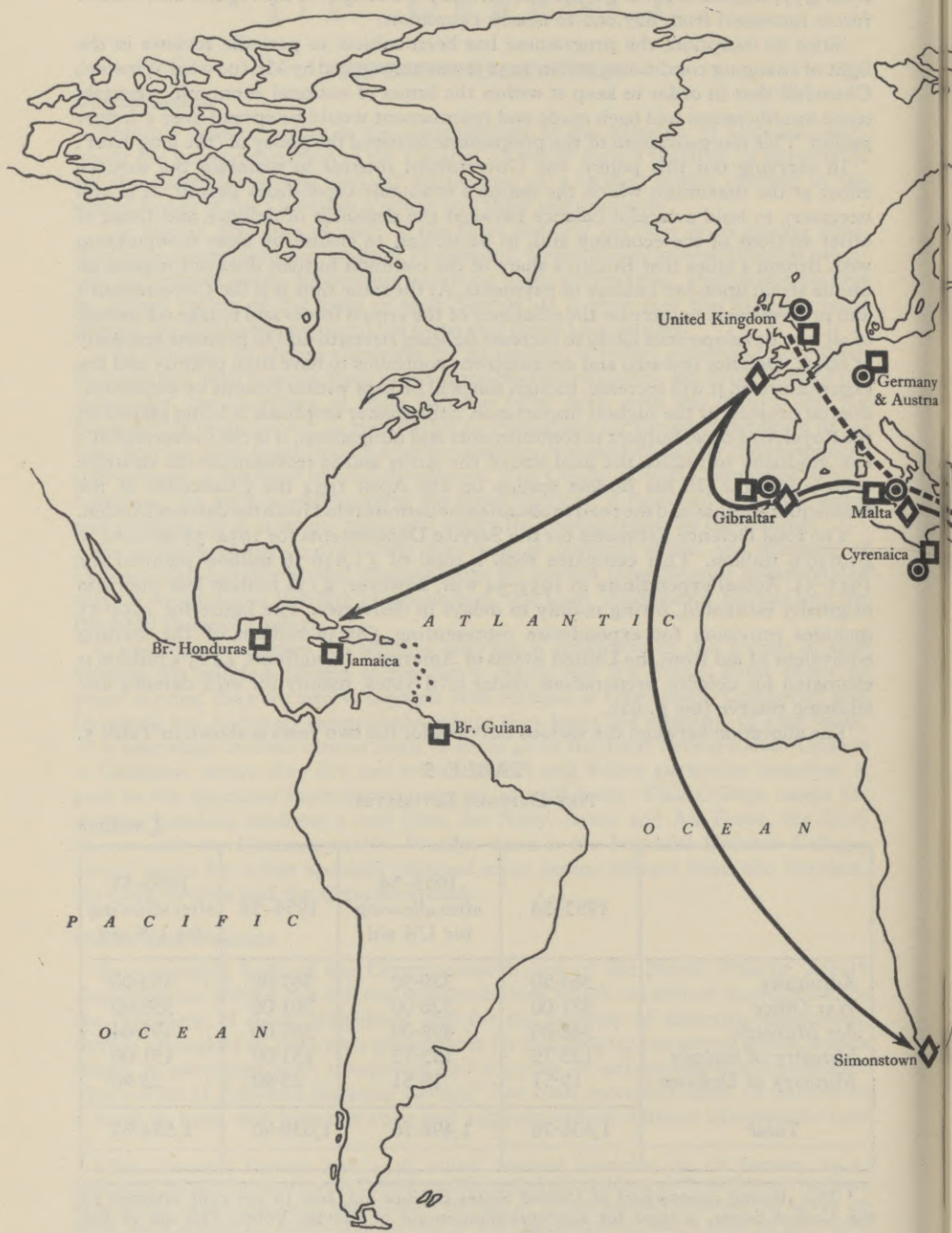
The allocation between the various Services for the two years is shown in Table 5.

TABLE 5
NET DEFENCE ESTIMATES

£ million

	1953-54	1953-54 after allowing for US aid	1954-55	1954-55 after allowing for US aid
Admiralty	364.50	329.50	367.00	353.00
War Office	581.00	526.00	561.00	535.00
Air Ministry	548.00	498.00	537.00	491.64
Ministry of Supply	123.75	123.75	151.00	151.00
Ministry of Defence	19.51	19.51	23.90	23.90
<i>Total</i>	1,636.76	1,496.76	1,639.90	1,554.54

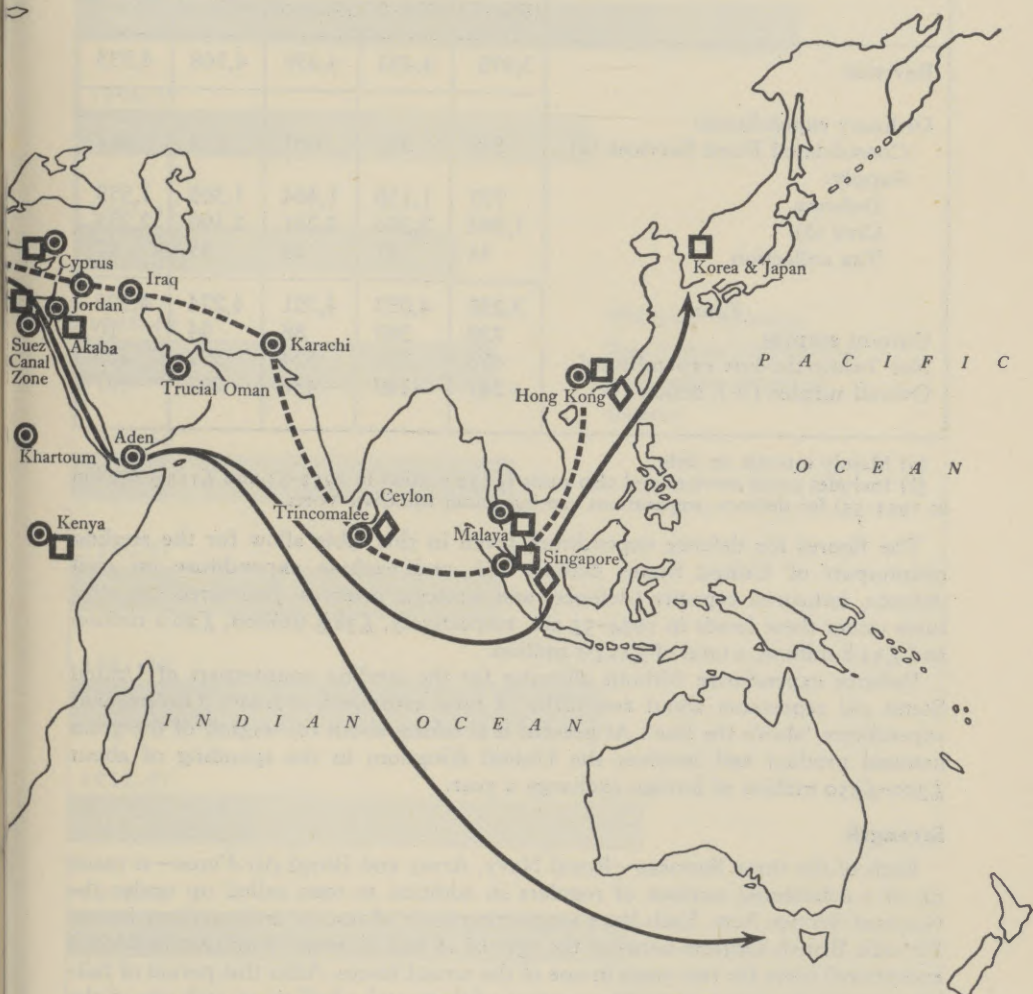
¹ The sterling counterpart of United States defence aid, less 10 per cent retained by the United States, is used for appropriations-in-aid of Service Votes. The use of this sterling counterpart does not relieve the pressure on real resources which is represented by the figure excluding credit for the counterpart.



Britain's Defence Forces

August 1954

- British Army Units
- ◇ Naval Bases—Naval Forces
- ⊙ Air Stations and Squadrons
- Lines of Communication



Under the Anglo-Egyptian Agreement on the Suez Canal Base, signed on 19th October 1954, the forces stationed in the Suez Canal Zone are to be withdrawn within 20 months.

The Ministry of Defence estimate consists mainly of contributions to international defence organizations, including contributions to the NATO common infrastructure programmes.¹ The 1954-55 Estimate includes £18.5 million on account of infrastructure.

Table 6 gives figures from successive Exchequer accounts showing defence expenditure in relation to total expenditure:

TABLE 6
EXCHEQUER ACCOUNTS

	£ million				
	1950-51	1951-52	1952-53	1953-54	<i>estimates</i> 1954-55
Revenue	3,978	4,433	4,439	4,368	4,533
Ordinary expenditure:					
Consolidated Fund Services (a)	545	592	667	674	667
Supply:					
Defence	777	1,110	1,404	1,365	1,555
Civil (b)	1,902	2,304	2,231	2,190	2,254
Tax collection	34	47	49	45	47
<i>Total</i>	3,258	4,053	4,351	4,274	4,523
Current surplus	720	380	88	94	10
Net 'below-the-line expenditure'	473	529	524	391	407
Overall surplus (+), deficit (-)	+247	-149	-436	-297	-397

(a) Mainly interest on debt.

(b) Includes social services and also sums (£139 million in 1953-54 and £113.5 million in 1954-55) for defence preparations coming under the Civil Votes.

The figures for defence expenditure given in this table allow for the sterling counterpart of United States defence aid, and exclude expenditure on civil defence, industrial capacity (defence) and strategic reserves. Estimated expenditures under these heads in 1954-55 are, respectively, £38.5 million, £20.2 million and £54.8 million, a total of £113.5 million.

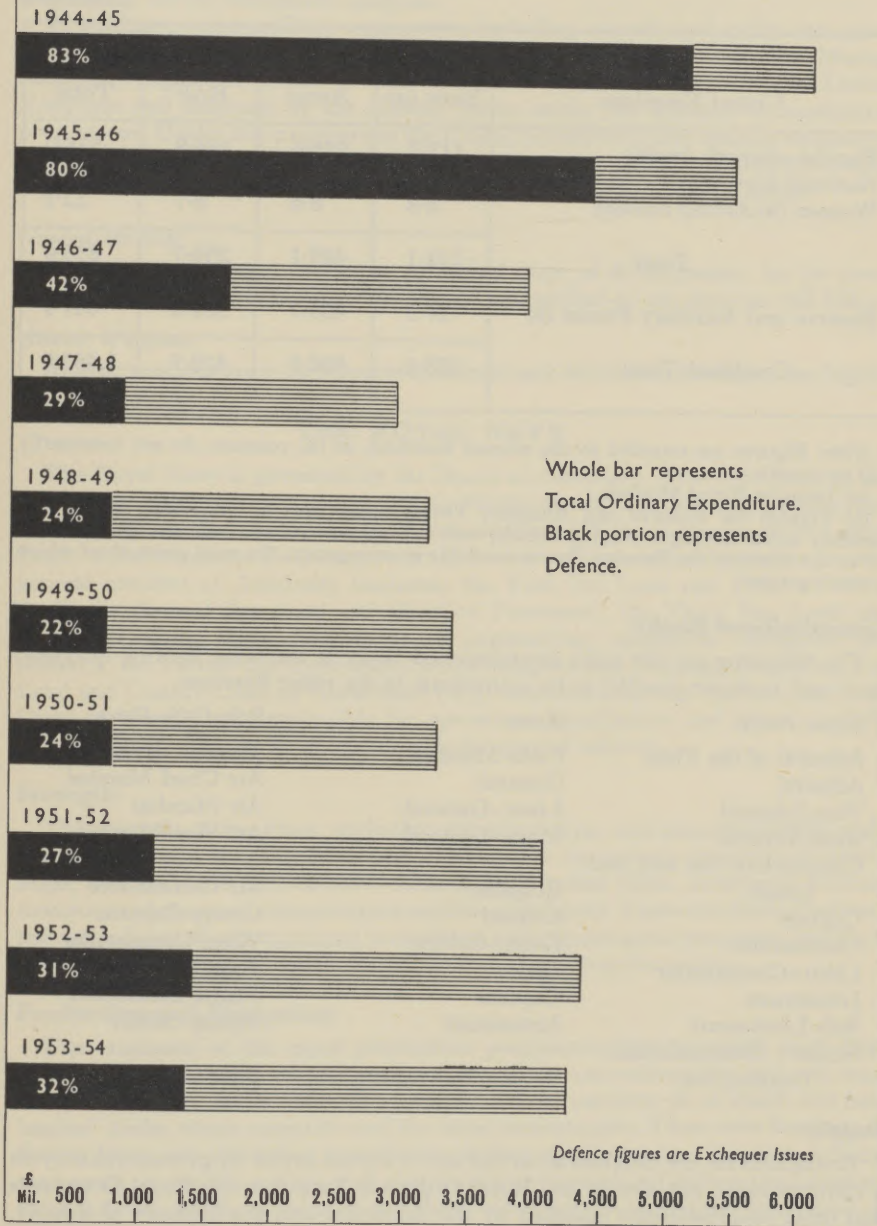
Defence expenditure without allowing for the sterling counterpart of United States aid represents about two-fifths of total estimated ordinary Government expenditure 'above the line'. At present it is taking about one-eighth of the gross national product and involves the United Kingdom in the spending of about £300-£350 million of foreign exchange a year.

Strength

Each of the three Services—Royal Navy, Army and Royal Air Force—is made up of a substantial nucleus of regulars in addition to men called up under the National Service Acts. Each has a supporting force of reserve and auxiliary forces. Fit male British subjects between the ages of 18 and 26 must (with certain limited exceptions) serve for two years in one of the armed forces. After this period of full-time service they must serve for a period of three and a half years with one of the

¹ 'NATO common infrastructure' has been defined as capital investment in basic facilities, such as airfields, signals systems, headquarters, etc., designed for common use.

DEFENCE EXPENDITURE 1945-54
in relation to Total Ordinary Budgetary Expenditure



reserve forces, giving in all five and a half years of whole-time and part-time service. During the latter period National Service men may be called upon to undergo 60 days' training.

Table 7 shows the strength of the various Services on 30th September 1954.

TABLE 7

Thousands

United Kingdom	Royal Navy (a)	Army	RAF	Total
Regular strength (male)	117·7	225·5	184·8	528·0
National Service	8·5	211·1	66·2	285·8
Women (including nurses)	4·8	8·6	8·7	22·1
<i>Total</i>	131·1	445·1	259·7	835·9
Reserve and Auxiliary Forces (b)	27·3	455·7	164·0	647·1
<i>Combined Total</i>	158·4	900·8	423·7	1,483·0

Note: Figures are rounded to the nearest hundred, so the columns do not necessarily add up exactly.

(a) Includes Royal Marines.

(b) Figures for Reserve and Auxiliary Forces relate only to volunteer reserve and auxiliary forces having a training liability and to National Service reserves. They do not cover the whole of the Reserve Forces available in emergency, the total strength of which is much greater.

Commissioned Ranks

The following are the main commissioned ranks in the three fighting Services; each rank is shown parallel to its equivalents in the other Services:

<i>Royal Navy</i>	<i>Army</i>	<i>Royal Air Force</i>
Admiral of the Fleet	Field-Marshal	Marshal of the RAF
Admiral	General	Air Chief Marshal
Vice-Admiral	Lieut.-General	Air Marshal
Rear-Admiral	Major-General	Air Vice-Marshal
Commodore (1st and 2nd Class)	Brigadier	Air Commodore
Captain	Colonel	Group Captain
Commander	Lieut.-Colonel	Wing Commander
Lieut.-Commander	Major	Squadron Leader
Lieutenant	Captain	Flight Lieutenant
Sub-Lieutenant	Lieutenant	Flying Officer
Senior Commissioned Gunner, etc.	Second Lieutenant	Pilot Officer

Supply

Production for the Services is carried out to a great extent by private industry on a contract basis, but also by the Royal Ordnance Factories, the Royal Dockyards and other establishments operated by the Admiralty and the Ministry of Supply.

At the beginning of the second world war three Royal Ordnance Factories were in operation; at its peak there were 44. There are now 23. The Ministry of Supply's research establishments carry out research on behalf of all three Services and naval research is also conducted by the Admiralty. Production of and research on atomic warheads to meet Service requirements are carried out by the Atomic Energy Authority (see p. 348) under contract from the Ministry of Supply, which is responsible for the completed weapons.

In addition, some military equipment, including aircraft and radio and radar equipment, is being supplied to Britain by the United States under the Mutual Security Programme. Some of this equipment is manufactured in the United Kingdom and financed by the United States under the 'offshore procurement' programme. Under this programme the United Kingdom is also making equipment for other NATO countries in Europe. A number of jet fighter aircraft have been supplied to the Royal Air Force as a joint Canadian-United States project.

Guided Missiles

Guided missiles have reached an advanced stage of development. An air-to-air weapon will be the first to come into service and surface-to-air weapons will follow.

Atomic Weapons

Atomic weapons are in production in Britain and delivery to the forces has begun.

THE ROYAL NAVY

The Royal Navy is governed by the Board of Admiralty. The First Lord of the Admiralty is the minister responsible to Parliament for the Navy. The other ten members of the Board are the Parliamentary and Financial Secretary; the Civil Lord; the Permanent Secretary, who is a civil servant and responsible for the general conduct of Admiralty business; the First Sea Lord and Chief of Naval Staff; the Second Sea Lord and Chief of Personnel; the Third Sea Lord and Controller of the Navy, responsible for engineering, equipment, ordnance, and research; the Fourth Sea Lord and Chief of Supplies and Transport; the Fifth Sea Lord and Deputy Chief of Naval Staff (Air), responsible for air matters; the Vice-Chief of Naval Staff, responsible for operations, intelligence and plans; and the Deputy Chief of Naval Staff, responsible for special subjects.

Strength

The strength of the Fleet, excluding attendant ships and numerous small craft, consisted in 1954 of nearly 600 vessels, falling into the various categories of battle-ships, fleet and light fleet carriers, cruisers, *Daring* class ships, destroyers, frigates, monitors, submarines, minesweepers and fast minelayers. These are divided between the active fleets, those employed on training and experimental purposes, and those in varying categories of reserve, including those preparing for service.

Production and Equipment

The emphasis of the naval production programme has for some years been placed on the building up and modernizing of the anti-submarine and anti-mine forces and on the construction of additional aircraft carriers, all of which will have 'angled' decks, steam catapults and the latest arrester gear. These new features, all British ideas, are also being installed in carriers now in service. Progress is being made with the building of frigates, minesweepers (coastal and inshore) and seaward defence boats. Modernization of the Fleet, including the submarine force, goes on

continually. Two squadrons of fast anti-submarine frigates converted from destroyers are now with the Active Fleet. New submarines are being laid down and existing submarines modernized. Besides orthodox submarines, experimental craft using high test peroxide propulsion to provide high underwater speed are being developed.

Research and Development

The main effort in the programme of naval research and development, as in the production programme, continues to be directed towards anti-submarine, anti-mine and anti-aircraft problems.

Much work has been done on propulsive machinery with good results. The *Deltic*, an internal combustion engine of advanced design and power-weight ratio, is in production and an improved type of marine gas turbine is being used in a motor torpedo boat to gain further experience of this type of machinery at sea. Modern chemical theory is being successfully applied to improvement of the efficiency of the steam plants which provide power for the larger units of the Fleet, and current research is expected to make possible greater unbroken operational periods at sea, economy of skilled maintenance staff, and savings in running costs.

Fleet Air Arm

The Fleet Air Arm is being re-equipped with jet and turbo-prop aircraft and *Sea Hawk* day fighters, and *Wyvern* strike aircraft are in service. A number of *Avenger* anti-submarine aircraft, received from the United States, are being used to bridge the gap until *Gannets* (anti-submarine search and strike aircraft) are in service. Further deliveries are being made of aircraft fitted with airborne early warning radar.

Stations

The Navy's commands in home waters are Portsmouth, Devonport, Chatham, Rosyth in Scotland, and the Commander-in-Chief Home Fleet. Abroad there is the Mediterranean Station with headquarters in Malta and with Gibraltar as a secondary base. This station covers the Red Sea (but not Aden) as well as the Mediterranean. The East Indies Station is practically co-extensive with the Indian Ocean. By agreement with Ceylon, the Navy has a base and dockyard facilities at Trincomalee which are maintained by the United Kingdom. The Far East Station, formerly known as the China Station, extends to the east of Singapore. Hong Kong remains the operational base but the headquarters have now been moved to Singapore. British naval aid to United Nations action in Korea was based on this station. Largest in area of the stations is the America and West Indies Station, with headquarters at Bermuda. From this station ships operate in both the North and South Atlantic and in the Eastern Pacific, except where the Royal Canadian Navy operates from Halifax and Esquimalt (Vancouver Island). By agreement with the Union of South Africa the headquarters of the South Atlantic Station are at Simonstown, near Cape Town. The navies of other Commonwealth nations operate in their respective areas from their home bases, the use of which may be made available to the Royal Navy at the discretion of their Governments.

The main Fleet bases at Portsmouth, Devonport, Chatham, Malta, Trincomalee, Simonstown and Singapore are also dockyards for the Navy. Rosyth, Gibraltar and Hong Kong are dockyards with major repair facilities. There are also a number of naval air stations at home and abroad.

Royal Marines

The Corps of Royal Marines is a body of trained men for service on sea or land. Its official existence dates from 1664. The present-day functions of the Corps are:

1. To supply detachments for HM ships, which (a) man a proportion of the ships' armament, (b) provide emergency landing parties, (c) carry out guard duties and the like.
2. To act as Commando units.
3. To provide crews for minor landing craft and certain other parties required for amphibious assault.

Women's Royal Naval Service

The WRNS is now a permanent and integral part of the Naval Service. It has its own disciplinary code. The estimated average strength in 1954-55 is 4,600.

Auxiliary Forces

Royal Fleet Reserve

The RFR consists of men who have taken their discharge from the regular service and who, either voluntarily or as part of their contract, join this reserve for a minimum period of five years. During 1954-55 maximum strength is estimated at 20,000.

Royal Naval Reserve

The RNR (officers and men of the Merchant Navy) reopened its ranks again in February 1950 for volunteers to serve in the Royal Navy in war. The qualification for service in the RNR is that the candidate should be following the sea as a profession. Provision has been made in 1954-55 for a maximum strength of 1,340 officers and 3,000 ratings.

Royal Naval Volunteer Reserve

The RNVR (officers and men who voluntarily train in peace time) is organized in 12 divisions which provide training for general naval service. There are also 10 RNVR Air Squadrons. The Royal Naval Volunteer (Wireless) Reserve consists of specialist officers, wireless operators and radio electricians. During 1954-55 provision is made for a maximum RNVR strength of 12,250 and also for 600 RNVR officers doing national service.

Royal Marines Forces Volunteer Reserve and Women's Royal Naval Volunteer Reserve

The RMFVR and WRNVR are the Royal Marines' and WRNS's counterparts of the RNVR.

General Reserves

Behind these fully trained reserves, available to meet immediate needs on mobilization, is the vast background of officers and men with past war-time and peace-time service in the Royal Navy now either in retirement or in civil occupations.

All those still fit for service are liable to recall on the outbreak of war and, after refresher training where necessary, would help to provide the additional trained manpower required to meet the war-time expansion of the Navy as a whole.

Royal Naval Minewatching Service

The RNMWS, a voluntary civilian organization formed in January 1952, is responsible in time of war for manning posts around the coast and overlooking the

main navigable waterways. Its object would be to spot mines dropped from aircraft, and to plot and report their positions. Its strength on 31st March 1954 was 3,700.

Sea Cadet Corps

The Sea Cadet Corps is the oldest pre-Service movement for boys in Britain, its origin dating from the time of the Crimean War in the mid-nineteenth century. As an organization it was sponsored in 1899 by the Navy League (the objects of which are the promotion of a strong Navy and instruction in the history and traditions of the sea). The aim of the Sea Cadet Corps is to give technical training to, and instil naval tradition in, boys under the age of 18 who intend to serve in the Royal and Merchant Navies and also to those sea-minded boys who do not intend to follow a sea career but will, given this knowledge, form a valuable reserve for the Navy. It also aims to provide for the social and educational welfare of the cadets and to develop character and good citizenship. The estimated strength in 1954-55 is about 2,000 cadet officers, 1,100 chief petty officer instructors and 22,000 cadets.

THE ARMY

The control of the Army is vested in the Army Council, of which the Secretary of State for War is president. The other civilian members of the Council are the Parliamentary Under-Secretary of State for War and Financial Secretary of the War Office, who performs parliamentary duties; and the Permanent Under-Secretary of State for War, a civil servant who acts as secretary to the Council. The military members of the Army Council comprise the Chief of the Imperial General Staff, who is responsible for strategic policy and plans, operation, intelligence and training, and is also a member of the Chiefs of Staff Committee (see p. 88); the Vice-Chief of the Imperial General Staff; the Deputy Chief of the General Staff, responsible for war organization, equipment, and weapons; the Adjutant-General to the Forces, responsible for manpower, personnel, discipline, medical services, welfare, education, and the women's services; and the Quartermaster-General to the Forces, responsible for supplies, transport, and works services.

Disposition and Strength

The Army is an instrument of Britain's commitments as a world power and as a member of the United Nations, of the North Atlantic Treaty Organization, and of the British Commonwealth. There were in the spring of 1954, 4 divisions (3 of them armoured) in Germany,¹ in addition to 1 brigade in Berlin, 1 brigade in Trieste² and a number of troops in Austria. In Korea and Japan there were 20,000 men³; in Malaya, 23 battalions (including Gurkha and Colonial battalions); in Kenya, 11 battalions (including Colonial forces), and in the Suez Canal Zone,

¹ The United Kingdom Government undertook, at the Nine-Power London Conference in October 1954 (if the agreements reached were accepted by all the national parliaments), to continue to station four divisions and a Tactical Air Force on the Continent, and not to withdraw them against the wishes of the majority of the Brussels Treaty powers. This was subject to one reservation to cover the possibility of some grave emergency overseas, and one condition to take care of possible financial difficulties.

² In accordance with the terms of a Memorandum of Agreement between the Governments of Italy, the United Kingdom, the United States and Yugoslavia, British troops were withdrawn from Trieste in October 1954.

³ The United Kingdom land forces in Korea form part of the Commonwealth Division which is being reduced by two-thirds.

2 divisions and 1 brigade.¹ In addition to these, there were the Gibraltar, Malta, Cyrenaica (and Tripoli), Cyprus, Akaba, and Hong Kong garrisons. There was also a battalion in the West Indies and 1 in British Guiana. At home there are the Territorial Army, other reserve forces and Home Guard, and certain elements of the Regular Army.

Equipment

Attention is being concentrated on the production of tanks and other armoured vehicles, infantry weapons, engineers' and signal equipment, and intensive study has been given to the defensive and offensive aspects of the introduction of atomic weapons.

The Regular Army is fully equipped with the *Centurion* tank which has also been supplied to allied countries. The heavy gun tank, the *Conqueror*, is in limited production. Complementary to the *Centurion*, it is larger, more powerfully armed and more heavily armoured. Its suspension is of a new and improved design. Great progress has been made with the development of a new scout car and a new six-wheel armoured personnel carrier of very modern unorthodox design, and the first heavy tracked vehicle to be powered by a gas turbine has been developed.

Among artillery weapons is a new light anti-aircraft gun for defence against low-flying aircraft and the most recent infantry equipment includes the *Energa* grenade, the 3·5-inch rocket launcher and the *Patchett* sub-machine gun.

It has been decided that the new rifle for the British Army shall be the Belgian FN.300, which may also be adopted by other NATO countries.

Production of engineering equipment includes a new girder bridge, capable of carrying the heaviest tanks in the Service, a new light assault floating bridge and a heavy ferry. A new and more powerful range of mines, needed for dealing with heavier tanks, and a speeded-up mechanical minelayer are now in service.

Trials have taken place and production is starting on a large range of new wireless sets for the Royal Armoured Corps, the Royal Artillery and the Infantry.

Organization of the Regular Army

The Army is organized in twenty-five corps or arms, which include the Royal Armoured Corps (the historic Cavalry Regiments—Dragoons, Hussars, Lancers—and the Royal Tank Regiment), Artillery, Engineers, Signals, Infantry, and various other corps such as the Royal Army Service Corps, the Royal Army Ordnance Corps, the Royal Army Medical Corps, etc. The Infantry has been reorganized since 1946 in the following groups:

1. The Grenadier Guards, The Coldstream Guards, The Scots Guards, The Irish Guards, The Welsh Guards.
2. The Royal Scots, The Royal Scots Fusiliers, The King's Own Scottish Borderers, The Cameronians.
3. The Queen's Royal Regiment, The Buffs, The Royal Fusiliers, The East Surrey Regiment, The Royal Sussex Regiment, The Queen's Own Royal West Kent Regiment, The Middlesex Regiment.

¹ Under the Anglo-Egyptian Agreement signed on 10th October 1954 the withdrawal of these forces is to be completed within twenty months. The Government had previously stated, in July 1954, that part of the forces released will be used to build up a strategic reserve in the United Kingdom.

The small British force in the Sudan is, under the Anglo-Egyptian Agreement of February 1953, to be withdrawn at the close of the transitional period of self-government when the Sudanese Parliament has passed a resolution expressing its desire that arrangements for self-determination be put in motion.

4. The King's Own Royal Regiment, The King's Regiment, The Lancashire Fusiliers, The East Lancashire Regiment, The Border Regiment, The South Lancashire Regiment, The Loyal Regiment, The Manchester Regiment.
5. The Royal Northumberland Fusiliers, The West Yorkshire Regiment, The East Yorkshire Regiment, The Green Howards, The Duke of Wellington's Regiment, The York and Lancaster Regiment.
6. The Royal Warwickshire Regiment, The Royal Lincolnshire Regiment, The Royal Leicestershire Regiment, The Sherwood Foresters.
7. The Royal Norfolk Regiment, The Suffolk Regiment, The Bedfordshire and Hertfordshire Regiment, The Essex Regiment, The Northamptonshire Regiment.
8. The Devonshire Regiment, The Gloucestershire Regiment, The Royal Hampshire Regiment, The Dorset Regiment, The Royal Berkshire Regiment, The Wiltshire Regiment.
9. The Somerset Light Infantry, The Duke of Cornwall's Light Infantry, The Oxfordshire and Buckinghamshire Light Infantry, The King's Own Yorkshire Light Infantry, The King's Shropshire Light Infantry, The Durham Light Infantry.
10. The Cheshire Regiment, The Worcestershire Regiment, The South Staffordshire Regiment, The North Staffordshire Regiment.
11. The Royal Welch Fusiliers, The South Wales Borderers, The Welch Regiment.
12. The Royal Inniskilling Fusiliers, The Royal Ulster Rifles, The Royal Irish Fusiliers.
13. The Black Watch, The Highland Light Infantry, The Seaforth Highlanders, The Gordon Highlanders, The Cameron Highlanders, The Argyll and Sutherland Highlanders.
14. The King's Royal Rifle Corps, The Rifle Brigade.

Women's Royal Army Corps

The WRAC, which has replaced the ATS, is a corps in the Regular Army, the officers and other ranks of which, with minor exceptions and modifications, are subject to the Army Act and Queen's Regulations to the same extent as members of any other corps.

Queen Alexandra's Royal Army Nursing Corps

The QARANC, which has replaced the QAIMNS, is a corps of the Regular Army and provides the nursing services within the Army. It numbers about 2,150.

Territorial Army

The Territorial Army was reconstituted in 1947 and now forms part of the national Army. Its role on the outbreak of war would be: to provide most of the anti-aircraft¹ and coast defences of the country and the reinforcements in those arms required at ports and airfields overseas; to provide, with the active army, a field force wherever required; and to support the civil defence organization in its task of minimizing the effects of enemy air attack.

¹ The development of nuclear and other new weapons has radically affected the problems of air defence, and the scale of anti-aircraft gun defences is therefore to be reduced.

From the outbreak of war the Regular and Territorial Armies would be integrated. In the United Kingdom the combined resources of Regular and Territorial units would be used together to meet initial operational requirements and to provide the framework of subsequent expansion.

The Territorial Army is to be brought up to the equivalent of 12 TA divisions, which should be able to take the field after a short period of formation training, following mobilization. The TA consists of armoured, infantry and airborne divisions, certain independent brigades, and anti-aircraft and coastal artillery units together with Corps and Army troops and administrative units. Its backbone is the volunteer, but from October 1950 an increasing proportion of its strength has been National Service men doing their compulsory term of three and a half years' part-time service in its ranks. The strength of the Territorial Army in the spring of 1954 was 11½ divisions, consisting of 60,000 volunteers and 192,000 part-time men.

Army Emergency Reserve

The object of the Army Emergency Reserve is, broadly, to provide the technical and administrative units needed to form the essential backing to the fighting formations of the Regular Army and of the Territorial Army immediately on mobilization. The Army Emergency Reserve is not part of the Territorial Army but an essential complement to it. In structure its units are similar to those of the Territorial Army in that they consist of basic elements of volunteers to provide the senior officers and NCOs, completed ultimately with National Service men during their part-time service; but the units are raised on a trade or 'skill' basis and not territorially.

Army Cadet Force

The ACF was founded some 90 years ago. Its objects are pre-Service training for boys between the ages of 14 and 18 and the encouragement of club life, games, etc. In the 1954-55 Estimates provision is made for about 6,270 officers and 126,000 cadets, of whom about three-fifths are in the Combined Cadet Force, which is organized in schools.

The Home Guard

The Home Guard, instituted during the second world war, was re-established on a voluntary and limited basis by the Home Guard Act, 1951.

The tasks of the Home Guard in war time would be to guard vulnerable points, particularly key factories and airfields, and to assist the civil defence organization in the event of heavy air attack.

The force is open to men between 18 and 65, unless they are members of the Regular forces, or of certain reserves, or of the Territorial Army. Women are eligible for service as clerks and telephonists. Service is for two years and may be extended for one year at a time. Service is part-time in times of peace, but members of the Home Guard are required to give whole-time service in the United Kingdom if the unit to which they belong is mustered to repel an invasion. There is no pay, but allowances are made to cover subsistence, disablement, travelling, etc., at a flat rate irrespective of rank. When on duty and mustered, members of the Home Guard will be subject to military law, but no member would be tried under military law for an offence which could come within the civil code.

The Home Guard was started as the Local Defence Volunteers in 1940 and was afterwards named the Home Guard on the suggestion of the Prime Minister, Mr. (now Sir Winston) Churchill. In the course of the war the organization reached a strength of over 1½ million. It held its 'stand-down' parade in December 1944.



THE ROYAL AIR FORCE

The Royal Air Force is administered by the Air Council (a body similar in organization to the Army Council), of which the Secretary of State for Air is president. The Council also has five permanent and three additional members. Of these, the Parliamentary Under-Secretary for Air acts as vice-president of the Air Council and performs parliamentary duties; and the Permanent Under-Secretary of State for Air, who is a civil servant, acts as secretary of the Air Council. The military members of the Council include the Chief of the Air Staff, who is responsible for strategic policy and the fighting efficiency of the RAF and is also a member of the Chiefs of Staff Committee; the Vice-Chief of the Air Staff, responsible for inter-Service policy, operations, intelligence, liaison with other air forces, standardization and ground defence; the Deputy Chief of the Air Staff, responsible for the preparedness for war of the RAF, for command, staff and air training, and for policy regarding future aircraft and weapons; the Air Member for Personnel; the Air Member for Supply and Organization; and the Controller of Aircraft of the Ministry of Supply.

Equipment

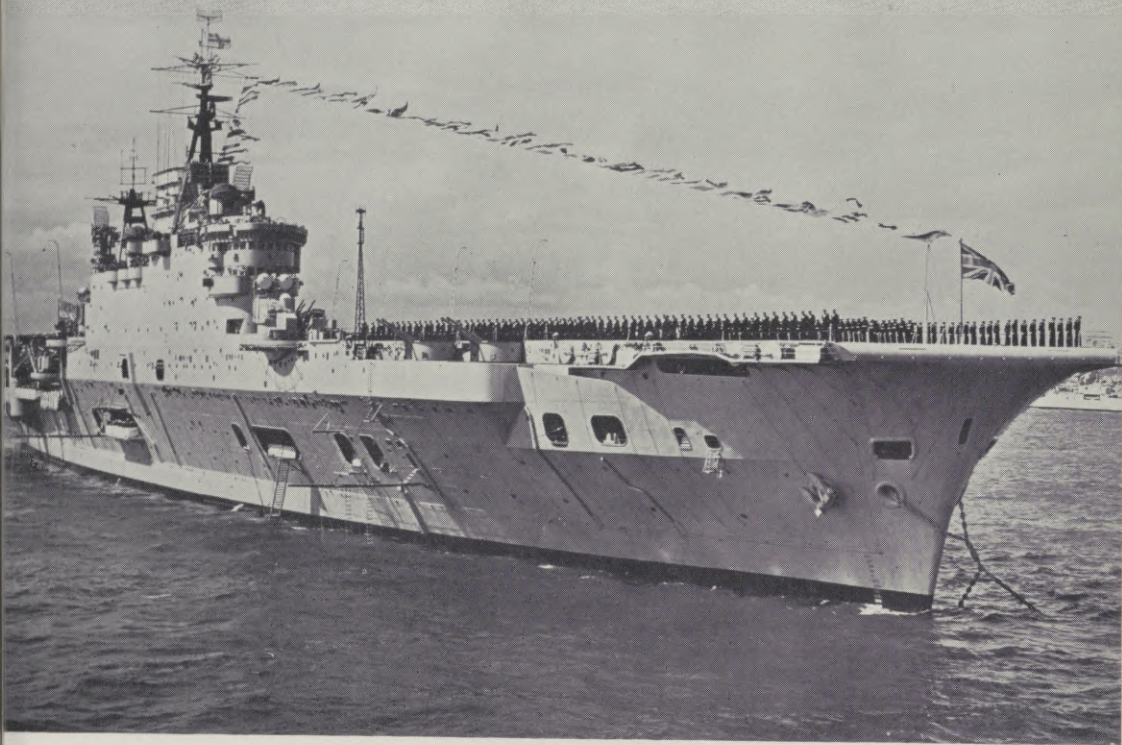
In the general defence effort still greater emphasis is being placed on the RAF, which is concentrating on the modernizing and expanding of equipment in Britain and Western Europe, while maintaining forces of high quality in the Middle and Far East. Most of the changes and improvements are taking place with the prospect of guided weapons 'coming over the horizon'.

Concentration continues on the production of the most advanced types of aircraft and equipment. The seven aircraft types to which super-priority has been accorded are: the *Hunter*, *Swift* and *Javelin* (jet fighters), and the *Canberra*, *Valiant*, *Vulcan* and *Victor* (jet bombers). A system has been introduced to shorten the development time of new aircraft. Fighter Command is steadily being re-equipped with *Swifts* and *Hunters*. Prototypes of a new supersonic fighter are in production and 20 pre-production aircraft have been ordered.¹ The re-equipment and expansion of Bomber and Coastal Commands is continuing and the jet medium bomber squadrons are being built up as quickly as production allows, with the aim of providing a highly trained and flexible force for the exercise of air power. As the four-engined strategic bombers, *Valiant*, *Vulcan* and *Victor*, come into service the *Canberra* squadrons will be converted to the heavy type, but the twin-engined *Canberra* will continue to give direct tactical support to Supreme Allied Command, Europe.

New types of airborne radio and radar equipment are being delivered in considerable quantities and early-warning radar has been highly developed. Ground organization has been speeded up and changes have been made in the system of command to match the needs of operations that may often be conducted above the speed of sound.

In the defensive field there will be guided weapons launched from aircraft and from the ground. The former will supplement, but not supplant, aircraft cannon.

¹ The *PI* twin jet fighter, the first British aircraft designed to exceed the speed of sound in level flight, made its maiden flight on 4th August 1954, and a new delta-winged jet aircraft, built for research into supersonic speed in level flight, made its first flight on 6th October. Other supersonic types are in process of construction.



H.M.S. Eagle, 36,800 tons, one of the two largest and most modern aircraft carriers in service with the Royal Navy.



The new *Conqueror* heavy gun tank, in production for the British Army (see p. 99).



A Gloster *Javelin* twin-jet, all-weather fighter, in super-priority production for the Royal Air Force (see p. 102).



Civil Defence volunteers train at a London headquarters.

Commands

The Royal Air Force is organized into Commands administered by the Air Council:

At Home. Bomber, Fighter, Coastal, Transport, Flying Training, Technical Training, Maintenance and Home (formerly known as Reserve) Commands.

Overseas. Second Tactical Air Force (Germany), the Middle East Air Force (headquarters in Cyprus) and the Far East Air Force (headquarters at Changi, Singapore).

Commands are subdivided into groups and wings, a certain number of squadrons being allotted to each group or wing. Squadrons are subdivided into flights.

Women's Royal Air Force

Women play an important part in the work not only of the Royal Air Force but of its reserve and auxiliary formations. The WRAF is a permanent and integral part of the Royal Air Force and its members train with and work alongside airmen in the same trades, serving not only in the United Kingdom but in Germany, the Middle East and the Far East. The maximum strength in 1954-55 is estimated at 9,450.

Auxiliary and Reserve Forces

The Royal Air Force auxiliary and reserve formations, administered by Home Command, are:

1. The Royal Auxiliary Air Force, which consists of units raised and maintained by Territorial and Auxiliary Forces Associations. It includes flying squadrons (fighter and air observation post), regiment squadrons and fighter control and radar reporting units. Each trains and operates as a self-contained unit. The estimated strength in 1954-55 is 9,290.
2. The Royal Air Force Volunteer Reserve, which provides a pool of officers, airmen and airwomen, who, like the personnel of the Auxiliary Air Force, train on a part-time basis, both as individuals and units.
3. The Air Training Corps, open to boys between the ages of 14 and 18, which in 1954-55 has an estimated average strength of 3,800 officers, 5,800 warrant officers, and 41,500 cadets, and, like the other pre-Service formations, seeks to inculcate citizenship as well as training for the RAF.

Royal Observer Corps

Nearly 20,000 men and women from all walks of life form the Royal Observer Corps, a voluntary civilian organization, which is part of Fighter Command, devoted to the specialized task of identifying and reporting the movements of aircraft. The corps originated in the first world war to report the movements of German aircraft and zeppelins over Great Britain and was officially established in 1925.

CIVIL DEFENCE

Civil defence is a vital and integral part of Britain's defence plans. Under the Civil Defence Act, 1948, the Secretary of State for the Home Department (in Scotland the Secretary of State for Scotland) is given wide powers in relation to civil defence which are applied by Regulations requiring the approval of Parliament.

Other Ministers may be designated under the Act to exercise powers with regard to particular subjects, and the Ministers of Health, Food, Housing and Local Government, Fuel and Power, and Transport and Civil Aviation have in this way been designated to deal respectively with such matters as the casualty services and care of the homeless¹; emergency feeding; evacuation¹; and the maintenance of fuel and transport services in war time. In Northern Ireland the Civil Defence Act (NI), 1950, places on the Minister of Home Affairs the responsibility for organization of the various civil defence services.

Thus civil defence is the responsibility of a number of Ministers each of whom undertakes the duties which, in war time, would represent a natural extension of his peace-time functions. The Home Secretary is responsible for the civil defence activities of the police and fire services,¹ and he administers the Civil Defence Corps and the Industrial Civil Defence Service as well as such matters as war-time lighting restrictions, air-raid shelter policy and the civil air-raid warning system. He has, in addition, the function of co-ordinating the civil defence work of all Departments. This necessarily involves much interdepartmental work, and the necessary committee organization for this purpose has been established at both the ministerial and the official levels; this organization includes a Civil Defence Joint Planning Staff, under Home Office chairmanship, on which all Departments with civil defence responsibilities are represented. Through this organization the Civil Defence plans and programmes are continually under review to take account of changes in the scale and nature of possible attacks.

In September 1954 the Home Secretary announced the appointment to the Home Office of a Director-General of Civil Defence, to co-ordinate the civil defence work of the civil Departments concerned and to develop liaison with the armed forces.

As the development of effective civil defence services involves much detailed planning and organization at local level, the central Government has enlisted the assistance of local government authorities, of industry and of public bodies of many kinds, including voluntary organizations. Local progress in civil defence in England and Wales is stimulated by Principal Officers of the Home Office in each of the eleven civil defence regions.

To provide the personnel required in war for civil defence tasks the following formations, in which in peace time only part-time service is required, are raised by voluntary recruitment of civilians:

1. The Civil Defence Corps, which was created by Royal Warrant in May 1949.
2. The Industrial Civil Defence Service, which comprises civil defence units formed in industrial and commercial premises.
3. The Auxiliary Fire Service, to reinforce the fire services maintained by local authorities under the Fire Services Act, 1947.
4. The National Hospital Service Reserve, limited at present to trained nurses and persons willing to be trained as nursing auxiliaries.
5. The Special Constabulary, to reinforce the police forces in all police functions.

Apart from industrial civil defence the Civil Defence Corps is the only one of these formations called upon to undertake tasks which have no peace-time equivalent. It is recruited and organized by certain local authorities (mainly the councils

¹ In Scotland these matters are the responsibility of the Secretary of State for Scotland.

of counties and county boroughs, or large burghs in Scotland) in local divisions each subdivided into five sections as follows:

- Headquarters: control of civil defence operations, communications, reconnaissance (including the identification of toxic agents).
- Wardens: guidance to the public, reporting the effects of air attack, organization of street and village parties, movement of the homeless, supplementary air-raid warnings.
- Rescue: rescue of trapped persons.
- Ambulance: the manning of ambulances, stretcher bearing and first aid.
- Welfare: escort and welfare of homeless and evacuees, billeting, rest centres, supervision and welfare of public in shelters, emergency cooking and feeding, public information centres.

Subject to restrictions regarding age and obligation to serve in the armed forces, recruits for all formations are drawn from men and women who are willing to serve as long as they are able and who will undertake to train approximately five hours each month. They are not paid, but reasonable out-of-pocket expenses are reimbursed.

Strengths in Great Britain at 30th September 1954 were:

1. Civil Defence Corps	338,153
2. Industrial Civil Defence Service	160,000
3. Auxiliary Fire Service	20,646
4. National Hospital Service Reserve	44,868
5. Special Constabulary (recruited since November 1949)	42,332

To provide central training in civil defence three residential technical training schools are maintained by the Home Office. These are attended by persons nominated by local authorities, industry and other organizations concerned with civil defence, many of whom qualify as civil defence instructors. First-aid instructors are provided in the main by the St. John Ambulance Brigade (in Scotland, St. Andrew's Ambulance Association) and the British Red Cross Society.

There is also a Civil Defence Staff College at Sunningdale in Berkshire, providing courses for senior officials in all aspects of civil defence, and a Tactical School to provide training for officers who will be in control of operations at or near damaged areas. Courses in the civil defence aspects of fire-fighting are provided for senior fire service officers at the Fire Service College, near Dorking, in Surrey.

The Government is reviewing civil defence plans in the light of recent developments in thermo-nuclear weapons. Techniques taught to members of the civil defence services are in no way outmoded by new weapons, but there will be changes in the emphasis of training. All Civil Defence Corps authorities have been asked to appoint controllers-designate, and some local authorities have formed themselves into larger groups for operational purposes. The Fire Service would become a national organization in time of war. Chief regional fire officers-designate have been appointed to assist in making plans. There will be even greater emphasis on mobile organization based outside main areas of population, but available to help them.

The problems of operating central reserves as tactical forces to help local authorities have been under study for some years. An experimental mobile column, manned by 150 officers and men of the Army and the Royal Air Force, was formed

in January 1953 and disbanded in December 1953; another force of 150 officers and men of the RAF was formed in January 1954. These columns have taken part in a number of exercises with local authorities.

To provide for the manning of mobile columns in war the Government hopes to bring a scheme into operation in the summer of 1955, using selected RAF reservists. The necessary statutory authority for the scheme is conveyed by the Civil Defence (Armed Forces) Act, 1954, which extends the Civil Defence Act, 1948, so that the responsible Ministers may arrange civil defence training for men undergoing part-time national service, and contains a clause which declares that the duties of members of the armed forces shall include civil defence. Three training depots are being established under the scheme to provide training courses in rescue work and firefighting.

IV. NATIONAL ECONOMY

BACKGROUND

The national economy of the United Kingdom offers to the rest of the world one of its most concentrated markets, particularly for food and the raw materials for industry. There are some 540 people to every square mile—eleven times as many as in the United States—and their standard of living is among the world's highest. But about half of their food is imported. They grow no cotton, rubber or jute, possess little or no economically workable deposits of aluminium, lead, copper, tin or zinc, and import four-fifths of their wood and their wool. The nation that invented steel can now supply only half its needs of iron ore, and the pioneer of the jet engine buys virtually all its crude oil from abroad.

Yet the national economy of Britain, using, as it does, mainly imported supplies, is itself the second largest supplier of the world's needs: of machinery, electrical apparatus and vehicles; of fine quality textiles and pottery; of coal, chemicals and cutlery; of whisky, jet aircraft and fertilizers. About half the world's trade is conducted in its currency; and in London are held the gold and dollar reserves of the sterling Commonwealth and other sterling countries.

This economy is a part also of Western Europe: of the association of countries in the Organization for European Economic Co-operation. As such it is a member of the European Payments Union through which trade is facilitated, not only between Western European countries but also between Western Europe and the whole of the sterling area. It is also the second largest economy to belong to the North Atlantic Treaty Organization, and is currently producing about a half of all the defence goods made by the alliance on the eastern side of the Atlantic.

The general description of the economy which follows gives first an account of its development up to the second world war and the effect of the war upon it; then an analysis of the composition and distribution of the national income in recent years; and finally a summary of the main economic tasks confronting the economy today.

The Economy before 1939

During the nineteenth century Britain secured a leading position as world manufacturer, merchant, carrier, banker, and investor and so was able to support a rapidly increasing population at a rising standard of living. The increase of population and wealth continued, though more slowly, in the twentieth century, in spite of increasing trade competition from other industrialized countries and the shocks and financial losses occasioned by two world wars.

The period from 1870 to 1890 was the high-water mark of British industrial expansion as compared with that of other countries. Between 1890 and 1914 growing industrial competition from Europe and America began to make itself felt, but its effects on Britain's staple export industries, particularly cotton textiles and coal, were offset by the general rise in world trade, by the continued demand for British textiles from India and other eastern countries, and by the continued high level of oversea investment.

The new problems confronting British industry and trade in the twentieth century became apparent after the first world war. Textiles from India and Japan, where labour costs were lower, established themselves firmly in the large eastern markets, to a great extent replacing the higher-priced and often higher quality

British product. The extension of the world demand for coal was slowed down by the increasing use of new fuels from oil, while coal from the new European mines competed severely with British coal.

In the old-established branches of the vehicles and engineering group of industries, e.g., locomotives, ships and textile machinery, world demand fell away after a brief post-war boom, and Britain failed at first to gain a compensating share of the expanding world trade in the new types of engineering products, e.g., cars and electrical goods. Most countries were tending towards self-sufficiency, and some sought deliberately to protect nascent and even established industries by sheltering them behind tariffs and (later) quotas and exchange restrictions.

Income from oversea investments and a substantial improvement in the terms of trade (the price of exports relative to the price of imports) cushioned the effect of a fall in the volume of exports, and imports remained high. The loss of export markets led, however, to a contraction of Britain's staple industries—coal, cotton, iron and steel, and the older branches of engineering. The result was heavy unemployment, the general rate of which averaged 14 per cent in the years 1921-39, reaching a peak of 22 per cent in 1932, when the slump in world trade was at its worst. In districts relying mainly on one of the staple industries, the rate was much higher.

After 1932 an improvement in the levels of production and employment took place, stimulated by an increase in home investment, by some revival in world trade and, after 1935, by the armament programme.

Effects of the Second World War

The second world war is estimated to have run down British domestic capital by about £3,000 million, through shipping losses, bomb damage, and arrears of industrial maintenance and replacements. It also resulted in a considerable alteration in Britain's financial and trading position, which may be summarized thus:

1. *Loss of oversea assets.* Over £1,000 million worth of oversea investments—including £428 million in North America—were sold to pay for war supplies. The income from these assets had paid for a substantial part of pre-war imports into the United Kingdom.
2. *New oversea debts.* New external debts, totalling £3,000 million, were accumulated.
3. *Terms of trade.* The price of imported raw materials rose sharply after the war, and by 1948 about one-fifth more goods had to be exported than in 1938 to bring in the same quantity of imports.
4. *Reduced exports.* By 1944, exports, curtailed as part of the war effort, had fallen to less than one-third of their 1938 volume.
5. *Smaller reserves.* The real value of the gold and dollar reserves was reduced to about half the pre-war level.
6. *World dollar shortage.* The physical destruction of the war led to an increased dependence on the part of Britain, the rest of the sterling area and many other countries on supplies of all kinds from North America. Dollar earnings by non-dollar countries were inadequate to pay for these supplies.

In the years after the war the United Kingdom made rapid progress in switching its economy from a war-time to a peace-time footing. Industrial production climbed rapidly: from 1946 (when it was at about the pre-war level) it rose at some 8 per cent a year and by 1950 was nearly a third higher than in 1946. Bigger than average gains were shown by the engineering, shipbuilding, electrical goods and vehicles

industries. Supported by rising production, exports made swift progress: from an end-war volume of about half pre-war, they had overtaken pre-war volume by 1947. The swift rise continued until 1950 when the volume was nearly two-thirds greater than in 1947. Imports were restricted, and averaged a little below the pre-war level.

Such a large increase in exports would not have been possible had it not been for the restriction of home demand and the limitation of supplies to the home market. In the post-war years average consumption per head remained at about the pre-war level, there having been a 6 per cent increase in population over the period 1939-52.

THE NATIONAL INCOME 1948-53

Size and Source

In national income per head (which is a very approximate measure of the standard of living) the United Kingdom ranks in the second group from the top, together with Norway, Sweden, Denmark, Switzerland, Australia and New Zealand. (Only the United States and Canada are in the top group.) From 1948 to 1953 the United Kingdom gross national product (which is equivalent to the national income plus depreciation) is estimated to have risen, in real terms, at a rate of about 3 per cent per year; as a result, in 1953 the real national income was about 15 per cent higher than in 1948. The money value of the gross national product in 1953 was over £14½ thousand million.

The contribution of different industries to the total supplies of goods and services produced in the United Kingdom has changed little over these years. Table 8 gives the average for 1948-52.

TABLE 8

PERCENTAGE CONTRIBUTION TO THE TOTAL OF HOME SUPPLIES OF GOODS
AND SERVICES (GROSS DOMESTIC PRODUCT)
(1948-52 averages)

	%
Agriculture, forestry and fishing	6
Mining and quarrying	4
Manufacturing	36
Building and contracting	6
Gas, electricity and water	2
Transport and communications	8
Distributive trades	13
Insurance, banking and finance	3
Public administration and defence	6
Public health and educational services	3
Other services	9
Miscellaneous	4
	—
	100
	—

Distribution

To these supplies from home production, imports added, on average, rather more than one-fifth. The total supplies from home production and imports were divided as follows:

TABLE 9
DISTRIBUTION OF TOTAL SUPPLIES OF GOODS AND SERVICES
(1948-52 averages)

Personal consumption	54
Public authorities' current expenditure	15
Investment, fixed and in stocks	12
Exports of goods and services	19
	100

There has been a significant change in the distribution of personal incomes (see Table 10).

TABLE 10
DISTRIBUTION OF PERSONAL INCOMES BY TYPES OF INCOME

Type of Income	Percentage		£ million	
	1948	1953	1948	1953
<i>Employees</i> (wages and salaries, pay and allowances of Armed Forces, employees' insurance contributions) ..	67	70	6,632	9,442
<i>Self-employed persons</i> (professional persons, farmers, other sole traders and partnerships)	14	12	1,340	1,606
<i>Rent, dividends and interest</i> (received by persons)	12	11	1,164	1,489
<i>Grants from public authorities</i> (National Insurance benefits, etc.)	7	7	704	1,000
	100	100	9,840	13,537

The income of employees has increased more than the income from any other source. Since employees' incomes are on the average lower than other incomes, this increase, together with the redistributive effects of taxation, has resulted in concentrating the bulk of personal income after tax in the ranges of income of £250 to £1,000 a year and, compared with 1938, greatly reducing the share taken by the highest incomes (see Table 11).

TABLE 11
DISTRIBUTION OF PERSONAL INCOMES AFTER PAYMENT OF INCOME TAX
AND SURTAX

<i>Calendar Year 1938</i>			
Ranges of income before tax	Number of incomes (a) (thousands)	Percentage of total number of incomes	Percentage distribution of aggregate income after tax (c)
Under £125	16,700 (b)	63	35
£125-£249	7,083	27	29
£250-£499	1,890	7	15
£500-£999	539	2	8
£1,000-£1,999	183	1	5
Over £2,000	106	—	8
<i>Calendar Year 1953</i>			
Under £250	10,110 (b)	37	15
£250-£499	9,240	34	32
£500-£749	5,215	19	29
£750-£999	1,360	5	10
£1,000-£1,499	600	2	6
£1,500-£1,999	190	1	2
£2,000-£9,999	274	1	5
£10,000 and over	11	—	—

(a) Income of a married couple is counted as one income.

(b) Approximate figure, comprising all married couples and single persons over 14 years of age not included in the higher ranges. It includes those without income but not seeking remunerative work (chiefly single women and students), amounting to about 1.7 million persons in 1953.

(c) More specifically, the percentage distribution by ranges of personal income before tax of the sum total of all personal incomes which can be allocated to ranges of income, after income tax and surtax have been deducted. Certain personal income which cannot be allocated to an income range is omitted from this total.

Table 12 shows how personal incomes were spent.

TABLE 12
PERSONAL OUTLAY
(percentage shares)

	1948-51 averages	1952-53 averages
Taxes on income (including National Insurance contributions)	14	12
Savings	1½	6½
Personal consumption	84*	81½*

* Of this about 15 per cent went in indirect taxes, less subsidies.

There appears to have been a large rise in saving in the last two years, though these figures are particularly uncertain. Personal consumption was divided between different kinds of commodities as follows:

TABLE 13
DIVISIONS OF PERSONAL CONSUMPTION
(1948-53 averages)

Food	30
Drink and tobacco	17
Rent, rates, fuel and light	11
Household goods	7
Clothing	10
Private motoring and travel	6
Other goods and services	19
	100

This division is influenced by the incidence of indirect taxes. Some foods are subsidized, and drink and tobacco are very heavily taxed; expenditure on food is thus a lower percentage of personal consumption, and expenditure on drink and tobacco a higher percentage, than might otherwise be the case.

Government Income and Expenditure

The Government's share in the total supplies available has been given above as 15 per cent. But the percentage of total incomes which the Government takes is higher, since public authorities raise a considerable part of their income, not to spend it on goods and services, but to redistribute as pensions or subsidies. If the total income of the central Government, local authorities and the National Insurance Fund is compared with the total income received by everyone (including companies) for work done, the percentage is about 40.

TABLE 14
COMBINED REVENUE ACCOUNTS OF PUBLIC AUTHORITIES IN 1953

Revenue	%	£ million	Expenditure	%	£ million
Taxes on income and capital	40	2,262	Defence	27	1,553
Taxes on outlay—alcohol, petrol, purchase tax, enter- tainments, betting, etc. ..	34	1,933	Grants to persons—pen- sions, subsidies, national insurance, etc.	24	1,358
National Insurance contri- butions	9	526	Local authorities' current expenditure on goods and services	13	737
Rates	8	436	Interest on national and local debt	13	732
Profits and other income from property	7	412	National Health Service ..	8	436
Grants from overseas ..	2	105	Other expenditure	10	541
			Surplus	6	317
	100	5,674		100	5,674

Table 14 gives a summary of the way in which public authorities—the central Government, local authorities, and the National Insurance Fund—collected and spent their incomes in 1953.

A DEVELOPING ECONOMY

The expansion of the national product after the second world war was accompanied by rising productivity and a great increase in the volume of exports. In spite of this increase there were recurrent payments crises in the immediate post-war years, but there has been no such crisis since 1951. United Kingdom exports dropped during 1952, largely as a result of import restrictions imposed by some Commonwealth countries to correct their own balance of payments as part of a concerted plan to strengthen sterling. United Kingdom exports recovered during 1953 (helped by progressive relaxations in the sterling area's restrictions) so that, while the total was much the same in both years, by the beginning of 1954 the level was nearly back to that of April 1951. The gold and dollar reserves, which fell very sharply from the middle of 1951 to early 1952, have since been recovering. They continued to rise throughout seven months of recession in the United States to reach, by the middle of 1954, a level more than halfway back to their June 1951 peak of £1,381 million.

In 1953 the United Kingdom ran a current balance of payments surplus of £211 million, including defence aid, compared with £242 million in 1952 (see p. 273).

A surplus is needed to repay oversea debt, to build up the gold and dollar reserves, and to finance investment abroad. The demand for imports will go on rising as production and incomes expand, and if an adequate surplus is to be maintained the United Kingdom must increase its export earnings still further. The United Kingdom Government has taken a leading part in organizing a move towards a world-wide system of freer trade and payments, and in promoting the further development of production in the sterling area—an essential element in the expansion of world trade. At the Conference of Commonwealth Finance Ministers in January 1954 the Government undertook to continue making special efforts to help provide capital for such development in the Commonwealth as would contribute towards strengthening the balance of payments of the sterling area.

In the United Kingdom itself the capacity for producing steel, chemicals and capital goods has greatly increased, and among its currently most successful exporters are industries which before the war played little or no part in United Kingdom trade. Aircraft, radar equipment, agricultural tractors, office machinery and petroleum products are examples of this development. Among the older industries the motor trade has given an outstanding illustration of the possibilities of export expansion, and pre-eminence has been maintained in such industries as wool goods, pottery and bicycles.

Industrial production as a whole was higher in 1953 than ever before, and about 6 per cent higher than in 1952. Steel production was again a record, the target of 17½ million tons being exceeded. With the abandonment of restrictions on home sales, more than 150,000 more cars were made in Britain than in 1952. The building target of 300,000 houses was exceeded. Output in the chemicals and textiles industries, which shared in the world recession of 1952, recovered in 1953. Net output in agriculture in 1952-53 was 52 per cent above the pre-war level, and for 1953-54 is estimated at 56 per cent. In June 1954 unemployment was at the very low figure of 1·2 per cent of the total in civil employment in the United Kingdom.

Defence production has now levelled off, but remains a very heavy burden on the economy. About one-quarter of the rise in production from 1952 to 1953 was

devoted to consumer goods. There was a slight increase in exports and in investment in stocks; the housing programme was responsible for most of the rise in fixed investment. There was a further stimulus to industrial investment in the 1954 Budget. In 1953 the initial depreciation allowances had been restored: in 1954 a further step was taken with the introduction of investment allowances. These constitute a tax-free allowance of 20 per cent of the value of any new plant and machinery and 10 per cent of the value of industrial or agricultural buildings, in addition to the ordinary allowances for depreciation.

V. INDUSTRY

ORGANIZATION AND PRODUCTION

The United Kingdom is one of the most highly industrialized countries in the world. Ten people work in mining, manufacturing and building for every one in agriculture.

Location

In the first half of the nineteenth century the principal factor in the location of British manufacturing industry was coal, which then became the main source of industrial heat and power. It was, however, by no means the only factor; raw materials, such as iron ore in the West Midlands, West Cumberland, the Cleveland Hills in Yorkshire, and elsewhere, and salt in Cheshire, had an important influence, as did the availability of suitable labour, transport and water.

The rapid construction of the railway system between 1840 and 1880 greatly facilitated the establishment and expansion of manufacture in many parts of the country. During the present century the development of electric power and of motor transport has further assisted the dispersal of industry. The dispersal has come about both through outward growth of the older industrial areas and through the establishment of factories in other towns, especially towns in the Midlands and South of England. During the 1920s and 1930s the 'drift to the south' became very marked. At the same time there was serious depression in many of the older industrial areas which depended on the traditional heavy industries. The Government of the day therefore started to encourage new industries to set up in these older areas and since 1945 special attention has been given to the needs of the Development Areas (see p. 117). At the same time, prosperity has returned to the traditional industries.

Industry is concentrated chiefly in eight areas:

London. In the nineteenth century London was not a major industrial centre, though there was shipbuilding on Thames-side and the variety of consumer-goods industries natural to a vast city. During the twentieth century, however, a growth of industry, particularly in the western suburbs, has both accompanied and contributed to the phenomenal growth of Greater London. In addition to having building, food and drink industries, London is the main centre in Britain of the clothing industry, of printing, of the manufacture of furniture, of materials for the arts, of precision instruments and of many other specialized goods. Small firms predominate in all these industries, so that the average size of manufacturing firms in London is well below the national average. London is also an important centre for light engineering and has some heavy engineering. Indeed, London is so large and its industries so diverse that it is a centre, if not the principal centre, for many of the broad groups of manufacturing industries, with the notable exception of textiles.

Midlands. The main Midland industrial area consists of the great conurbation centred on Birmingham and Wolverhampton which includes portions of Staffordshire, Worcestershire and Warwickshire, where there is a wide variety of industry, including notably the manufacture of electrical and engineering goods and vehicles but also jewellery and precision instruments, chemicals, rubber products and domestic metalware. The smaller adjacent conurbation of North Staffordshire centred on Stoke-on-Trent may be considered as a separate industrial area and is

devoted chiefly to the manufacture of pottery and china and to the mining of coal. Derby, Nottingham, Leicester and Coventry are the principal industrial towns in the rest of the Midland area. There are several small coal deposits scattered throughout the area, while a large coalfield runs north and east of Derby and Nottingham.

Yorkshire. The West Riding of Yorkshire still contains much the bigger section of the British woollen and worsted industry, though Leeds is now more concerned with clothing and a variety of steel and engineering products. The modern woollen and worsted industry lies farther west, at Bradford, Halifax and Huddersfield. The city of Sheffield, in the extreme south of Yorkshire, is famous for its high-quality steel manufacture, its cutlery, plate and tool industry and its heavy engineering. There are extensive coalfields in the West Riding of Yorkshire.

Lancashire. Manchester is the commercial centre of the cotton textile industry. Most cotton yarn is spun in towns within a ten-mile radius of Manchester, but weaving is mostly carried on somewhat farther to the north, in the Preston, Burnley, Nelson, Blackburn and Colne areas. Manchester itself, besides having the variety of industry typical of a large city, is one of Britain's chief centres of electrical and heavy engineering, while to the west of the city expanding chemical industries have been developed. There are also coalfields in the Manchester area. The whole region flanking the River Mersey is industrial as well as commercial; it is a Development Area (see p. 117). Liverpool, besides being a port and produce market, is, after London, the greatest centre of food preparation, while ship repairing is carried on there and both shipbuilding and repairing on the other side of the river at Birkenhead.

South Wales. Coalmining, including the production of such special coals as steam coal and anthracite, has been and remains the chief industry of South Wales. The other basic industry is steel, including tinplate, in which extensive modernization is in progress. The largest steel plant in Europe was opened at Margam in July 1951. It has a capacity of 1½ million ingot tons a year, most of which is converted into sheet or sent to the great continuous strip mill at Trostre for conversion into tinplate. New industries of many different types have been established in South Wales since the war, providing nearly 100,000 new jobs, as well as diversifying the industrial structure. There are four industrial estates (see p. 117), including the pre-war estate at Treforest, and on these estates there are now some 350 industrial undertakings including Government factories.

Tyneside. In Northumberland and Durham, near the River Tyne, coalmining is the principal industry. This region also has steel and engineering industries: it is one of Britain's two greatest shipbuilding areas, the other being in Scotland. Most of the shipyards are on the lower reaches of the rivers Tyne, Tees and Wear. Additional employment and some degree of diversification have been introduced during the post-war period by the establishment of new light industries in the Development Area.

Scotland. The largest shipbuilding centre in Britain is on Clydeside. It has a marine engineering industry and important neighbouring coalfields in the Lothians, Fife and Lanark, although activity in this last field is now declining as the seams are worked out. There is also a flourishing steel industry. The commercial importance of Glasgow and the size and varied appointments of the great ships produced on Clydeside have assured for this area a variety of manufactures. The whole of the central lowlands of Scotland from the Clyde to the Forth is industrialized and further industrial development has taken place since the war, particularly in the Development Area, which includes Glasgow and the Lanarkshire coalfield.

Northern Ireland. Another important shipbuilding area is Belfast, in Northern Ireland, even though it has no local supplies of coal and iron. It has, however, an engineering industry, primarily marine engineering, and there is a growing aircraft assembly industry. The traditional industries of Belfast are linen, rope and tobacco, but many new industries have been introduced, particularly since the end of the second world war.

Other Localized Industries. There are a number of other localized industries both within and outside the main industrial areas, e.g., boots and shoes at Northampton and Leicester; jute at Dundee; hosiery at Leicester and Nottingham; chemicals on Tees-side and Merseyside; cement on the Thames, Medway and Humber; glass at St. Helens, Lancashire, and at Smethwick and Stourbridge, near Birmingham; carpets at Kidderminster, Halifax and Glasgow; tobacco in Bristol and Nottingham; woollens in many of the Border towns of south Scotland and in Gloucestershire; linen in the towns of Northern Ireland; sugar confectionery in Yorkshire, Bristol and Birmingham; shipbuilding and repairing at the main ports and up many of the estuaries. There is also a wide range of industry scattered throughout the country, mainly concerned with consumer goods and building and civil engineering.

Distribution of Industry Policy

Areas in Great Britain where there is likely to be a special danger of unemployment may be scheduled by the Board of Trade as 'Development Areas' under the Distribution of Industry Act, 1945. The purpose of this Act, and of the Distribution of Industry Act, 1950, is to promote the growth of new industry and the expansion of existing industry in the Development Areas. The main advantages which these Acts give to Development Areas are that the Board of Trade may build factories for letting to suitable industry and the Treasury may help by making loans or grants to undertakings which are unable to secure finance through normal channels. The Board of Trade factories are built and managed by Industrial Estate Companies. The directors of these companies are unpaid and are appointed by the Board of Trade, and their capital is provided from Government sources. The companies include North-Western Industrial Estates Ltd., North-Eastern Trading Estates Ltd., Scottish Industrial Estates Ltd., Wales and Monmouthshire Industrial Estates Ltd., and the West Cumberland Industrial Development Company Ltd.

There are Development Areas in the following parts of England and Wales: the mining and coastal areas of Northumberland and Durham; West Cumberland; South Wales and Monmouthshire; Wrexham; South Lancashire; Merseyside; and North-East Lancashire, which became a Development Area in March 1953. In Scotland the industrial area in and around the Clyde Valley, the Dundee area, and part of the Highlands have been scheduled as the Scottish Development Area.

The Government cannot direct a firm to go to any particular area or site. But, in addition to the special powers in scheduled Development Areas, the Board of Trade has statutory powers under the Town and Country Planning Acts, 1947, to ensure that new industrial development throughout Great Britain is carried out consistently with the proper distribution of industry. A certificate to this effect is necessary before planning consent may be given by a local planning authority (see p. 329) for a new industrial building or extension with an area of over 5,000 square feet.

Of the 7,925 new factories and extensions to old ones, representing 168 million square feet of factory space, built between 1st January 1945 and 31st March 1954, 38 per cent by factory space and 37 per cent by value were built in the Development Areas.

The Industries Development Act (Northern Ireland), 1945, gives the Ministry of Commerce of Northern Ireland similar powers in the whole of Northern Ireland.

Government assistance is not limited to Development Areas: it is given to other areas of high unemployment not listed as Development Areas. The Buckie-Peterhead area in north-east Scotland, which is heavily dependent on the fishing industry and has a hard core of unemployment, is not a Development Area but arrangements have been made for it to receive help through the Development Commission (see p. 343). The Commission has agreed to consider sympathetically requests for help in building small factories for industrialists who are prepared to go there.

Organization

The British economy is a mixed economy, in which both private and public enterprise play a substantial part. Throughout the first half of the twentieth century, the public sector tended to grow relatively to the private sector. This tendency is connected largely with the increasing concern of Government with such matters as health, education and housing. But up to 1950, and particularly in the decade 1940-50, there was also an increase in the State's direct participation in productive economic activities, although since 1951 this increase has been checked and in two instances—steel and road transport—steps have been taken to return ownership to private enterprise. State participation is effected mainly through special statutory bodies set up to deal with a particular activity. Such bodies, though not part of a Government Department, are under a considerable but varying degree of public control (see p. 124). The most important of these statutory bodies have been the public corporations which operate major industries and services in the public interest.

The public corporation in its twentieth-century form is, generally speaking, a public body having a clearly defined and specific task. Its board of directors and its staff are chosen for their experience and competence in a particular field; they are not civil servants, and although they are accountable to Parliament for their actions in a variety of ways, they are free from full and continuous ministerial control. Certain of the corporations are self-supporting. Others receive Exchequer grants to help them in carrying out the duties with which they have been charged.

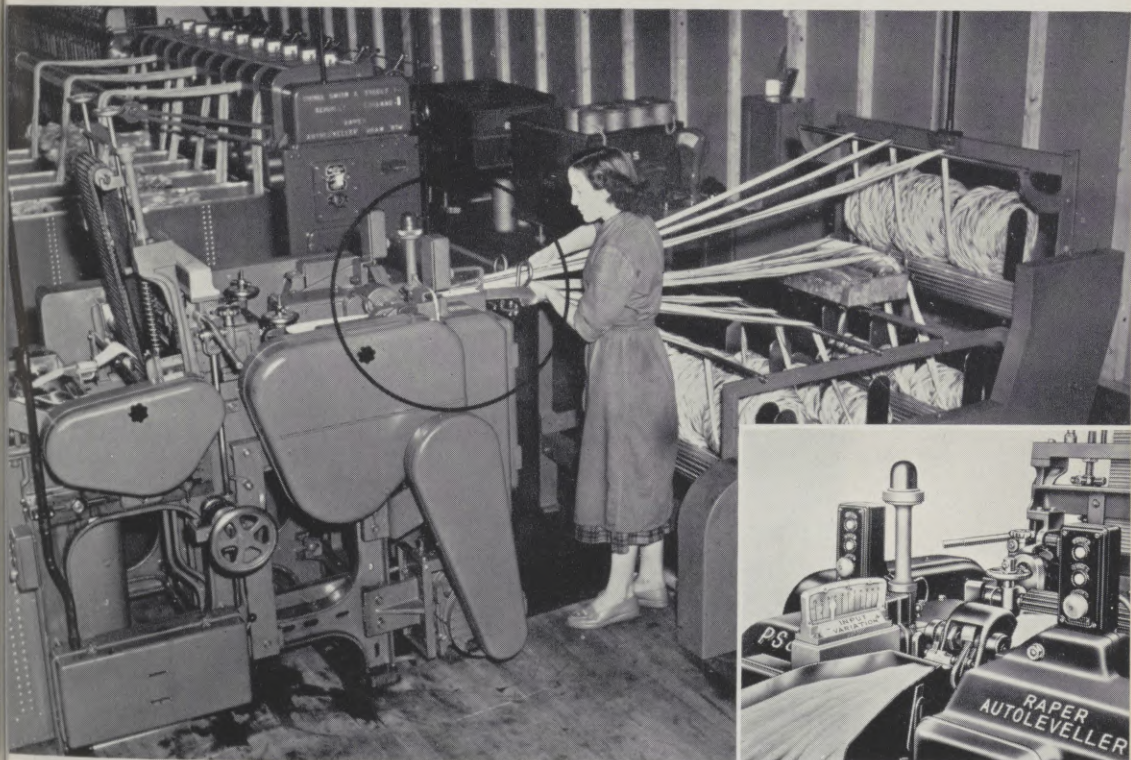
Before the second world war a number of public corporations were established, designed to reorganize and to operate for the public benefit some service that required co-ordination or public assistance and control. Their constitutions had no standard pattern and even their governing bodies differed in the method of appointment and in composition.

Immediately after the second world war the Nationalization Acts set up public corporations to run certain major industries and services including coalmining, inland transport, gas supply, electricity generation and supply and civil air transport. These post-war corporations are less varied in the composition of their governing bodies, which are appointed by the responsible Minister, who has full powers of dismissal.

An analysis made privately in 1950 by a government statistician found that the number of persons employed in the public sector of the economy as a whole increased by 50 per cent between 1945 and 1950, so that by the middle of 1950, 22½ per cent of the total number of persons in civil employment were in the public sector and 77½ per cent in the private sector. In manufacturing and building, private enterprise still accounts for the major part of activity, employing, in 1950, 96 per cent of the persons engaged in these industries. Also in terms of employment, only about 30 per cent of the public utilities—gas, electricity, water and transport—was the concern of private enterprise. In mid-1954 the position was still approximately the same.



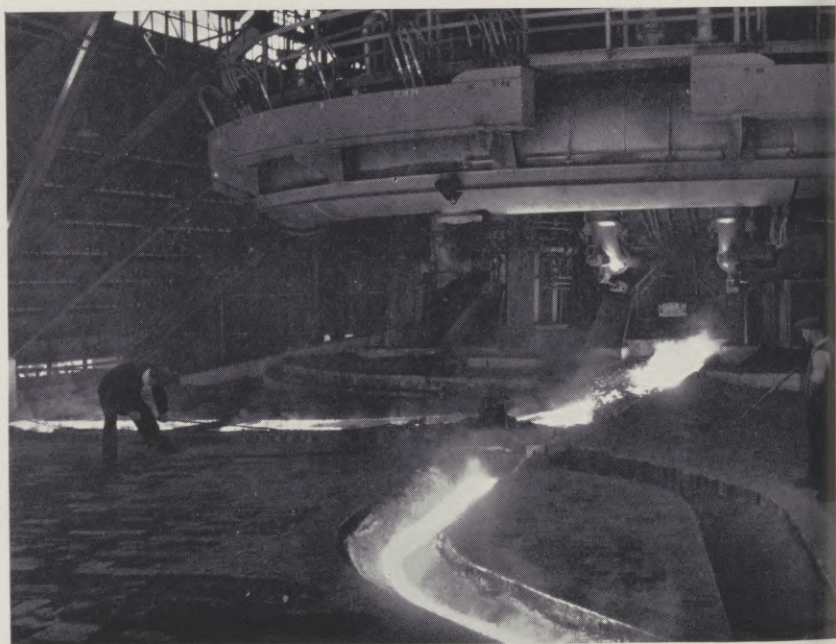
A new aid to the farmer, the Mobile Grass Dryer.



The Raper Autoleveller (in circle and inset), an important British invention for the wool textile industry which lowers labour costs and ensures uniform thickness of yarn (see p. 174).



A section of the Kent Oil Refinery of the British Petroleum Company (formerly the Anglo-Iranian Oil Company).



Tapping the new blast furnace at the Appleby Frodingham steelworks at Scunthorpe, Lincolnshire (see p. 168).

Mining and Quarrying

Much the most important of the British extractive industries is coalmining.

The coalmining industry of Great Britain is operated as a single co-ordinated enterprise under the direction of the National Coal Board (see p. 152), a public corporation appointed by the Minister of Fuel and Power. The mining of iron ore is in the hands of private companies, many of which, though retaining their individual names and managements, were brought under public ownership by the Iron and Steel Act of 1949. Under the Iron and Steel Act of 1953 (see p. 169) the companies are in process of being returned to private ownership. Many of these companies, in addition to extracting ore, are engaged in at least some of the manufacturing processes of iron and steel production.

Other mining and quarrying (e.g., sand, gravel, chalk, limestone, salt, tin, slate, oil shale and china clay) is undertaken by private enterprises, usually owned and operated by limited liability companies.

Manufacturing

Most manufacturing is still in the hands of private enterprises. Some exceptions are locomotives and rolling-stock for use on British Railways, mostly built in workshops owned and operated by the British Transport Commission (see p. 195), a public corporation appointed by the Minister of Transport and Civil Aviation; a considerable quantity of arms and military equipment made in Royal Ordnance factories and other factories operated by the Ministry of Supply, and some fighting ships built in naval dockyards operated by the Admiralty. Some printing and bookbinding is undertaken by staffs of the Stationery Office, while the repair, and to a limited extent the construction, of Post Office equipment is carried on in factories run by the Post Office. The companies primarily concerned with manufactures of iron and steel which were owned by the Iron and Steel Corporation, and subject to its policy direction, are being returned to private ownership under the Iron and Steel Act of 1953.

A survey of the size of all manufacturing establishments employing more than 10 persons was made by the Ministry of Labour and National Service in May 1952; the results of the survey are shown in Table 15.

Over a quarter of all employees in manufacturing industries are in establishments employing from 100 to 500 persons. A high proportion of the biggest establishments are in the heavy industries, while the average size of establishments in industries making consumer goods is smaller than in manufacturing industries as a whole. Comparisons with results obtained in earlier surveys on similar lines suggest that there is a slow but significant trend towards an increase in the average size of manufacturing establishments: in May 1952 establishments with 1,000 or more employees were found to employ 2,224,000 persons, more than twice as many as in 1935.

The size of establishments is not in itself an indication of the size of manufacturing firms, as a single firm may own several establishments. There are no general surveys of the size of manufacturing firms comparable to the survey of establishments. It is known, however, that in a few industries a small number of big companies are responsible for most of the total production. Shares in these companies are usually distributed among a great number of holders and it is unusual for a few large holders to have a controlling interest.

The way in which the work of production is divided within and between different firms varies from industry to industry. In the cotton industry, for example, it is usual for different firms to undertake the various main processes of production (spinning, weaving, finishing), while in the woollen section of the wool textile industry all

TABLE 15
 SIZE OF MANUFACTURING ESTABLISHMENTS BY INDUSTRIES (MAY 1952)

Industry Group	11-24 Employees		25-99 Employees		100-499 Employees		500-999 Employees		1,000-1,999 Employees		2,000 or more Employees		Total	
	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)
Treatment of non-metalliferous mining products other than coal	596	11	1,306	64	610	128	57	38	21	31	9	24	2,599	296
Chemicals and allied trades	593	10	957	49	579	123	100	69	33	44	25	94	2,287	389
Metal manufacture	349	6	750	39	581	133	144	100	66	91	49	159	1,939	528
Engineering, shipbuilding and electrical goods	2,303	40	3,579	179	1,942	421	391	271	228	318	120	463	8,563	1,692
Vehicles	2,330	39	2,271	104	672	140	118	83	81	117	87	387	5,559	870
Precision instruments and other metal goods	1,917	34	2,732	133	1,065	217	135	92	37	51	7	19	5,893	546
Textiles	1,167	20	2,780	151	2,136	450	156	102	38	52	13	43	6,290	818
Leather, leather goods and fur	363	6	475	24	135	22	4	2	—	—	—	—	977	54
Clothing	1,947	33	3,034	149	1,074	211	86	60	16	22	3	10	6,160	485
Food, drink and tobacco	2,444	41	2,747	133	1,128	230	115	80	51	67	19	72	6,504	623
Paper and printing	1,458	25	1,887	92	818	168	99	69	32	43	13	38	4,307	435
Manufactures of wood and cork and miscellaneous manufacturing industries	1,974	34	2,685	131	803	155	66	45	16	21	16	58	5,560	444
<i>Grand Total</i>	17,441	299	25,203	1,248	11,543	2,398	1,471	1,011	619	857	361	1,367	56,638	7,180

(a) Number of establishments. (b) Number of employees (in thousands).

Source: Ministry of Labour and National Service.

these processes are commonly undertaken within the same firm. Some of the leading establishments in the vehicles group of industries are primarily engaged on the assembly of parts, many of which have been built for them under contract by specialist firms.

Building and Civil Engineering

In building and civil engineering most of the work is undertaken by private firms. Since the end of the second world war, most new houses have been built by firms under contract to local authorities, but an increasing number are now being built by private enterprise, mainly for owner-occupiers but some for sale. Some 10 per cent of local authorities employ labour direct for the construction of new houses, while over 80 per cent use their own labour for repair and maintenance. (For the numbers of houses built since 1945 see p. 322.)

Building firms may be divided into those undertaking general building and civil engineering work and those undertaking highly specialized work, many of whom operate outside as well as inside the building industry. Building is an industry of small firms; nearly a third of building operatives work in firms employing from 20 to 99 persons, while about 16 per cent work in firms employing fewer than six persons or are self-employed.

Industrial Association

From the middle of the nineteenth century private industrial undertakings have increasingly entered into voluntary association for a number of different purposes. Some of the more important of these purposes may be classified as follows:

1. The provision of common services, the exchange of information, liaison with Government, and representation of their members' point of view.
2. The regulation of trading practices. Where this involves restrictions on competition, the Monopolies Commission (see pp. 124-5) can be asked by the Board of Trade to investigate the effect of such restrictions on the public interest.
3. Negotiation with trade unions about wages and conditions of work.

Associations for the first and third of these purposes cover with varying completeness almost the whole of British industry but there are wide sectors of industry where there is no collective agreement to regulate trading practice. Associations which deal with labour matters generally consist of firms engaged in the same type of manufacturing process. Organizations mainly concerned with representations to Government, provision of common services or the regulation of prices are built up round a product or an allied group of products. In an industrial sector concerned wholly with an allied group of products, a single association may undertake all required functions.

There are about 270 national federations and probably about 1,600 other employers' organizations (mostly regional or local, and members or branches of the national federations) all concerned with negotiation of wages and conditions of work. Most of the national federations are in turn affiliated to the *British Employers' Confederation*, the national body representing employers on labour questions affecting industry generally (see p. 236).

No comparable statistics exist for associations concerned with the provision of common services, etc., or the regulation of trade and prices. There are, however, about 300 national organizations which are affiliated to the *Federation of British Industries* (FBI), the national body recognized as the spokesman for British

industry on economic, commercial and production (as opposed to labour) questions. The FBI has offices in the main industrial centres in the United Kingdom and is very widely represented abroad.

A number of the organizations affiliated to the FBI also deal with labour matters and are affiliated to the British Employers' Confederation. The two organizations work closely together on matters of common interest.

Other important national associations of employers are the *National Union of Manufacturers* (NUM) and the *Association of British Chambers of Commerce*. The members of NUM are over 5,000 manufacturing firms, mainly small or medium sized, and some 70 trade associations are affiliated to it. Like the FBI it has regional branches. The Association of British Chambers of Commerce is the central organization to which local Chambers of Commerce are affiliated. There are about 100 of these local Chambers. They are open to all kinds of producers and traders and exist for promoting the interests of local industry and commerce. These last three national organizations, all being concerned with industrial and trading matters, often collaborate in the consideration of particular questions.

Relations with Government

As a general rule each industry has a particular Government Department as its 'Production Department', which is its point of contact with the Government. The main Production Departments and the industries and services in which they are interested are:

Board of Trade	All industries and materials not the responsibility of another Department, among the most important being textiles (including clothing), paper and film industries, and a large part of the chemical industry.
Ministry of Supply ..	Iron and steel and all alloys, vehicles, engineering (including aeronautical, electrical and radio) and explosives.
Admiralty	Shipbuilding and ship repairing.
Ministry of Agriculture and Fisheries	Farming, horticulture, agricultural machinery and fisheries.
Ministry of Fuel and Power	Coal, gas, electricity and oil.
Ministry of Transport and Civil Aviation ..	Transport services (including civil aviation), road-making, and certain sections of the quarrying industry.
Ministry of Works ..	Building, civil engineering and building materials.
Ministry of Housing and Local Government ..	House-building.
Ministry of Health ..	Medical and surgical goods.

The Treasury and the Ministry of Labour and National Service, though prominent in economic matters, have no production authority duties.

During and after the second world war many operations of industry and commerce were subject to Government control. Most of these controls have been relaxed, but some remain. Thus the consent of the Treasury is required for the issue of large amounts of fresh capital or for the purchase of foreign currency; and that of the Board of Trade for the import or export of certain goods. The Board of

Trade has certain powers to influence the location of industry (see p. 117), and the Ministry of Housing and Local Government, acting through local planning authorities, also has powers to control the use of land (see pp. 326-32).

In the post-war period an effective control was that over the allocation, distribution and use of raw materials. The degree of control was governed to a large extent by the supply situation—an important factor in which is the availability of foreign exchange—and varied from time to time. Thus, controls removed in the immediate post-war years had to be reimposed in 1951 when the rearmament programmes of the free world, superimposed on rising civilian demands, caused shortages of many key raw materials, including zinc, lead, copper, nickel and steel. Since then, an improving supply position has made it possible to relax all these controls.

All Departments which are production authorities, and some others, have a responsibility for promoting increased productivity and efficiency in industry. Production authorities, for example, encourage the establishment within each industry and within individual undertakings of joint councils and committees in which representatives of employers and of workers discuss together improvements in methods and technique. They also work with and through various statutory and voluntary bodies concerned with the same ends and make grants to them in appropriate cases. Such bodies include employers' associations (see p. 236) and trade unions (see p. 236), the British Productivity Council (see p. 127), a voluntary body representing employers and trade unions; the various management and professional associations including the British Institute of Management, the Council of Industrial Design (see p. 359), and the *Development Councils* which may be set up under the provisions of the Industrial Organization and Development Act, 1947, by Departments responsible for the industry concerned. The purpose of the Councils is to provide firms in an industry with those services (research, design, statistics, personnel training, etc.) which individual firms cannot afford out of their resources. There are at present development councils for the cotton industry (*The Cotton Board*), and for the furniture industry. The Department of Scientific and Industrial Research (see p. 344) encourages and sometimes finances industrial research and also itself conducts research useful to industry. The national standards organization is the British Standards Institution, a voluntary non-profit-making body, incorporated by Royal Charter. It is governed by a General Council consisting of representatives of the main organizations of employers and workpeople, the professional institutions and the larger Government Departments, and it receives a Government grant.

Technical advice is available for those firms which ask for it through such services as the National Agricultural Advisory Service of the Ministry of Agriculture and Fisheries, and the Personnel Management Advisory Service of the Ministry of Labour and National Service.

To ensure that industry is fully aware of Government policy and that policy is framed with a full knowledge of industry's needs and difficulties, a number of consultative bodies have been set up representing Government, employers' associations and trade unions. Among the more important of these are the *National Production Advisory Council on Industry* (NPACI) and the *National Joint Advisory Council* (NJAC). The NJAC consists of representatives of private employers, the boards of nationalized industries and trade unionists under the chairmanship of the Minister of Labour and National Service, and is concerned with matters affecting the relations between employers and workers (see p. 240). The NPACI, which covers the wider problems of industrial production, is under the chairmanship of the Chancellor of the Exchequer and includes representatives of certain Government Departments as well as of employers and workers.

These consultative bodies approach the study of problems from a broad national point of view. There are in addition consultative bodies concerned with the special problems of Scotland, Wales and Northern Ireland and of the English regions. The most important of these are the *Regional Boards for Industry* whose main functions are to keep the Government informed on industrial conditions in the nine English regions and in Wales and Scotland, and to provide a link between central Government and local industry.

Government and Public Corporations

The extent to which the responsible Minister has power over the working of the Boards set up to run those industries which have been nationalized varies from industry to industry, but two features are common to almost all of them. First the Minister appoints the chairman and members of each Board, and secondly he has power to give general directions as to how the industry should be run, but does not interfere in day-to-day management. It is usually also laid down that the Board shall give to the Minister any information, statistics, financial accounts, and so forth, which he may require.

The most usual financial arrangement is that the Board is required to conduct its business so that receipts at least balance outgoings over a period of years. The exception to this rule is Civil Aviation; the Minister of Transport and Civil Aviation (subject to Treasury approval) has power to make grants to the two Airways Corporations up to specified limits in the first few years of their existence. The responsible Minister is usually empowered (subject to Treasury approval) to say what shall be done with any surplus should the Boards make a profit. The Boards can also borrow money up to certain limits, but require the consent of the responsible Minister and the Treasury each time.

The Minister responsible for each nationalized industry must take steps to see that the interests of the industry's customers are protected. This is usually done by the establishment of representative consumers' councils to consider complaints and suggestions made to them and advise the Board or the Minister on the changes they think desirable. It is recognized that these arrangements are still to a great extent experimental.

In most other respects the nationalized industries have the same relations with the Department responsible for them as do the private industries; they look to them for sponsorship and advice on productivity, and are subject to the same controls.

The arrangements necessary to ensure that parliamentary discussion of the nationalized industries is informed and effective have been examined by a Select Committee of the House of Commons which was appointed in November 1952 and reported in July 1953.

On 13th July 1954 the Lord Privy Seal announced in the House of Commons that the Government was taking action on the basis of this report (though some of the specific recommendations were modified). During the next session it was intended to introduce an *ad hoc* motion for the appointment of a Select Committee on the Nationalized Industries. The task of this committee, which would consist of not more than 14 members of the House of Commons, would be to examine the reports and accounts of the nationalized industries, to obtain further information about their current policies and practices, and to report from time to time, publishing its evidence, unless this was contrary to the public interest.

Monopolies and Restrictive Practices

Under the Monopolies and Restrictive Practices (Inquiry and Control) Act, 1948, an independent Commission called the Monopolies and Restrictive Practices

Commission was established to investigate and report on matters referred to it by the Board of Trade, which also appoints the members of the Commission. Broadly speaking, a reference may be made where it appears that at least one-third of the supply, processing or exports of any commodity is in the hands of a single firm or is subject to arrangements which in any way restrict competition. Where the Commission finds that these conditions do prevail and are contrary to the public interest, Production Departments are empowered by the Act to take suitable remedial action. The Board of Trade is required to publish an annual report on the working of the Act, including a list of the suggestions and requests made for reference of matters to the Commission.

Up to July 1954 the Commission had been given references relating to the following matters: dental goods, cast iron rainwater goods, electric lamps, insulated electric wires and cables, matches and match-making machinery, insulin, semi-manufactures of copper and copper-based alloys, printing of woven fabrics, imported hardwood and softwood timber and plywood, certain electrical and allied machinery and plant, pneumatic tyres, buildings in the Greater London area, hard fibre cordage, linoleum, sand and gravel in central Scotland for building or civil engineering purposes, certain industrial and medical gases, standard metal windows and doors, and some types of rubber footwear. Reports had been published on eight of these matters.

In December 1952 the Commission began an investigation into the general effect on the public interest of certain widely prevalent practices; broadly speaking, their inquiry covers arrangements between a number of traders to discriminate in favour of, or against, a defined class of customer.

In October 1953 a Monopolies and Restrictive Practices Commission Act was passed, the purpose of which was to strengthen the Monopolies Commission and enable it to deal at any one time with a greater number of references. This amending Act provides amongst other things that the Commission's work may be divided among groups of not more than five members selected by the chairman.

Production

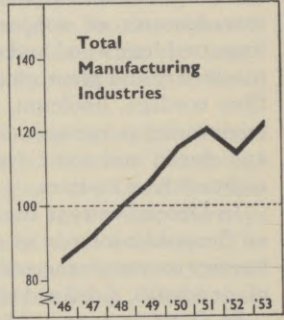
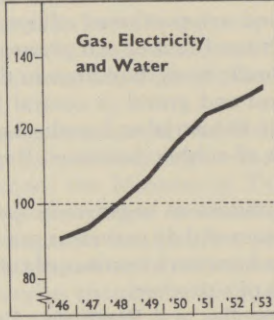
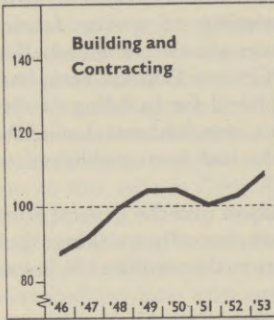
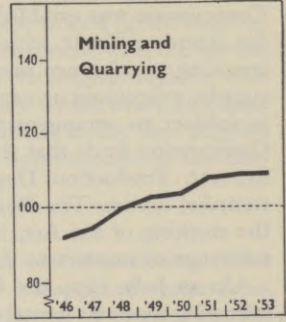
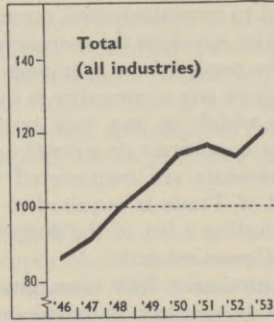
Industrial production (mining and quarrying, manufacture, and building and civil engineering) in 1950 averaged nearly a third above 1946, when it was at about the pre-war level. The rate of increase slackened off in 1951, when it was about 3 per cent compared with annual increases of about 7 per cent in the three previous years. This slackening was due in part to the effect of steel shortage on metal goods production and in part to a fall in demand for textiles and clothing. In 1952 production was 3 per cent less than in 1951. The effects of steel shortage were still being felt, particularly in the first half of the year, but more important was the fall in demand which took place at home and overseas, and affected mainly the consumer-goods industries, particularly textiles and clothing. Production and employment fell sharply after the first quarter of 1952 but began to recover in the last quarter and was higher in the third and fourth quarters of 1953 than in the corresponding quarters of either 1952 or 1951. At the end of 1953, industrial production was 6 per cent above the level of 1951, and there have been further gains in 1954.

Over the post-war period as a whole the greatest increases in production have been in the engineering, shipbuilding and electrical goods group, the vehicles group and the chemicals group, with increases since 1946 of approximately 60 per cent, 60 per cent and 70 per cent respectively.

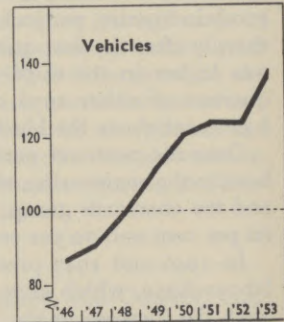
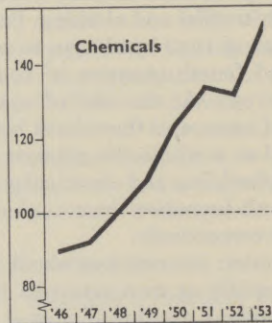
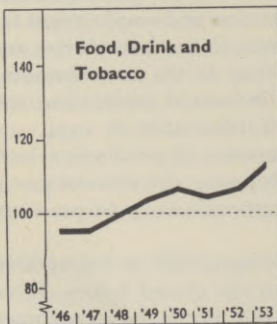
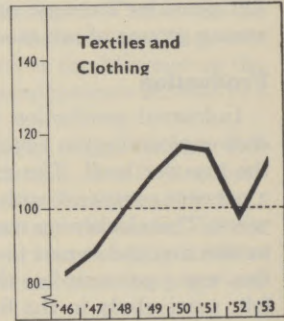
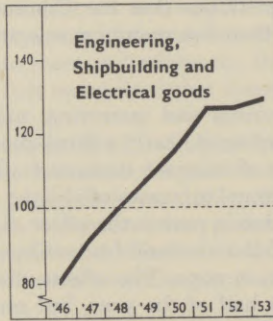
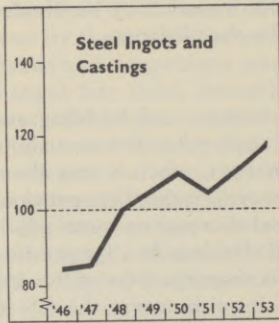
In 1946 and 1947 production increased at about the same rate as the civilian labour force, which grew rapidly as men returned from the armed forces. From 1947 the increase in the numbers employed slowed, while production continued

**INDEX
OF INDUSTRIAL
PRODUCTION**

100 represents 1948
level of production



MANUFACTURING INDUSTRIES



rapidly to expand: this rise in productivity was about 3 per cent a year up to 1951. Since 1952 demand has increasingly become the main determinant of the level of output; in other words, the world sellers' market has given way to a buyers' market.

In 1952, while industrial production fell by 3 per cent, employment fell by less than 1 per cent, and the lower levels of demand and output were reflected in a reduction in hours worked and lower output per man. In 1953, when demand recovered, employment rose by much less than production—1 per cent against 6 per cent—and output per man recovered.

The need to increase productivity has been a constant concern of Government and industry. One important step was the formation in 1948 of the Anglo-American Productivity Council, the main purpose of which was to promote productivity in Britain through the exchange of ideas between various British industries and the corresponding industries in the United States. 'Productivity teams' made up of representatives of management, technical and workshop levels from British industries were sent to the United States for study and, on their return, their findings were made public.

When this Council was wound up after four years' work, its task of helping to promote higher productivity in Britain was continued by the *British Productivity Council*, formally established in London in November 1952. This is an independent body drawing its funds mainly from the organizations represented on it: the British Employers' Confederation, the Federation of British Industries, the Trades Union Congress, the Association of British Chambers of Commerce, the National Union of Manufacturers and the nationalized industries. Its programme of action includes the formation of Local Productivity Committees and the exchange of visits between teams from different industrial firms for the purpose of studying common problems.

Capital Development

In recent years gross fixed capital formation has accounted for about one-seventh of gross national expenditure. Table 16 shows the breakdown by groups of industries since 1948 and Table 17 shows capital formation in manufacturing industries between 1948 and 1952. In 1952 industrial investment (excluding fuel and power) was lower than in 1951. It was affected by the steel shortage, by physical restrictions imposed on investment in order to free resources for export and defence, and by a reduction in demand for investment which no doubt to some extent reflected the effects of the new monetary and fiscal restraints. An important aim of the 1953 Budget proposals was to encourage the re-equipment and modernization of productive industry, the expansion of capacity in lines commanding a ready overseas sale, and the development of new lines and techniques. Easier licensing procedure was also announced for new factories and extensions.

In terms of 1952 prices, investment in 1953 was about £215 million greater than in 1952. Over half the increase was attributable to housing. Other increases were registered by mining, shipping, electricity, gas and water, rail transport and telephone services. Fixed investment by manufacturing industries was about the same in both years in terms of current prices. The policy of encouraging industrial investment—particularly in manufacturing industries—was continued in the 1954 Budget proposals, of which a main feature was a system of investment allowances to give new encouragement to industry to put money into productive investment.

Average capital expenditure per employee¹ in 1950 was £62 for manufacturing industry as a whole. The industrial sectors with the highest rates of fixed capital

¹ Based on Census of Production employment figures which differ slightly from those compiled by the Ministry of Labour and National Service.

expenditure per employee were mineral oil refining (£3,350), other chemical and allied trades (£166), and iron and steel manufacture (£113). Average expenditure per employee varied very little for factories of different sizes within any one industry.

TABLE 16

GROSS FIXED INVESTMENT BY INDUSTRIES AND TYPE OF ASSET 1948-53

£ million at current market prices

	1948	1949	1950	1951	1952	1953
INDUSTRIES						
Agriculture, forestry and fishing	90	87	84	89	83	83
Mining	30	36	34	36	49	64
Manufacturing industry ..	335	383	446	510	537	550
Electricity, gas and water ..	138	173	196	219	239	263
Transport and communications (a)	206	231	239	238	232	289
Distribution and other services ..	97	115	141	150	160	169
New housing	342	332	331	372	489	631
Social and public services ..	79	102	121	143	158	168
Other	33	36	39	55	74	77
TYPE OF ASSET						
Vehicles, ships and aircraft ..	235	264	265	269	266	321
Plant and machinery	494	554	633	736	787	821
Buildings	621	677	733	807	968	1,152
Legal fees, stamp duties, etc. ..	46	49	51	54	45	39
TOTAL	1,396	1,544	1,682	1,866	2,066	2,333

Source: *National Income and Expenditure 1946-53*.

(a) In 1952 and 1953 roads goods transport is included under 'Distribution and other services'.

TABLE 17

GROSS FIXED CAPITAL FORMATION IN MANUFACTURING INDUSTRY 1948-52

£ million

Industries	1948	1949	1950	1951	1952
Government-financed expenditure	7	8	11	31	50
Other:					
Bricks, pottery, glass, cement, etc.	19	18	19	18	20
Mineral oil refining	6	18	32	34	40
Other chemicals and allied trades	33	42	54	67	69
Iron and steel manufacture ..	32	42	49	55	53
Non-ferrous metals manufacture	7	9	8	8	8

TABLE 17 (contd.)

£ million

Industries	1948	1949	1950	1951	1952
Engineering, shipbuilding and electrical goods	52	52	55	64	74
Vehicles	22	22	29	33	39
Metal goods not elsewhere specified	15	16	18	18	19
Precision instruments, jewellery, etc.	5	4	3	4	4
Textiles	37	49	52	53	41
Leather, leather goods and fur ..	2	3	3	2	2
Clothing	10	9	8	7	5
Food and drink	45	48	58	63	61
Tobacco	3	3	2	2	3
Manufactures of wood and cork	6	7	10	10	7
Paper and printing	23	22	24	30	29
Other manufacturing industries	11	11	11	11	13
<i>Total</i>	335	383	446	510	537

Source: *National Income and Expenditure 1946-53.*

AGRICULTURE

Although Britain is an industrialized country relying on imports for half its food supply, agriculture remains one of its largest and most important industries. It provides employment for about a million people and uses some 48 million of the 60 million acres of land.

LAND AND CLIMATE

The land in general is highly fertile and with efficient farming this results in a yield per acre of grain crops among the highest in the world. In 1953, for example, previous record yields for these and other crops in England and Wales were again broken. Yields per acre were (in cwts.): wheat 24; barley 22·6; oats 21·2; rye 19·6; (in tons) potatoes 8·7; sugar beet 13·1. Agriculture in the United Kingdom is less subject to serious dislocation caused by extreme climatic conditions than it is in some other countries; crops and livestock, for example, are seldom subjected to the dangers of drought, or floods, or severe cold. Nevertheless when abnormal climatic conditions do occur (e.g., during the severe winter of 1946-47) they tend to assume great importance because they affect the fulfilment of definite agricultural programmes.

Types of Farming

There are more than 535,000 farms in the United Kingdom: 377,000 in England and Wales; 74,000 in Scotland; and 84,000 in Northern Ireland. About three-fifths of the total are under 50 acres in size.

In *England and Wales* out of a total of 29·7 million acres of agricultural land, 24·5 million acres are under crops and grass.

Types of farming vary widely with difference of soil and climate. In general the eastern half of England is predominantly arable and the western half of England, together with Wales, are predominantly dairying. Pasture types of farming account for 37 per cent of agricultural land, arable types for 22 per cent and intermediate types for 29 per cent; the remainder being unclassifiable or of little agricultural value. In many places land of several types is found intermingled within a small area. Market-gardens are usually found near towns. Fattening of animals for food is widespread but is carried on particularly in the Home counties, Midlands and Eastern counties, and stock-rearing is prevalent in Wales and in the North of England.

In *Scotland* out of a total of over 15 million acres of agricultural land, 4½ million acres are under crops and grass, the rest being rough hill grazings (about 11 million acres) or land only able to support deer and game. The chief crop is oats (887,930 acres in 1953); next come root crops for stock-feeding; potatoes, especially seed potatoes, and barley are also important crops. The wheat area is small. In the south-west dairying is the chief branch of the industry, while cropping and fattening cattle are practised mainly in the east. The rearing of stock (especially sheep) is of importance in the hill areas.

In *Northern Ireland* the total of 2.97 million acres of agricultural land in 1953 included 2.28 million acres under crops and pasture. The land is intensively farmed, the chief crops being potatoes, oats, flax, and ryegrass for seed. An average of about 80 per cent of Northern Ireland's agricultural income is derived from livestock and livestock products. The total quantity of milk sold off farms during 1953 was about 95 million gallons.

Horticulture accounts for one-sixth of the value of the agricultural output of the United Kingdom. The war-time need for self-sufficiency and the shortage of other foods led to a great increase in the acreage under vegetables, but return to a more normal diet and the reopening of oversea sources of supply have brought about a reduction of the area, which is now not much greater than before the war. The acreage under fruit remains at about the pre-war level, but the crops produced on that area have been approximately doubled.

Although the commoner vegetables are grown to some extent all over the country, there is a tendency for certain crops to predominate in specialized areas, e.g., broccoli in Cornwall and Kent, carrots and rhubarb in Yorkshire, asparagus and plums in Worcestershire, cherries in Kent, apples in Kent and Hereford, onions in the Fen district, strawberries in Hampshire and tomatoes under glass in the Lea Valley. Early vegetables are supplied from the Channel Islands.

During the war the area devoted to flowers was drastically reduced by official controls. It has taken the nursery industry some time to recover from the setback but the acreage is now about the same as before the war. Early spring flowers are grown in the Scilly Isles.

Changes since 1870

In the middle of the nineteenth century Britain was largely self-sufficient in agricultural production. Then wool, grain and later meat—all produced cheaply from virgin lands—were increasingly imported, and the farming industry had to undergo a major alteration and concentrate much more on milk, eggs, pigs and horticultural produce. Changes in production and types of farming in successive attempts to meet changes of fortune resulted in a continuous trend throughout the period away from an agricultural industry based mainly on grain to one based more on livestock and livestock products, and, among crops, an increasing emphasis on vegetables.

Moreover the meat, dairy and poultry industries were becoming increasingly dependent on imported feedingstuffs. The arable area in Britain declined continuously from 1872 until 1939, except during the first world war. The outbreak of the second world war was followed by an immediate reversal of farming policy, for shortage of shipping space for imports demanded a greatly increased home production of crops for direct human consumption such as wheat and potatoes, largely at the expense of livestock and livestock products other than milk. The post-war world food shortage and Britain's balance of payments problems made it necessary for Britain to maintain increased grain production, but since 1947 an expansion of output of livestock, livestock products and animal feedingstuffs has been encouraged concurrently with the maintenance of a high level of production of grain and other crops.

Recent trends in agricultural policy have resulted in greater emphasis on stock-rearing for meat and less stress on further increases in milk production.

The use of agricultural land for the various crops and the numbers of livestock on farms in the United Kingdom since 1924 are shown in Tables 18 and 19.

TABLE 18
USE OF AGRICULTURAL LAND IN THE UNITED KINGDOM 1924-53
Million acres

	1924	1934	1939	1944	1951	1952	1953
Wheat	1.6	1.9	1.8	3.2	2.1	2.0	2.2
Barley	1.5	0.9	1.0	2.0	1.9	2.3	2.2
Oats	3.3	2.5	2.4	3.7	2.9	2.9	2.9
Mixed corn ..	} 0.2	0.1	0.1	0.4	0.8	0.8	0.8
Rye (threshed) ..			0.01	0.1	0.1	0.1	0.1	0.1
All cereals	6.6	5.4	5.3	9.4	7.8	8.1	8.2
Potatoes	0.7	0.8	0.7	1.4	1.1	1.0	1.0
Sugar beet	0.02	0.4	0.3	0.4	0.4	0.4	0.4
Fodder crops ..	1.7(a)	1.2(a)	1.4	2.0	1.5	1.5	1.6
Fruit	} 1.4	0.3	0.3	0.3	0.3	0.3	0.3
Vegetables		} 0.8	0.3	0.5	0.4	0.4	0.4
Other crops			0.1	0.3	0.3	0.4	0.3	0.3
Bare fallow ..	0.4	0.4	0.4	0.2	0.4	0.3	0.2
Total tillage ..	10.8	9.3	8.8	14.5	12.2	12.4	12.4
Temporary grass ..	4.7	4.1	4.1	4.8	5.8	5.7	5.7
Total arable land ..	15.5	13.4	12.9	19.3	18.0	18.1	18.1
Permanent grass ..	17.6	18.7	18.8	11.7	13.1	13.1	13.0
<i>Total Crops and</i>							
<i>Grass</i>	33.1	32.1	31.7	31.0	31.1	31.2	31.1
<i>Rough Grazings ..</i>	15.1	16.4	16.5	17.0	17.1	17.1	16.9

Source: *Monthly Digest of Statistics*.

(a) Excluding beans and peas which, in each of the years, amounted roughly to 0.15 million acres, and which are here included in 'other crops'.

TABLE 19
LIVESTOCK IN THE UNITED KINGDOM 1924-53 (JUNE)

Millions

	1924	1934	1939	1944	1951	1952	1953
Dairy cattle	3.4	3.8	3.9	4.4	4.5	4.5	4.5
Other cattle	4.4	5.0	5.0	5.1	6.0	5.8	5.9
Sheep	22.2	24.9	26.9	20.1	20.0	21.7	22.5
Pigs	3.6	3.9	4.4	1.9	3.9	5.0	5.2
Poultry	n.a.	83.9	74.4	55.1	94.3	95.0	92.1

Source: *Monthly Digest of Statistics*.

n.a. = figures not available.

THE GROWTH OF POLICY

The severe agricultural depression which followed the fall in the general price level after 1920 resulted in 1931 in the beginning of a programme of financial assistance to agriculture, including tariffs, subsidies and quotas, which had a stabilizing effect on the prices of grain, cattle and milk, developed the sugar beet industry and encouraged cultivation of sub-marginal land (land which it is not profitable to cultivate).

Commodity commissions were set up for wheat, sugar, livestock and bacon. In addition, to enable the home producer to regulate the marketing of his produce, the Agricultural Marketing Acts of 1931 and 1933 provided for the establishment of commodity marketing boards in Great Britain, and by September 1939 there were eight such boards concerned with the marketing of four products—potatoes, hops, bacon pigs (two boards), and milk (four boards).

The Agricultural Marketing Boards are producers' organizations established under the provisions of the Agricultural Marketing Acts, 1931, 1933 and 1949. They have compulsory powers to regulate the marketing of particular agricultural products by producers.

The schemes under which the various Boards are constituted and operate must be approved by Parliament and confirmed by a poll of the producers concerned. A Board must normally consist of from 8 to 24 members; not fewer than two and not more than one-fifth of the total number must be appointed by the Minister.

During the war and the post-war years agriculture was closely controlled by the State and the functions of marketing boards, commodity commissions and similar bodies were largely suspended. Farmers' prices were fixed by the State for the principal agricultural products, the majority of which were purchased by the State. This was coupled with close State control of food imports, many of which were bought on Government account, the stabilization of food prices by means of subsidies, and a rigid system of food rationing for most of the principal food products. In addition the State exercised a close supervision over the level and efficiency of agricultural production.

In 1947 the Agriculture Act was passed, which provided the main basis of post-war agricultural policy in England and Wales and the controls to implement it. Similar Acts for Scotland and Northern Ireland were passed in 1948 and 1949

respectively. The principles of the 1947 Act were that the Government would provide the industry with a system of guarantees which would ensure 'a stable and efficient agricultural industry capable of producing such part of the nation's food as in the national interest it is desired to produce'. In return for this, the Act gave the Government power to insist on a minimum level of efficiency. Farmers and land-owners are respectively required to maintain a reasonable standard of husbandry and estate management. If they do not do so, the Agricultural Ministers are able to issue directions, and in the last resort to require a change of occupation or ownership (see p. 138). The implementation of these Acts is the responsibility respectively of the Ministry of Agriculture and Fisheries (see p. 39), the Department of Agriculture for Scotland (see p. 53) and the Ministry of Agriculture in Northern Ireland (often known collectively as the Agricultural Departments).

The Acts provide for the holding of an Annual Review of the economic condition and prospects of the agricultural industry. This is conducted by the Agricultural Departments with the farmers' representatives. In the light of the review, price guarantees are determined for livestock and livestock products for the next year and for crops to be harvested in the year following that in which the review is held. The products concerned are: wheat, barley, oats, rye, potatoes, sugar beet, fatstock, milk and eggs; wool was added in 1950. Minimum prices for livestock and their products are also fixed for two to four years ahead. Provision is also made for special reviews to be held at any time if the Ministers consider that there has been a sudden substantial change in costs or in other conditions. There are powers to relate guaranteed prices to the levels of output of particular products. These were used for the first time in 1954 for milk.

Guarantees after Decontrol

As world supplies of food and Britain's own trading position have improved in the last few years, the Government has gradually restored both the import of food and all domestic trading in food to private business. All consumer rationing of food ended in Britain on 3rd July 1954. But the basic policy of the Agriculture Act, 1947, including guarantees to farmers, remained. In the words of the White Paper (*Cmd. 8989*) of November 1953:

'Direct Government purchase of home-produced food can no longer be the sole or main instrument for implementing the Government's guarantees to farmers. But the Government firmly adheres to the principles of the Agriculture Act, 1947, and fully accepts its obligation to make alternative arrangements to secure a stable and efficient agriculture.'

The White Paper stated that no single method could be devised for meeting all problems and that each commodity had to be considered separately. In some cases temporary methods then in force which combined market freedom with guarantees would be maintained. In others the Government would make full use of producers' marketing boards. Additional powers to control such boards and to widen their functions to include the supply of requisites and a wider range of services to producers had been conferred on Ministers by the Agricultural Marketing Act, 1949. Thus, wool continued to be marketed through the Wool Marketing Board, and marketing powers were restored to the Milk Marketing Boards on 1st April 1954, although for as long as there remains an element of consumer subsidy the Government will continue to be responsible for approving prices and distributive margins for milk. An interim scheme for eggs, whereby a National Egg Marketing Organization was set up to advise the Minister of Food on orderly marketing arrangements after decontrol on 26th March 1953, is expected to give way to more

permanent machinery in the form of a marketing board. Steps are being taken to restore the Potato Marketing Board. Since 1st July 1954, when Government purchase of home produced fatstock ended, farmers have been able to sell their fatstock by auction at approved fatstock markets by private treaty and by grade and deadweight.

Consumers' Committees to represent the consumers' interests in regard to the operation of marketing schemes were reconstituted in December 1953. They had been set up in 1931 and disbanded in 1939.

The guarantees fixed at the 1954 Annual Review and described in a further White Paper (*Cmd. 9104*) are being given in four different ways:

- (1) *Fixed guarantee prices*, the general form of guarantee before the return to free markets, continue to apply to milk, wool, potatoes and sugar beet. In the case of milk, however, the guaranteed price is limited to a standard quantity. If total sales, off farms exceed this, the effective level of the guaranteed price per gallon is reduced.
- (2) *Minimum or support prices*, below which the Government pays the difference on sales taking place, apply to eggs and are designed to protect the farmer from low prices resulting from periodic gluts. Potatoes from the 1955 harvest will be dealt with in a similar way.
- (3) *Deficiency payments schemes*, under which the Government establishes a standard price and pays each producer the deficiency (if any) between this price and the average realized market price multiplied by the volume of his sales, apply to wheat, rye, barley and oats, but for barley and oats the price deficiency is converted into a payment per acre. The method also applies to fat cattle, fat sheep, fat lambs and pigs. The guarantee is collective; it safeguards the incomes of producers as a whole and the individual producer may get more or less than the standard price. Otherwise standard prices are similar in principle to minimum prices, except that they have been fixed high enough to give a more extensive type of protection.
- (4) *Guaranteed individual prices*, which guarantee a minimum price for each individual transaction additional to the collective guarantee, are applicable to fatstock (except fat cows).

In explaining that the effect of the changes made at the 1954 Review could not be forecast precisely, since in a freer economy farmers' receipts would depend less on fixed prices and more on sales in a competitive market supplemented when necessary by guarantees, the White Paper stated that while net agricultural income might be somewhat lower than at present (the figure for 1953-54 was given as £321 million) the Government was satisfied that the guarantees assured the industry a satisfactory level of income in accordance with the 1947 Act. If the industry were to maintain its net income it would have to reduce costs further and sell its produce competitively and in relation to world food prices, and so continue to prosper with less assistance from the Exchequer.

The cost of these guarantees to the agricultural industry is included in the general subsidies on certain basic foods, whether home produced or imported.

Total subsidies on food (home produced and imported combined) for 1953-54 amounted to £334 million. Table 20 shows how this sum was distributed. The Financial Statement for 1954-55 provided for agricultural and food subsidies amounting to £337.3 million in 1954-55.

TABLE 20

FOOD SUBSIDIES 1953-54

Subsidies Administered by the Ministry of Food

	<i>£ million</i>
Bacon	15.7
Bread	42.8
Meat (carcass)	42.5
Milk (liquid)	46.0
Butter	13.0
Cheese	2.9
Eggs and egg products	23.0
Margarine (domestic)	1.4
Potatoes	7.5
Sugar (domestic and manufacturing)	5.0
Welfare and Milk in Schools Schemes	47.1
Animal feedingstuffs	19.7
Home-grown wheat	11.2
Miscellaneous	16.5
<i>Total subsidies administered by the Ministry of Food</i>	— 294.3

Subsidies Administered by the Agricultural Departments

Attested herd scheme	11.3
White fish subsidy	2.3
Fertilizers	13.0
Calf subsidy	6.8
Ploughing grants	6.3
<i>Total subsidies administered by the Agricultural Departments</i>	— 39.7

TOTAL FOOD SUBSIDIES 334.0

The above figures do not include certain direct agricultural subsidies, such as those for hill sheep and hill cattle, and for steer calves (other than those of Jersey, Guernsey, Friesian and Ayrshire breeds) which are suitable for rearing for beef production; grants towards the cost of field drainage, ditching schemes and farm water supplies; grants for the improvement of stock-rearing land in hill and upland districts, for increasing food or fodder production on poor or difficult land; subsidies for livestock improvement and for the supply of fertilizers and agricultural lime.

THE EXECUTION OF POLICY

Agricultural policy is carried out in England and Wales under the Minister of Agriculture through County Agricultural Executive Committees (CAECs) set up under the Agriculture Act, 1947, with the duty of promoting agricultural development and efficiency.

County Agricultural Executive Committees

Each committee consists of twelve members. Five are appointed directly by the Minister, and seven from panels nominated by the interests concerned, three being farmers, two landowners and two workers. One of those directly appointed is a member of the county council; the others are persons with special qualifications

or with experience of local agriculture. The committees are represented in areas within the county by District Committees. The system of voluntary part-time liaison officers, to interpret Government policy to the CAECs, was revived in 1952. The arrangements differ in Scotland and Northern Ireland. In Scotland, agricultural policy is carried out under the Secretary of State for Scotland through the Department of Agriculture by 11 Area Agricultural Executive Committees. In Northern Ireland, an Agricultural Executive Officer working directly under the Northern Ireland Ministry of Agriculture is responsible for carrying out the Government's agricultural policy in each county.

The Agricultural Land Commission

The Agricultural Land Commission was set up under the Agriculture Act, 1947. Its functions are to manage and farm lands vested in the Minister of Agriculture and Fisheries, or land for which he has become responsible; and to advise and assist the Minister in matters relating to the management of agricultural land. The Commission also advises the Minister on the exercise of his powers of compulsory purchase under the 1947 Act, to ensure the full and efficient use of agricultural land. The Commission manages about 200,000 acres. Nearly half of this is agricultural land intermixed with other lands used by the Forestry Commission. The remainder is mostly land acquired by the Minister under the Act on the grounds of ensuring its full and efficient use for agriculture.

In Scotland, the management of lands vested in the Secretary of State and the duty of advising him on management matters are carried out by the Department of Agriculture.

The Agricultural Land Service

In 1943 Rural Land Utilization Officers were appointed to advise planning authorities on the agricultural implications of development plans in England and Wales. This work, as well as that of the pre-war Land Commissioner Service, has now been taken over by the Ministry of Agriculture's Agricultural Land Service, formed in 1948, which operates in eight provinces. The main duties of this service are as follows: (1) to act as agent for the Agricultural Land Commission, giving technical advice on the acquisition and management of agricultural land; (2) to give technical advice on measures to ensure good estate management, on the agricultural aspects of planning and the release of agricultural land for other development, including afforestation, on schemes under the Hill Farming and Livestock Rearing Acts and the Marginal Production Schemes, on the provision and management of smallholdings by smallholdings authorities, and on the provision of allotments by local authorities.

In Scotland similar duties are carried out by officers of the Department of Agriculture.

PRODUCTION

Before the second world war, Britain produced about 31 per cent of its food supplies (in terms of calories for human consumption). By 1953 this had risen to nearly 50 per cent. The comparable figures in terms of values are 36 per cent pre-war and about 51 per cent in 1952-53. Imports of food and feedingstuffs accounted for 45 per cent by value of total imports pre-war and about 40 per cent in 1953.

In 1947 plans were made to secure an increase in the volume of annual agricultural net output to about 50 per cent above the pre-war level by 1952. This objective was

in fact achieved, the official index number (pre-war average = 100) being 152 for 1952-53 (*Cmd.* 9104). A further objective to raise this to at least 160 by 1956 was announced in 1952 (*Cmd.* 8556) and confirmed in 1954 (*Cmd.* 9104). The index number for 1953-54 is provisionally given as 156. Table 21 shows the trend in production of some of the main products since the war.

TABLE 21
AGRICULTURAL PRODUCTION IN THE UNITED KINGDOM

Product	Unit	Pre-war average	1946-47(a)	1952-53(a)	1953-54(a)
<i>Crop Production:</i>					
Wheat ..	'000 tons	1,651	1,967	2,307	2,664
Rye ..	"	10	39	50	66
Barley ..	"	765	1,963	2,334	2,521
Oats ..	"	1,940	2,903	2,772	2,821
Mixed corn ..	"	76	350	830	845
Potatoes ..	"	4,873	10,166	7,848	8,260
Sugar beet ..	"	2,741	4,522	4,236	5,226(b)
<i>Livestock</i>					
<i>Products:</i>					
Milk ..	mill. gals.	1,563	1,665	2,053	2,149
Eggs (c) ..	'000 tons	385	322	474	504
Beef and veal ..	"	578	537	583	606
Mutton and lamb ..	"	195	141	172	187
Pigmeat (c) ..	"	435	145	574	596
Wool (clip) ..	"	34	27	31	32
Index of net agricultural output:					
Agricultural holdings (d) ..	—	100	117	151	156
Total (c) ..	—	100	122	152	156

Source: *Cmd.* 9104.

(a) Years beginning 1st June.

(b) Provisional.

(c) Includes estimated production of eggs, pigmeat and other output from gardens, allotments, pig clubs, and other small producers.

(d) Holdings of one acre and above (or over $\frac{1}{4}$ acre in Northern Ireland). Excludes output of gardens, allotments, pig clubs, etc.

PROMOTION OF EFFICIENCY

Besides providing financial stability through guarantees to farmers (see pp. 133-4), the State promotes efficiency by means of various facilities, safeguards, schemes and services.

Loan Facilities

In England and Wales long-term finance for agricultural properties is provided by the Agricultural Mortgage Corporation, formed under the provisions of the Agriculture Credits Acts, 1928 and 1932. The Corporation's funds are derived mainly from the proceeds of various issues of debenture stocks which are subscribed by the public and are repaid by the operation of sinking funds. The Corporation may also raise money in the form of interest-free loans from the Government up to a total of £2.5 million under the Agriculture Credits Act, 1928, and the Agriculture (Miscellaneous Provisions) Act, 1944. In Scotland loans on favourable terms for agricultural purposes on the security of agricultural land in Scotland are granted by the Scottish Agricultural Securities Corporation Limited, a limited company set up in accordance with the provisions of the Agriculture Credits (Scotland) Act, 1929. The Corporation receives an annual grant from the Treasury to cover loss of earnings arising from a reduction of the lending rate in 1944.

Security of Tenure

Returns made in 1950 for the purpose of the United Nations Food and Agriculture Organization's World Census, showed that about 36 per cent of holdings in England and Wales were wholly owned by the occupier; 49 per cent wholly rented; and 15 per cent part-owned and part-rented. The proportion of owner-occupiers is substantially higher in the case of holdings of under 5 acres but does not vary appreciably from size group to size group in the case of larger holdings. There are no farm landlords in Northern Ireland, where, under various Land Acts passed between 1870 and 1925, every farmer is either the owner, or is in process of becoming the owner, of his holding.

In England and Wales the Agricultural Holdings Act, 1923, required at least 12 months' notice to be given to quit an agricultural holding and gave the tenant a right to compensation for disturbance on leaving his holding; a tenant had no statutory right of contesting the notice to quit. The Agricultural Holdings Act, 1948, gave the tenant the right in normal circumstances to have the matter referred to the County Agricultural Executive Committee (acting for the Minister); either tenant or landlord could then appeal against the committee's decision to an Agricultural Land Tribunal (see below). The Scottish Act of 1949 applies similar provisions to Scotland, with a right of appeal to the Scottish Land Court.

Under the Agriculture Act, 1947, the Minister of Agriculture has the power to place under supervision an owner or occupier considered guilty of bad estate management or bad husbandry. This power he has delegated to the County Agricultural Executive Committees. If the owner or occupier fails to show satisfactory improvement in his standard of management or of husbandry after 12 months under supervision, or earlier if he has failed to comply with a direction, he may be dispossessed. Dispossession of an owner means compulsory purchase. Dispossession of an occupier merely means that his occupation is terminated and the new occupier has to be approved by the Committee. An owner or occupier may appeal to an Agricultural Land Tribunal against a proposal that he should be dispossessed.

Agricultural Land Tribunals

Agricultural Land Tribunals, which are independent bodies each consisting of a chairman, appointed by the Lord Chancellor (usually for three years), and two members representing landowners and farmers appointed by the chairman from

panels drawn up by the Lord Chancellor after consulting representative bodies, were originally set up in England and Wales in 1948 under the Agriculture Act, 1947. Their task is to hear and to decide cases in which decisions and proposals (generally notices to quit or proposals to dispossess) of the Minister of Agriculture, or of the County Agricultural Executive Committees acting on his behalf, are referred to them at the request of one of the parties concerned. Under new regulations made in 1954 a Tribunal may, at the request of any interested party or at the direction of the Court, refer questions of law to the High Court of Justice.

Smallholdings and Allotments

There are about one million allotments in the United Kingdom. Most of these are allotment gardens¹ and are provided by local authorities, who have certain powers and duties under the Allotments Acts.

There are also some 20,000 smallholdings provided by county councils and county borough councils in England and Wales and by the Minister of Agriculture and Fisheries. Of these some 11,000 are capable of providing a full-time occupation for the tenant. These smallholdings are let only to people with practical experience in agriculture, preferably agricultural workers, with the object of affording them an opportunity to become farmers on their own account. Loans may be made to the tenants of up to 75 per cent of the working capital they require.

Of the smallholdings provided by the Minister of Agriculture approximately 1,000 situated on 18 different estates are managed on the Minister's behalf by the Land Settlement Association Limited, which was originally formed in 1935 to develop smallholdings for unemployed men from industrial areas. The Association provides centrally on each estate various services for the tenant's use. These services include the supply of agricultural stores and requisites, the operation of a machinery pool, and the packing and marketing of produce.

The Welsh Land Settlement Society, which was also formed to assist in the settlement on the land of unemployed industrial workers, created a number of profit-sharing farms, which still operate.

In Scotland the Department of Agriculture provided plots of up to one acre for the unemployed. In 1937 there were over 2,000 plot-holders, but there has been a gradual closing down of the schemes since the end of the war and the number of plot-holders had fallen to 403 at the end of 1953.

Land settlement in Scotland has always been carried out by the central Government, which now owns and maintains some 452,000 acres of Land Settlement Estates with over 4,200 holdings.

There are about 100,000 domestic pig keepers in England and Wales and about 500,000 domestic poultry keepers. They are encouraged by the Small Pig Keepers' Council and the National Domestic Poultry Keepers' Council, respectively, promoted by the Ministry of Agriculture. In Northern Ireland there are 82,000 poultry keepers and 36,000 pig keepers.

Agricultural Advisory Services

Free technical advice on all agricultural and horticultural matters is available to every farmer and grower in England and Wales through the Ministry of Agriculture's National Agricultural Advisory Service (NAAS).

Every county is divided into districts, to each of which District Advisory

¹ An allotment garden is legally defined as an allotment not exceeding 40 poles (1,210 square yards) in extent, which is wholly or mainly cultivated by the occupier for the production of vegetable or fruit crops for consumption by himself or his family.

Officers have been appointed to act as general advisers to farmers. The District Officers can call on an extensive system of specialist advisers. Advisers in general agriculture, livestock husbandry, milk production, farm machinery, poultry husbandry, and horticulture are available in each county; at the 12 provincial centres and sub-centres there are senior advisers in these subjects and in crop and grassland husbandry, besides specialists in animal nutrition, bacteriology, soil chemistry, plant diseases and plant pests. These centres are equipped with laboratories for the analysis of soils and feedingstuffs, and the diagnosis of crop pests and diseases.

In Scotland the advisory services, similar in scope to the NAAS, are based on the three agricultural colleges. Northern Ireland has its own separate advisory service which is closely linked with the research and experimental divisions (see p. 145).

Drainage and Water Schemes

The State makes substantial contributions towards the cost of land drainage and water supply in Britain. In England and Wales, for example, under various Acts grants for farm drainage may be up to 50 per cent of the approved cost; for main river drainage they can range up to 80 per cent. Farm water supply grants are at the rate of 25 per cent of the approved cost where the connection is to a public main and 40 per cent where a private source is utilized. Separate, but similar, legislation applies to Scotland and Northern Ireland.

The estimated cost of drainage and water schemes approved for State aid amounts to:

ENGLAND AND WALES (to 31st March 1954)

Farm drainage (since 1940)—£28 million.

Main rivers (since 1930)—over £29 million.

Minor arterial drainage (since 1937)—over £11 million.

Farm water supply (since 1941)—over £16 million.

SCOTLAND (to 31st March 1954)

Farm drainage and arterial drainage (since 1940)—£7½ million.

Farm water supplies (since 1942)—£2½ million.

NORTHERN IRELAND (to 31st March 1954)

Farm drainage and arterial drainage (since 1942)—£2½ million.

Farm water supplies (since 1942)—£1½ million.

Main rivers (since 1947)—over £850,000.

Farm Buildings

The provision of many more farm buildings for the industry, including steel Dutch barns and buildings to house grain-drying and grass-drying plants, is being facilitated.

A scheme for the large-scale production of standardized components for farm buildings was announced in February 1948. The Ministry of Works, the building trade and agricultural organizations have co-operated in preparing the scheme, which provides components for buildings that will suit a wide range of agricultural and horticultural purposes. With these components, buildings either 18 ft. or 33 ft. wide can be constructed to a height of 8 ft., 12 ft. or 16 ft. in bays of 15 ft. The available length is any multiple of 15 ft. With the decontrol of steel the Ministry is no longer required to give special facilities to manufacturers of these components, but there is every reason to suppose that continuing use will be made of standard components for the construction of farm buildings.

Crops and Grass

Research at the Grassland Research Institute, Hurley, and elsewhere has directly influenced agricultural practice, notably in the development of scientific grassland management and the extension of ley-farming in districts where formerly this alternating husbandry system has not been the usual practice; in the choice of crop varieties; in crop husbandry; in the application of insecticides and fungicides; and in the use of disease-free planting material.

The aim of Government policy is the maintenance of a large tillage area; the efficient production of cereals; and the economic use of concentrates and their substitution by grass, grass silage, and fodder crops such as kale.

Animal Husbandry

Britain is noted for its exports of pedigree livestock and since the end of the war there has been a marked recovery of the export trade in livestock of high quality.

Horses. To ensure that quality is maintained, stallions must be licensed whether they travel or stand for service at home. Grants are paid to approved societies hiring out pedigree stallions of heavy breeds. The number of farm horses has fallen by half since 1939 because of mechanization.

Cattle. It is mainly the beef breeds (e.g., Shorthorns, Herefords, Aberdeen Angus) which have made a reputation overseas, but interest in British dairy stock is increasing. The rise in milk consumption since 1940 has resulted in concentration at home on dairy breeds, but, in spite of the change-over to milk, many breeds have maintained the dual-purpose type of qualifications. In Scotland, while milk production has expanded, an even greater increase in numbers of beef cattle has taken place. Schemes for communal use of sires are in operation, with special schemes in the Highlands and Islands for the loan of bulls and rams (free of charge) to communities of smallholders. Cattle-rearing in the United Kingdom is encouraged by subsidies on calves reared for beef production and on hill cattle. Northern Ireland sends to Great Britain all fatstock surplus to its own requirements.

Licensing schemes operate for bulls and boars in order to ensure sound breeding. Artificial insemination (AI) centres, which are officially licensed, cover practically the whole of England and Wales and licensed centres are also operating in Scotland. In Northern Ireland AI is carried out at centres under the control of the Northern Ireland Ministry of Agriculture. Over one-third of the dairy cows in England and Wales are artificially inseminated.

Under a plan introduced in October 1950 for the eradication of bovine tuberculosis on an area basis, areas containing about one million cattle have already been cleared. Others are being cleared. At the end of 1953 there were 112,000 attested herds (over 4 million cattle) in Great Britain. Northern Ireland has had an Attested Herds Scheme in operation since 1949; there are 1,428 attested herds (47,485 head of cattle).

Milk. Since October 1949 all dairy farms in Great Britain must be registered, and regulations lay down conditions under which milk is produced, handled, treated and stored. Milk may be sold, subject to licence, under special designations: 'Tuberculin Tested' (TT), 'Accredited' (in Scotland 'Standard'), 'Pasteurized', and 'Sterilized'. It is intended that ultimately there will be facilities for the heat treatment of all milk that is not tuberculin-tested. Premiums are paid on TT and accredited milk and a bonus on attested herds.

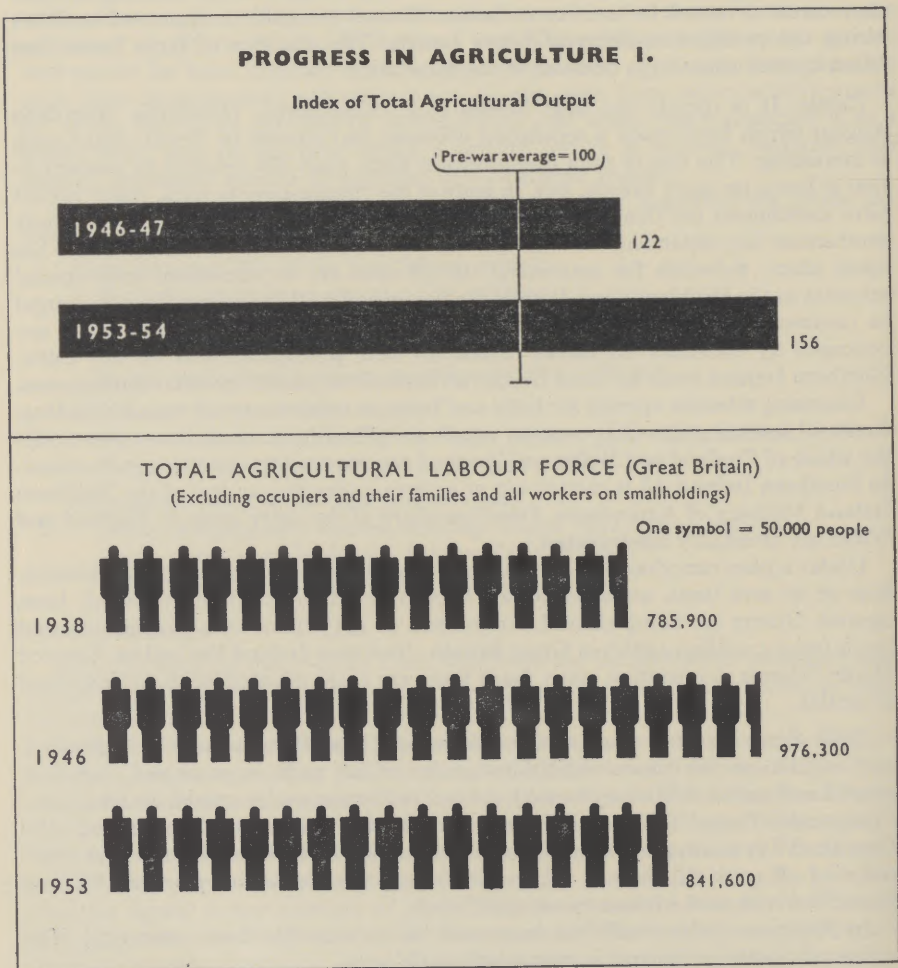
In Northern Ireland milk has been paid for on a quality basis since 1934. The whole of Northern Ireland is now a 'safe milk' area.

Sheep. The best mutton and lamb throughout the world is largely of British origin. At home, modern farming conditions have led to a decline in 'arable' flocks (i.e. flocks feeding off root and forage crops grown in rotation with, for example, barley) and an increase in grass-reared sheep.

Poultry. To raise the standard of poultry stock there is a Poultry Stock Improvement Plan under which breeding stations and hatcheries are accredited. By December 1953 accredited breeding stock amounted to approximately 2,850,000 birds in England and Wales. Similar schemes operate in Scotland and Northern Ireland.

Improvement of Livestock Rearing Land in Upland Areas

The Hill Farming and Livestock Rearing Acts provide for grants for owners and occupiers of livestock rearing land in upland areas who wish to put their farms into sound working order. The object is to encourage the breeding and rearing of store



cattle and store sheep (i.e. cattle and sheep for further fattening, not for immediate slaughter). Grants are at the rate of 50 per cent of the cost of work done. The total amount available for grant in the United Kingdom is £20 million and this can be increased by £2 million if necessary.

Marginal Production Schemes

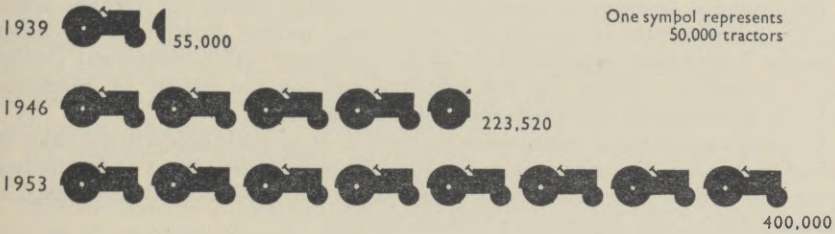
Grants of up to 50 per cent of the cost can be given to occupiers of agricultural land to help them in farming operations which would be temporarily uneconomic without assistance but which would eventually enable them to increase production. About £2 million is being provided for this kind of assistance in 1954-55.

Mechanization

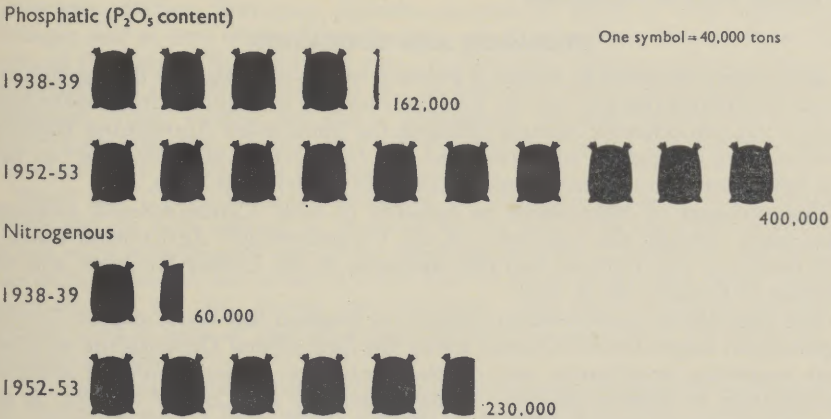
Mechanization has been one of the important causes of the increase of productivity of labour on the land in recent years, and one of the aims of the policy of guarantees to farmers under the Agriculture Act, 1947, was to give them an

PROGRESS IN AGRICULTURE 2.

TRACTORS IN USE



FERTILISER CONSUMPTION



opportunity to invest in capital equipment. Such investment is also encouraged by the tax allowance on capital investment, which was increased in the 1954 Budget.

The estimated number of tractors (excluding small market-garden types) in the United Kingdom in 1925 was about 21,000, in 1939 about 55,000, and in 1954 about 400,000. According to the Economic Commission for Europe, Britain has the greatest tractor density in the world, one tractor per 57 acres of arable land. The increase in some of the newer agricultural machines has been even more notable; thus it is estimated that 24,000 combined harvester-threshers were in use in the 1954 harvest; in 1939 there were only 150. As so often happens in agriculture the solution of one problem creates another; in a climate such as Britain's, the widespread use of these combines gives rise to the need for grain-drying and grain-storage facilities on a substantial scale. How to provide these on sound technical and economic lines is a problem which is receiving the closest attention by the many public and private interests concerned.

Considerable, but as yet not complete, success has attended intensive efforts to solve the problem of mechanizing the cultivation and harvesting of root crops—especially potatoes and sugar beet—which make so heavy a seasonal demand on labour. The problem continues to receive close attention.

Great strides have been made in the development of a wide range of equipment to assist the production of grass in the various forms—silage, hay and dried grass—upon which British farm livestock very largely depends.

The National Institute of Agricultural Engineering carries out research, testing and development work in agricultural engineering, and the Agricultural Machinery Advisory Committee, representative of the industries and Government Departments concerned, advises on requirements and on the supply of machinery and the development and production of new machines.

The home agricultural engineering industry in 1939 made goods to the value (ex works) of no more than £4½ million. In 1953 the output was valued at £94 million, about £49 million of which was exported (see p. 181). Making full allowance for increased prices, this represents a tenfold increase.

To meet the needs of farmers with insufficient equipment of their own, more than 5,000 tractors as well as other types of agricultural machinery were owned in 1954 by County Agricultural Executive Committees in England and Wales and by private firms of contractors.

RESEARCH AND EDUCATION

Agricultural Research in Britain is planned and co-ordinated by the Agricultural Research Council (see pp. 346–8). This body advises the Agricultural Departments (see p. 133) on scientific matters affecting the grant-aided Agricultural Research Institutes (15 in England and Wales and 7 in Scotland, listed in footnote ¹, p. 347) and itself controls 14 research centres (listed in footnote ¹, p. 348).

The exchange of information on research in other Commonwealth countries takes place through the machinery of the Commonwealth Agricultural Bureaux and Institutes (ten bureaux and two institutes in the United Kingdom and one institute in Canada, see p. 354).

The Agricultural Improvement Council for England and Wales and the Scottish Agricultural Improvement Council advise the Agricultural Departments on problems requiring investigation and on the application of the results of scientific investigation to farming practice. In reconstructing the Council in 1953, at the end of a three-year period of office, the Minister included a prominent landowner and a land agent to assist the Council to devote more attention to problems of estate management, including buildings and fixed equipment.

Research and advice are combined in the Provincial Agricultural Economics Service of England and Wales. The service is attached to the universities and organized in ten economic advisory centres. In Scotland the Department of Agriculture has a Farm Economics Branch, and agricultural economists are on the staff of the three Agricultural Colleges. Similar arrangements exist in Northern Ireland.

Facilities are provided at the Ministry of Agriculture and Fisheries Experimental Centres in England and Wales and at Agricultural College Centres in Scotland for field-scale extensions of research work and investigations of local problems. Experiments are also carried out at provincial advisory centres and on commercial farms.

The Ministry of Agriculture for Northern Ireland has its own research divisions investigating problems of animal and crop production. The research divisions work in close touch with the Ministry's county staffs, and also provide technical advisory services for the farmer. A very close link has been forged between the Queen's University of Belfast and the research divisions, since certain officers of the latter are professors and lecture in the University Faculty of Agriculture.

Control is also exercised by the Plant Disease Division in the disinfection of all flax seed sown in Northern Ireland. A well-equipped Dairy Bacteriology Division keeps a watchful eye on the maintenance of the hygienic standards laid down for the production and handling of milk.

At Hillsborough, in County Down, the Northern Ireland Agriculture Research Institute owns and operates a farm of some 500 acres. The Institute is endowed from public funds, and therefore the officers of the Ministry's Research Divisions are afforded facilities for carrying out their field experiments. Another 500 acres at Hillsborough are devoted to forestry and are controlled by the Forestry Branch of the Ministry of Agriculture. Thus there is a close integration of research, education and advisory work in these research divisions.

Eight universities in England and Wales (Cambridge, Durham, Leeds, London, Oxford, Nottingham, Reading, and the University of Wales) and three in Scotland (Edinburgh, Glasgow and Aberdeen) provide degree courses in agriculture, which are of particular value for intending research workers, advisory officers, teachers and other specialists; in Northern Ireland a degree course is provided at Queen's University, Belfast. Two-year diploma courses are given at four Agricultural Colleges and at two of the Farm Institutes in England and Wales; three Agricultural Colleges in Scotland give two- to three-year diploma courses. These are more practical than degree courses and are intended mainly for farmers and farm managers. These courses are also a preparation for the National Diplomas in Agriculture, Dairying, Horticulture and Poultry Husbandry. In Northern Ireland there are three Agricultural Colleges.

There are 33 Farm Institutes and three Horticultural Institutes in England and Wales and six farm schools in Scotland run by local education authorities providing courses in general agriculture, dairying, poultry, horticulture and poultry husbandry. Courses are usually for one year of 33 to 40 working weeks. Various short courses are run during the vacations, and local education authorities provide a wide range of part-time instruction which also meets the needs of the domestic producer.

An important means of voluntary informal education in agriculture is provided by *Young Farmers' Clubs*, which flourish in villages and towns throughout the United Kingdom. There are in all some 1,462 clubs with about 67,228 members, mostly between the ages of 10 and 25. Each club is self-governing but has the support of an advisory committee of farmers and other adults and of the local

organizer. Clubs are combined in county federations and in National Federations for England and Wales (founded in 1932), Scotland (in 1937), and Northern Ireland (in 1929).

The *National Federation of Women's Institutes* is another important voluntary organization, with over 8,000 Institutes in villages throughout England and Wales. Their aim is to improve rural life and amenities, and they are interested in all subjects of general, agricultural and social significance to country women. The *Scottish Women's Rural Institutes* have similar aims and interests.

Rural crafts and industries are fostered by the *Rural Industries Bureau*, founded in 1921, which is financed almost wholly by grants from the Development Fund set up under the Development Acts of 1909 and 1910. These Acts gave the Government power to make grants and loans from this Fund for certain specified purposes including the promotion of rural industries. The Bureau provides an information and advisory service which helps country craftsmen in England and Wales to keep abreast of new developments while at the same time preserving their ancient skills. Advice and instruction are given on the commercial as well as the technical aspects of rural industries.

FISHERIES

Britain's fishing industry falls into two main divisions: demersal and pelagic.¹ There are also fisheries for oysters, cockles, mussels and whelks from the Thames Estuary to the Wash, and on the Cornish and South Wales coasts; for lobsters and crabs off the Scottish coasts and off the north-east, east and south coasts of England; and for shrimps in the Wash, East Anglia, the Thames Estuary, and Morecambe Bay on the north-west coast of England.

There were 27,414 fishermen regularly employed in Great Britain at the end of 1953. The landed weight of British-caught wet fish amounted to nearly 19,000 tons per week; consumption of fresh, frozen and cured fish in Great Britain amounted to about 16,230 tons landed weight per week.

Northern Ireland consumes about one-third of its own catches and exports the rest to Great Britain and to the Irish Republic.

Fishing Ports

The principal fishing ports in England and Wales are Grimsby, Hull, Fleetwood, Milford Haven and Lowestoft for white fish, and Great Yarmouth and Lowestoft for herring; in Scotland the chief centres are Aberdeen and Granton for white fish, which are caught all round the coast and particularly in the Moray Firth, and for herring Peterhead, Fraserburgh, Shetland, Stornoway, the West Coast and the Clyde; those in Northern Ireland are Ardglass, Portavogie and Kilkeel. London is the principal wholesale distributing centre, and Billingsgate Fish Market handles an average of 600 tons a day.

Sea Fishing

The chief means of catching fish are by the use of nets—trawl, seine, drift and ring—and by lining. Trawling is carried on in distant, middle and near waters for demersal fish throughout the year, and seasonally for herring. The deep-sea trawler fleet comprised 1,014 vessels at the end of 1953. Seining is chiefly used on the nearer grounds, the principal catches being plaice and haddock; 569 Scottish vessels engage in seine net fishing during most of the year, while from Grimsby,

¹ Demersal fish (white fish) live on or near the sea-bed (e.g., cod, haddock, plaice, turbot, sole, etc.). Pelagic fish live in the intermediate waters or near the surface (e.g., herring, pilchard, mackerel, sprats, etc.).

Fleetwood and Whitehaven 74 such vessels are in regular operation. In Northern Ireland fishermen also use seine nets. Drift nets are mainly used for herring and pilchard by 398 steam and motor drifters; ring netting, a method of catching herring, is used seasonally in certain districts by about 200 motor-boats. Long lining on grounds too rough for trawling is carried on by a limited number of vessels (mainly Scottish), while small and hand lining still provide employment for a large number of crews in autumn, winter and early spring; cod, whiting and mackerel are caught.

The quantity and value of fish landed in the United Kingdom during the year ended 31st December 1953 were as follows:

WET FISH (demersal and pelagic)

Great Britain: 980,338 tons valued at £40,999,622.

Northern Ireland: 5,674 tons valued at £137,359.

SHELL FISH

Great Britain: value £1,229,831.

Northern Ireland: value £4,814.

Exports of fish from the United Kingdom—fresh, frozen, cured or canned—in 1953 were valued at £5,254,159.

Freshwater Fisheries

The principal commercial freshwater catches are salmon, grilse, sea-trout and eels. In Scotland and Northern Ireland fixed nets along the coast and sweep nets in rivers and estuaries are used; in England drift nets are used for catching salmon in the sea. In England and Wales the value of the salmon catch is approximately £195,000 a year, in Scotland it amounts to about £1 million, and in Northern Ireland to some £200,000. In Northern Ireland eels are captured by long lines and by eel nets placed in special gaps in river weirs.

Sporting fishing is by rod and line in lakes, lochs, rivers and streams. Salmon, grilse and sea-trout are the most important species, and the fishing rights command high rentals. There are also extensive fishings for brown trout. Other freshwater fish taken, particularly in England, are roach, rudd, perch and dace. Fishing for freshwater fish other than salmon and trout is of minor importance and figures of catches are not available.

Promotion and Regulation of the Industry

Laws in Britain relating to fisheries and fish are principally directed to the following purposes: (a) protection of supply by measures against over-fishing, e.g., the Sea Fisheries Regulation Acts, 1888 to 1930, and the Sea Fishing Industry Acts, 1933 to 1938; (b) promotion of the prosperity of the industry, e.g., the Herring Industry Acts, 1935 to 1953, and the White Fish Industry Acts, 1951 to 1953; (c) protection of the quality of the product, e.g., the Food and Drugs Act, 1938. The Government Departments mainly responsible for the administration of laws in the first two categories and for the general sponsorship of fisheries are the Ministry of Agriculture and Fisheries (see p. 39), the Scottish Home Department, and the Ministry of Commerce for Northern Ireland; the Ministry of Food (see p. 42) is concerned with questions of processing and distribution, and, together with the Ministry of Health and the Department of Health for Scotland, with questions of nutrition and hygiene affecting fish and fish products. The safety and welfare of crews of fishing vessels are provided for under the Merchant Shipping Acts, which are administered by the Ministry of Transport and Civil Aviation.

The authorities concerned with fisheries research are the Ministry of Agriculture

and Fisheries, the Scottish Home Department and the Development Commissioners (see p. 350).

An Order made by the Minister of Agriculture and Fisheries, the Secretary of State for Scotland and the Home Secretary in January 1954 prescribed new and larger minimum sizes of mesh for nets used by British fishing vessels. The Order, which came into operation on 5th April 1954, fulfilled an obligation on the part of the United Kingdom Government to give effect to decisions taken in November 1953 by the Permanent Commission set up under the International Fisheries Convention of 1946.

The *Herring Industry Board* was set up under the Herring Industry Act of 1935, to reorganize, develop and regulate the herring industry: subsequent amending Acts have also been passed. The Board is financed partly by Government grants and loans and partly by levies and licence fees. It consists of a chairman and two other members, all part-time and independent of the industry, who are appointed jointly by the Secretary of State for Scotland, the Minister of Agriculture and Fisheries and the Secretary of State for the Home Department. The Board promotes sales of herring both at home and abroad, encourages and carries out schemes of research and experiment into methods of fishing and processing, makes grants and loans for the acquisition of new boats and engines, and loans for the purchase of nets and gear, for the provision of processing plants, and for the reconditioning of existing boats, and exercises a measure of control over the industry by means of rules, directions and licensing. It operates a scheme for the reduction of herring to oil and meal, using its own and commercial processing plants. In August 1951 the Board was given powers to participate in the industry, including fishing for herring, and purchasing, processing and selling herring; such powers, however, are to be used only to secure proper provision for the needs of the industry and after consultation with the interests concerned. The Board is assisted by the Herring Industry Advisory Council, representing various sections of the industry and consumers, and by local officers who work at the ports during the fishing season, and who on occasion act as port arbiters in disputes regarding herring sales. Sectional committees may be set up to advise the Board on matters affecting a particular section of the industry.

The *White Fish Authority* was set up by the Sea Fish Industry Act, 1951, to reorganize, develop and regulate the white fish industry. The Authority is financed partly by Government grants and loans and partly by a levy on first-hand sales and by registration fees. It is composed of five independent members, appointed jointly by the Minister of Agriculture and Fisheries, the Secretary of State for Scotland and the Secretary of State for the Home Department, working in consultation with the industry and consumers through the White Fish Industry Advisory Council. The Authority has powers, similar to those of the Herring Board, to carry on research and experiment, to encourage the formation and development of voluntary arrangements in the industry on a co-operative basis, to promote exports, to make grants and loans for the acquisition of new boats and engines, and loans for the purchase of nets and gear for the provision and reconditioning of processing plants and for the reconditioning of existing boats. Certain of the Authority's functions in Scotland and Northern Ireland have been delegated to a committee consisting of Scottish and Northern Irish members.

FORESTRY

Only a relatively small part of Britain's timber requirements is met from its own woodlands; the greater part—to the value of £166 million in 1953—is supplied by

imports. In recent years, however, the Government has been devoting continuous effort through the Forestry Commission to the long-term task of increasing the country's timber resources, which over the centuries, and particularly as a result of overfelling in the two world wars, have been seriously depleted.

Forest Areas

The last census of woodlands (1947-49) disclosed that the total area of woodland in Great Britain on 30th September 1947, excluding woods under 5 acres in extent, was 3,448,362 acres. This represents 6·1 per cent of the land surface of the countries surveyed, or 71 acres of woodland for every 1,000 of the population.

According to the census figures, 3,412,388 acres, or 99 per cent of the total area of woodland, were on the mainland and 1 per cent distributed over various islands. England, with 1,865,046 acres, had 54 per cent of the whole; Scotland, with 1,266,838 acres,¹ had 37 per cent of the whole; and Wales, with 316,478 acres, had 9 per cent of the whole.

The greatest density of woodland in Great Britain is to be found in the north and east of Scotland, where the census showed that ten counties all had 8 per cent or more of their land area under woodland—Moray, for example, had 21·6 per cent and Nairn 19·1 per cent. The second region of high density lies in the south-east of England and comprises the following five counties: Sussex, Surrey, Hampshire (in which is to be found the well-known New Forest), Kent and Berkshire. Monmouthshire, on the Welsh border, had 10·7 per cent of its land area under woodland at the time of the census. Every county contains some measurable woodland; the census disclosed that even the administrative county of London had 639 acres.

Types of Woodland

Fifty-two per cent of the total woodland area in Great Britain as a whole was classified in the census as High Forest, which consists of stands of trees that are normally grown to maturity from planting, sowing, natural regeneration or, occasionally, from coppice shoots; 10 per cent was classified as Coppice (woodland in which the crop is worked or could be worked on the coppice system); 15 per cent as Scrub; and 23 per cent as Felled or Devastated.

Woods which are wholly or mainly coniferous occupy a slightly larger area in the High Forest of Great Britain as a whole than do the broadleaved species; in Scotland coniferous woods predominate, with 79 per cent of the total, the broadleaved species accounting for only 21 per cent. In England, broadleaved species occupy 63 per cent, oak accounting for 33 per cent, beech for 11 per cent, ash for 7 per cent, birch for 5 per cent, sycamore for 4 per cent, and Spanish chestnut, elm, and other broadleaved trees for 1 per cent each. In coniferous woods, which make up 37 per cent of the total, the Scots pine is the most common tree, and accounts for 14 per cent of the total. In Wales, where the conifers again predominate (although only by a small margin), the most common species are the Norway and Sitka spruces, which account for 29 per cent of the total. The broadleaved trees, amounting to 45 per cent in all, consist mainly of oak, which forms 26 per cent of the whole.

Volume of Timber

The timber volume of Great Britain's woodlands (timber over 3 inches in diameter) at 30th September 1949 was estimated at approximately 2,650 million

¹ Some 15,000 acres of woodlands, mostly conifers, in the north-east of Scotland were blown down by the gales of 31st January 1953 which coincided with the flood disaster on the east coast of Britain.

cubic feet, the hardwood amounting to approximately 1,550 million cubic feet, and the softwood to approximately 1,100 million cubic feet. The total annual growth of timber was estimated at approximately 97 million cubic feet.

Ownership of Woodlands

Eighty-two per cent of all woodlands in Great Britain is owned by private individuals or by limited companies, trusts, corporations, local authorities or Government departments other than the Forestry Commission. The remaining 18 per cent is under the management of the Forestry Commission.

The Forestry Commission

The Forestry Commission was established under the Forestry Act, 1919-47, to promote the interests of forestry, the development of afforestation and the production and supply of timber in Great Britain. Under the Forestry Acts, 1945, the Minister of Agriculture and Fisheries and the Secretary of State for Scotland became jointly responsible for forest policy; the Forestry Commission continued to carry out forestry operations, research and the training of foresters; and since 1950 it has been the licensing authority for the felling of timber. The Forestry Act, 1951, placed responsibility on the Commissioners for the maintenance of an adequate reserve of growing trees.

During the years 1919-53¹ the Forestry Commission acquired 1,909,400 acres of land through the Forestry Fund² and under the Transfer of Woods Act, 1923. This total comprises 1,181,400 acres classified as 'forest land', which is either planted or will be planted in due course, and 728,000 acres of 'other land' which includes forest nurseries, rough grazing, agricultural land and land unsuitable for planting on account of soil conditions and locality. The total number of Commission forests in Great Britain at 30th September 1953 was 462, of which 193 were in England, 193 in Scotland and 76 in Wales.

Policy

Great Britain's forest policy, laid down in the various Acts, is to extend State and private operations so as to establish, over 50 years, 5 million acres of well-managed woodlands, made up of 3 million acres of new planting by the Commission and the replanting by the Commission and private owners of 2 million acres of existing woodland. The annual yield from these 5 million acres should be about 35 per cent of the national timber requirements.

The restoration of privately owned woodlands is being assisted by the Dedication Scheme, initiated by the Forestry Act, 1947, under which owners are invited to agree to their land being given over permanently to timber production and to their woods being managed in accordance with a plan approved by the Forestry Commission; in return the owner is entitled to financial aid in the form of grants.

Forestry Education and Research

The Commission maintains five forester-training schools: in England, at Parkend in Gloucestershire, and at Lynford in Norfolk; in Wales, at Gwydyr in Carnarvonshire; and at Benmore and Faskally, near Pitlochry, in Scotland. Northerwood House, the Commission's educational centre in the New Forest, Hampshire, is used for practical courses for university students, landowners, school teachers and others connected with forestry.

¹ Figures for 1953 do not include those for the full year but for the Forest Year 1953, which ended 30th September 1953.

² See p. 151.

Higher education in forestry is provided at several universities, suitable graduates being recruited by the Commission as forest officers.

In 1946 Alice Holt Lodge, Farnham, Surrey, was opened by the Commission as a forestry research station. Grants are made for research on special forestry problems of a fundamental scientific nature to be carried out by universities and other institutions qualified to undertake such work. Expenditure on research and experiment in 1953 amounted to £215,330.

Finance

The Forestry Fund was established in 1919 and from it is paid all the expenditure of the Forestry Commissioners. The fund is replenished by sums voted annually by Parliament, receipts from forest produce, rentals and other sources. From 1920 to 1953 Parliamentary votes totalled £54,586,800 and receipts £18,029,060. Payments were £72,403,480.

National Forest Parks

The Forestry Commission has opened to the public seven National Forest Parks: Argyll, Glentool, Glenmore, and Loch Ard (renamed the Queen Elizabeth Forest Park to commemorate the Coronation Year) in Scotland; Hardknott, Forest of Dean and Snowdonia in England and Wales. The total area of these parks is about 290,000 acres; they include planted areas and unplanted moorland and mountains. Camping facilities are provided in most of the Forest Parks, and the number of overnight stays at the camping grounds exceeded 64,000 in 1953.

Forestry in Northern Ireland

In Northern Ireland, forestry has been the responsibility of the Ministry of Agriculture for Northern Ireland since 1922. At that date the Government had acquired some 4,000 acres for afforestation, of which 700 acres had been planted. Since then the State forest area has grown steadily, and at a greatly accelerated pace since the end of the second world war. By 31st March 1954, 62,000 acres had been acquired for State afforestation, of which approximately 36,000 acres had been planted. The area of exploitable private woodland is at present some 20,000 acres, and private planting is assisted both by the supply of young trees at cost price from the Government nurseries and by grants towards the cost of new plantations.

FUEL AND POWER

The most important primary sources of the fuel and power used in Britain are coal and petroleum, and the most important secondary sources are electricity (including hydro-electricity) and coal gas. Normally, inland coal requirements are met from within the country; supplies from the mines also afford substantial exports. Nearly all petroleum is imported (most of it as crude oil) and refined within the country, only a little being produced from coal, shale and local oil wells. The fuel and power industries, with the exception of the petroleum industry and coal distribution, are mainly under public ownership.

The Government's fuel and power policy has broadly three objectives: to obtain more coal; to use the coal better; and to supplement supplies of coal with other sources of energy—atomic energy as soon as possible, natural gas if it can be found, and oil forthwith.

COAL

Coal has been worked in Britain for over 700 years and an organized coalmining industry has been in existence for over 300 years, some 200 years longer than in any

other European country. British coal exports dominated the world coal market until about 1910. By 1913—the peak year—the industry was producing 287 million tons of coal, exporting 94 million tons and employing 1,107,000 workers.

The very fact that the British coalmining industry was developed so early has meant that many of the best seams of coal are now worked out; every year coal has to be mined from deeper and thinner seams and there is a constant struggle to maintain productivity at its present level.

The industry declined during the first world war owing to a shortage of manpower and to the shortage of plant and materials necessary for undertaking any mechanical improvement. Moreover, alternative sources of energy and lower prices in continental countries led to a later decline in exports, which had fallen to 67 million tons in 1925.

Attempts at securing economies through amalgamation date from the Sankey Commission of 1919. In 1930 a Coal Mines Act established commissioners to bring about the formation of larger and more efficient units. The Coal Act of 1938 transferred ownership of the mineral coal to the State and made it the statutory responsibility of a Coal Commission to accelerate the integration of the industry by still further reducing the number of separate undertakings. At the outbreak of the second world war in 1939, however, this process was not far advanced.

Organization under Public Ownership

In 1942 the Government assumed full control of the industry's operations, though the colliery undertakings continued to own the coal mines. In May 1946 the Coal Industry Nationalization Act received the Royal Assent; on 1st January 1947 the whole coalmining industry was transferred to public ownership and control and the *National Coal Board*, appointed by the Minister of Fuel and Power and now consisting of a chairman, two deputy chairmen, four full-time and four part-time members, was set up and made responsible for its efficient operation. The Board is a public corporation and is responsible for its own regional organization.

There are minor exceptions to the Board's exclusive monopoly to work coal in Britain: for example, it may license private enterprise to work small mines in which the number of underground workers does not greatly exceed 30. Production on opencast sites, which had been the responsibility of the Ministry of Fuel and Power, was transferred to the Board on 1st April 1952.

The main coal-bearing areas, roughly in order of output, are to be found in Yorkshire, Nottinghamshire and Derbyshire, Durham and Northumberland, Central Scotland, South Wales, Lancashire and North Wales, Staffordshire, Warwickshire and Leicestershire. There are no coal-bearing areas in Northern Ireland. Under the National Coal Board's organization, the collieries, numbering about 900, are grouped into 50 Areas which are the basic units for commercial management. The size of the Areas varies according to geological, geographical and other technical considerations. Some of the larger Areas are split up into sub-Areas the managements of which are responsible to Area managements for the operation of groups of collieries within the sub-Area. The Areas are grouped into nine Divisions which roughly correspond to the main coal-bearing regions. A Divisional Board for each Division supervises and co-ordinates the work of the Areas within the Division, formulates divisional policy, and is answerable to the National Coal Board, which is responsible for questions of national policy, finance and the co-ordinating of major schemes of development. The day-to-day work of running the collieries is under the direction of colliery managers.

Employment¹ and Production

Employment and production in the coalmining industry, after rising again in the years immediately following the first world war, fell later owing to loss of export markets and depression in the heavy industries at home. In the years since the second world war, the trend has been upwards. In 1952 output reached a post-war peak of 226.5 million tons. In 1953, however, the Coronation holiday, together with the grant to the miners of a second week's paid holiday, reduced output by 5½ million tons; most of this loss was made good by higher output in the remainder of the year, but even so, total output fell to 224.2 million tons. Total manpower in June 1954 was 708,000, of which 290,800 represented workers at the coal face. Table 22 shows the progress of the National Coal Board since its inception.

Development and Research

Contraction and curtailment of development in the industry since the peak year, 1913, had led to a position in which less than one-third of current output was coming from pits started in the twentieth century. Large-scale development was therefore essential.

In 1950 the National Coal Board announced its long-term plan of development for the industry involving the reorganization and increased mechanization of existing mines and the sinking of new ones. The plan envisaged a capital investment of £635 million at 1949 prices between 1950 and 1965, when it was estimated that the annual output of coal would have risen to about 240 million tons. The plan was not a rigid blueprint, room being left for modifications in the light of changing circumstances and new knowledge. Actual capital expenditure in the years 1950-53 was £173 million at current prices. When the programme is completed, four-fifths of Britain's coal will be coming from virtually new mines.

In 1947 the National Coal Board took over, with other assets, the Coal Survey, a national organization for surveying coal resources within Britain, and 70 laboratories in the various coalfields, which it has since extended and modernized.

In 1948 the Board established a central research organization at Stoke Orchard, near Cheltenham, Gloucestershire, to provide facilities for fundamental research in the coalmining industry, as distinct from the day-to-day scientific control exercised by the divisional and area scientific organization. A second central research organization for the investigation of underground problems was formed in 1952 by the Board at Isleworth, Middlesex, and a Central Engineering Establishment is being built near Bretby in Derbyshire for developing new machines and equipment.

The Board also subscribes to a number of autonomous research associations in receipt of grants from the Department of Scientific and Industrial Research (DSIR) (see p. 344), including the British Coal Utilization Research Association, the British Coke Research Association and the Coal Tar Research Association. In addition much of the work of other bodies, such as the Safety in Mines Research Establishment of the Ministry of Fuel and Power and the Fuel Research Station of DSIR, is closely related to the Board's problems.

Various estimates have been made of the country's workable reserves. The latest was made by the Coal Survey in 1946 which considered there was certainly sufficient coal to maintain output for 100 years but that in some places economically workable reserves, particularly of special coals, would be worked out sooner.

¹ Further references to conditions of employment, labour relations, welfare, and the special legislation for safety in mines will be found on pp. 242-4.

THE NATIONAL COAL BOARD'S PROGRESS, 1947-53

TABLE 22

		1947	1948	1949	1950	1951	1952	1953
<i>Coal output</i>	million tons	187.2	197.6	202.7	204.1	211.9	214.3	212.5
	" "	10.2	11.8	12.4	12.2	11.0	12.2	11.7
	Total ..	197.4	209.4	215.1	216.3	222.9	226.5	224.2
<i>Manpower</i>	thousands	288	293	296	288	287	294	300
	" "	423	431	423	409	412	422	417
	All workers (a) ..	711	724	719	697	699	716	717
<i>Attendance</i>	thousands	94	74	52	55	73	77	52
	" "	68	66	68	76	64	55	63
	Net change ..	+26	+8	-16	-21	+9	+22	-11
<i>Productivity</i>	Shifts worked per man per week	4.69	4.71	4.67	4.72	4.81	4.79	4.70
	per year (b) ..	244	245	243	245	250	249	244
<i>Earnings</i>	tons per manshift	2.86	2.92	3.02	3.11	3.17	3.15	3.14
	" "	1.07	1.11	1.16	1.19	1.21	1.19	1.21
	shillings and pence per manshift (c) ..	36 10	41 1	43 1	44 10	48 6	54 0	56 10
<i>Colliery financial results</i>	shillings and pence per ton of saleable coal ..	28 10	33 1	34 4	35 6	38 10	43 2	45 5
	Costs ..	41 3	45 7	45 0	45 5	49 2	56 9	59 2
	Proceeds ..	40 3	47 3	47 11	47 10	51 2	57 3	61 1
	Profit (+) or loss (-) (d)	-1 0	+1 8	+2 11	+2 5	+2 0	+6	+1 11

(a) Yearly average. (b) 52 weeks. (c) Including the value of allowances in kind. (d) Operating profit or loss, i.e. before paying interest. Source: National Coal Board Report and Accounts 1955.

PETROLEUM

The petroleum industry in Britain dates back to 1850, when Dr. James Young, a Glasgow chemist, succeeded in obtaining lamp oil and lubricants from natural mineral oil occurring in the Derbyshire coal measures. The Scottish shale deposits, yielding similar products, were first worked in 1858.

Indigenous Production

Sources of crude oil within Britain (including shale oil) supply altogether less than 1 per cent of total United Kingdom requirements, the remainder being imported from overseas.

Current output of shale oil is drawn from 11 shale mines, retorted in four crude oil works and the crude products are refined in a central refinery at Pumpherston, near Edinburgh. Output of shale reached a peak of 3½ million tons in 1913, but the cost of the processes and other economic difficulties led to a reduction of output. This at present averages 1½ million tons a year, yielding, in 1953, some 104,000 tons of crude shale oil. From the latter some 100,000 tons of refined products were obtained. In 1953 some 110,000 tons of motor and aviation spirit were obtained from coal by hydrogenation, and 280,000 tons of refined benzole from coke ovens and gas works. Prospecting for crude petroleum has so far led to the establishment of four oilfields in Nottinghamshire (small amounts of oil were found in further borings at Plungar in Leicestershire in 1953), one in Lancashire and one very small field in Scotland.

International Trade

British and British-Dutch oil companies have been responsible for developing the oil resources of many countries to mutual advantage, especially in the Middle East, Far East and Caribbean areas.

Today they produce one-third of all oil entering into international trade, with a tanker fleet (part-owned by them and part on charter) amounting to about one-third of the world's tanker tonnage. (United Kingdom registered tanker tonnage is about one-fifth of the world's total.)

Consumption

Consumption of petroleum products in the United Kingdom has risen from just over one million tons in 1900 (mostly kerosene for lamps, and lubricants) to over 19 million tons in 1953 (predominantly gas, diesel and fuel oils and motor spirit).

Refineries

Up to 1939 three-quarters of the United Kingdom's supply of petroleum products was refined overseas, in accordance with the view, commonly held in the world oil industry at that time, that it was more economical to refine at the source of production. Since the second world war, however, the industry has come to favour the siting of refineries in the consuming areas. In this it has had Government support, both because of the need to save foreign exchange and because of the extra employment and other advantages to the economy resulting from the new development. The expansion programme of the United Kingdom was a substantial one, costing over the years 1947 to 1953 very nearly £200 million.

At the end of 1953 refinery capacity in the United Kingdom amounted to almost 28 million tons per annum; actual production of refined products rose from about 5 million tons in 1948-49 to 23·4 million tons in 1953. Exports of refined products

became possible, and their value reached over £71 million in 1953, while in the same year that of imports of refined products were valued at £90 million compared with £141 million in 1951.

ELECTRICITY SUPPLY

Public supply of electricity was first demonstrated at Godalming, Surrey, in 1881, following the development of the vacuum carbon-filament lamp between 1875 and 1880. From the earliest days a measure of public control has been a feature of the industry, and the Electric Lighting Act of 1882 authorized the Board of Trade to grant exclusive rights to local authorities, and to companies which the local authorities might ultimately take over, to supply consumers in a given area. By the turn of the century technical developments had led to a large expansion of distribution areas and the introduction of the electric motor as a source of motive power, and a variety of independent supply systems had grown up all over the country.

It was not until after the first world war that steps were taken to reorganize the industry on a national scale in order to realize the benefits of a standard and integrated system of supply. In 1919 the Electricity Commissioners were set up as a supervisory body and to secure reorganization through voluntary agreement. Then in 1926 the Central Electricity Board was established to co-ordinate more efficiently the generation of electricity. Its main duties were to concentrate the output of electricity in certain stations, selected for their efficiency and low operating costs; to connect these selected stations with one another and to local distribution undertakings by means of a national system of main transmission lines, known as the Grid; and to establish a standard alternating current frequency of 50 cycles. Thenceforward steady progress was made in putting this plan into effect and, by March 1948, 143 selected stations, out of some 300, were supplying 95 per cent of the electricity generated for public supply.

Organization under Public Ownership

With the exception of a few small non-statutory undertakings supplying a fraction of 1 per cent of the total supplies to the public, the electricity supply industry in Great Britain is now entirely under public control.

When it was transferred to public ownership in April 1948, under the Electricity Act of 1947, there was already in existence a *North of Scotland Hydro-Electric Board*, set up in 1943 as a non-profit-making body to develop the water-power resources of the Highlands and Islands and to distribute electricity in the more sparsely populated parts of Scotland not covered by existing undertakings.

The Act of 1947, under which the British Electricity Authority and the Area Electricity Boards took over the assets of the former municipal and private undertakings throughout the rest of Great Britain, made the North of Scotland Hydro-Electric Board solely responsible to the Secretary of State for Scotland for all generation and distribution in its area. This area was extended under the Act to include that part of Scotland north and west of a line running roughly from Dumbarton on the Firth of Clyde to a point just north of Newburgh on the Firth of Tay. In the rest of Scotland, the British Electricity Authority, together with the South-East and South-West Scotland Electricity Boards, was responsible to the Minister of Fuel and Power in all electricity matters.

In 1954, however, the Electricity Reorganization (Scotland) Act provided for a new *South of Scotland Electricity Board*, answerable to the Secretary of State for Scotland, to be set up on 1st April 1955, which will take over the British Electricity

Authority's functions in Scotland. The Minister of Fuel and Power will retain only three functions in regard to electricity in Scotland, namely, to act jointly with the Secretary of State in regard to staff pensions and safety measures, and to remain solely responsible for the certification of meters.

The *British Electricity Authority*, the central authority of the electricity supply organization, is a partly functional board, appointed by the Minister of Fuel and Power, consisting of a chairman, two deputy-chairmen, and six to eight part-time members. It is responsible to the Minister for the general policy of the whole electricity supply industry—originally throughout the whole of Great Britain except the North of Scotland area, but, as from 1st April 1955, under legislation already referred to, throughout England and Wales only. Its main function is to develop and maintain an efficient co-ordinated and economical system of electricity supply and it is responsible for the generation and bulk supply of electricity to the statutory Area Boards.

The *Area Boards* are responsible for the distribution of electricity. Each consists of a full-time chairman and deputy-chairman and four to six part-time members. Area Consultative Councils have been set up in the area of each Area Board to represent the interests of consumers. They each consist of between 20 and 30 members, of whom between 50 and 60 per cent are nominated by local authority associations. The chairman of each Area Consultative Council is an *ex-officio* member of the corresponding Area Board.

As part of its administrative arrangements, the Authority has established *Generation Divisions*, the areas of which correspond in general with those of the Area Boards.

At 31st March 1954, 50,400 persons were employed by the British Electricity Authority (Headquarters and Generating Divisions) and 137,000 by Area Boards and the North of Scotland Hydro-Electric Board; a total of 187,400 of which 11·4 per cent were women.

In Northern Ireland, electricity is generated by two municipal undertakings and one public board. The bulk of the electricity is acquired by the *Northern Ireland Joint Electricity Committee* set up by statute in 1948, for sale to statutory distribution undertakings. Of these the *Electricity Board for Northern Ireland* distributes electricity throughout the country with the exception of the cities of Belfast and Londonderry, where it is carried out by municipal undertakings.

Generation

Almost the whole of Britain's electricity is produced in coal-fired steam generating stations. Plentiful supplies of coal together with good rail and water transport for moving the coal, in contrast with the remote and scattered location of water-power resources, led to this preponderant development of electricity supplies from thermal generating stations. The development of hydro-electricity on any scale is comparatively recent.

In 1953, 64,068 million units (one unit=one kilowatt-hour), or 97·4 per cent of the public supply in Great Britain, was generated at steam stations, 1,745 million units, or 2·6 per cent, from water power, and 160 million units by other means, e.g., diesel and waste heat and refuse destruction. The high rate of expansion of output, which has been a feature of the industry since its earliest years, has been continued since the war. Total production in 1953 showed an increase of 5·8 per cent over 1952, and of nearly 76 per cent over 1945 (see Table 23).

Sales of electricity in Northern Ireland in 1953 totalled over 757 million units.

Generating capacity of the public supply industry in Great Britain as a whole at the end of 1953 totalled 19,256 megawatts (maximum continuous rating) compared

TABLE 23
PRODUCTION OF ELECTRICITY IN GREAT BRITAIN

Year	Million units generated	Year	Million units generated
1920-21	4,275	1945	37,284
1925-26	6,619	1950	54,965
1930	10,917	1951	59,974
1935	17,569	1952	62,395
1940	28,773	1953	65,973

Source: Ministry of Fuel and Power.

with 12,546 megawatts at the end of 1946. The Authority is at present implementing a large-scale programme of capital investment, for the regions it controls, which includes the provision of an increase, between the years 1946 and 1955, of 10,600 megawatts (sent out).

The industry is the largest consumer of primary fuel in Britain and in 1953 it used approximately 37 million tons, consisting mainly of coal. Average thermal efficiency of steam stations (i.e. the ratio of power output to the coal consumed) rose from 20.86 per cent in 1947-48 to 23.2 per cent in 1953 as new plant was brought into use. For the first time in Britain, three stations in 1953 attained a thermal efficiency of over 30 per cent, and altogether 11 stations operated throughout 1953 with efficiencies of over 28 per cent. A policy of standardization of equipment is being implemented wherever possible, especially in generators, boilers and other plant. The two standard sizes of turbo-alternators are 30,000 kilowatts and 60,000 kilowatts, and most sets now installed are of these sizes, although larger sizes up to 200,000 kilowatts are planned for operation by 1960.

To meet increasing demands for electricity and to save coal, generation from alternative fuels is being actively promoted. The chief alternatives are expected to be oil and nuclear energy. As regards oil, dual firing apparatus able to use either coal or oil is being fitted to a new power station at Marchwood, on Southampton Water; and similar apparatus may be installed in other power stations similarly situated on river estuaries and thus able to be fed conveniently from nearby oil refineries. As regards nuclear energy, an experimental nuclear power plant is being built by the Atomic Energy Authority (see p. 348) at Calder Hall, Cumberland, and a nuclear power reactor working on the 'breeder' principle at Dounreay, Caithness, Scotland. Construction of nuclear power stations of an advanced type before 1960 is contemplated by the Government, and in July 1954 the British Electricity Authority announced the setting up of a nuclear power branch of its engineering department and the appointment of a nuclear power engineer.

Transmission and Distribution

Main transmission lines—the Grid—cover most of the country. Those of the Authority totalled 4,682 route miles (6,471 circuit miles) at 31st March 1953, of which 4,174 miles were operated at 132,000 volts and the remainder at 66,000 volts and below. Operation of the Grid is effected through the Authority's eight operational areas, set up for the purpose and distinct from the divisions in which the generating side of the industry is organized; each area has a central control station and the operations are co-ordinated by the national control station in London.

In order to meet estimated demand during the next 20 years, a new Super-Grid of main transmission lines at 275,000 volts, which will make British electricity supply the most closely integrated power network in the world, is being promoted by the Authority. The first stage, already in progress, is due for completion in 1955. The Authority is also undertaking in conjunction with the corresponding French organization—*Electricité de France*—experimental trials with the object of linking British and French Grid systems by submarine cable in order to take advantage of different peak periods in the two countries.

The Area Electricity Boards distribute to consumers electricity acquired mainly from the Authority, but in part from other sources, e.g., collieries. There were 14.6 million consumers in December 1953, an increase of approximately 4 million on those supplied in March 1939. Industrial users are the group of consumers with the highest consumption, and demand from this sector is increasing rapidly. The principal domestic uses of electricity are for lighting, cooking, and for space and water heating, but the demand for numerous other domestic purposes is increasing.

Sales of electricity in Great Britain for the years 1948-53 to the various classes of consumers are shown in Table 24.

TABLE 24
SALES OF ELECTRICITY IN GREAT BRITAIN 1948-53

Million units

	1948	1949	1950	1951	1952	1953
Domestic and farm premises	13,576	13,657	14,911	16,939	16,869	17,691
Shops, offices and other commercial premises	4,469	5,035	5,765	6,354	7,115 (a)	7,948 (a)
Factories and other industrial premises	19,581	20,896	23,358	25,746	26,469	28,459
Public lighting ..	257	335	415	441	479	528
Traction	1,398	1,447	1,463	1,429	1,419	1,401
<i>Total</i> ..	39,281	41,370	45,912	50,909	52,351	56,027

Source: Ministry of Fuel and Power.

(a) Includes 194 million units in 1952 and 529 million units in 1953 in respect of combined shops and domestic premises where a special tariff is enforced.

The development of electricity supplies for rural areas has been facilitated by the change in the structure of the industry under the 1947 Act. During 1953 supplies were provided for a further 13,411 farms which raised the total to approximately 158,500.

The Area Boards are required to promote the standardization of systems of supply and types of electric fittings. The standardization of low-voltage supplies had been under consideration for many years, and in 1945 it was decided that the adoption of a voltage of 240 volts would be the practical and economic method of standardization of alternating current low-voltage supplies. Implementation, however, is restricted by shortage of labour and materials.

Development and Research

The comprehensive capital development plan to bridge the gap between ever-increasing demand and supply is limited by shortages of equipment and finance. Borrowing by the British Electricity Authority and Area Electricity Boards was limited to a maximum of £700 million by the Electricity Act, 1947. By 30th June 1954, borrowings had been authorized up to a total of £635 million. Under the Gas and Electricity (Borrowing Powers) Act, 1954, these powers were extended to £1,400 million. Capital investment by the industry in 1953-54 was approximately £168 million.

The setting up of the North of Scotland Hydro-Electric Board in 1943 marked the beginning of a new era of intensive water-power development in the Highlands of Scotland. A development scheme drawn up by the Board in 1944, showing the water-power resources which it proposed to examine, listed 102 hydro-electric projects with an estimated annual output of 6,274 million units of electricity. The ultimate output of Highland hydro-electric power is expected to be substantially higher and eventually may exceed 10,000 million units. In 1953, 913 million units were generated from this source compared with 322 million in 1949.

The British Electricity Authority undertakes research and may require the Area Boards to do so. Much of this research is carried out through the British Electrical and Allied Industries Research Association, established before the supply industry passed into public ownership. This is one of the 36 autonomous research associations in receipt of grants from the Department of Scientific and Industrial Research (see p. 344). But in July 1949 the Authority set up an Electrical Supply Research Council to advise it and its Area Boards on problems affecting the supply and use of electricity. The activities of this council, members of which include outside experts as well as staff of the Authority and Area Boards, are said to be 'complementary to those of the various research bodies appointed by the Government'. Direct research on a laboratory scale takes place at the British Electrical Laboratories, at Leatherhead, Surrey, extensions to which were opened by the Authority in July 1950. In 1950-51 a Research Liaison Committee was set up to facilitate collaboration between Headquarters and Generation Division staff. In 1952-53 one of two projected 15,000 kilowatt experimental gas turbine generating stations came into experimental operation. Experiments are also being conducted on wind power generation under the auspices of a joint committee of the British Electricity Authority and the British Electrical and Allied Industries Research Association, known as the Wind Power Generation Committee, which was set up in 1948.

Research is also conducted by the North of Scotland Hydro-Electric Board.

GAS SUPPLY

Public supply of gas in Britain dates from 1807, when Pall Mall, London, was first lighted with gas. In 1812 the London and Westminster Gas Light and Coke Company received a Royal Charter to supply gaslight in London. In the early years of the industry, gas was used almost exclusively for lighting and was provided by a growing number of company and municipal undertakings. Then, after the middle of the century and the invention of the Bunsen burner in 1869, gas was used increasingly as a source of heat for many purposes such as domestic cooking and space and water heating, in addition to a number of industrial uses. After 1880, however, gas for lighting purposes was subjected to increasing competition from the new electricity supply industry; but the invention of the Welsbach incandescent mantle in 1887, which raised the efficiency of gas lighting very considerably, enabled

the industry to hold its own while the supply of gas for purposes other than lighting increased.

The modern gas industry developed during the period between the wars when increasing competition from electricity had to be met and when changes in social habits and outlook were taking place. The industry undertook a large-scale programme of modernization of production and distribution and launched widespread sales promotion campaigns especially for the numerous uses of gas in the home. By 1939 the industry had become mainly a supplier of heating instead of a supplier of lighting.

Organization under Public Ownership

Under the Gas Act, 1948, the gas industry was brought under public ownership and control on 1st May 1949. The assets of 991 undertakings, of which 269 belonged to local authorities, were vested in 12 Area Gas Boards. Together they cover the whole of Great Britain and are charged with the statutory duty to develop and maintain an efficient, co-ordinated and economical system of gas supply to domestic, industrial and other consumers. The national body is the *Gas Council*, which is responsible for advising the Minister of Fuel and Power on questions affecting the gas industry. It consists of a full-time chairman and deputy chairman and the 12 chairmen of the Area Boards. It is a co-ordinating council and, *inter alia*, is responsible for advising the Minister on questions affecting the gas industry.

The *Area Gas Boards*, which have a large measure of financial and operational responsibility, are charged *inter alia* with the responsibility of manufacturing and distributing gas to consumers. Their powers differ from those of the Electricity Area Boards, which are limited to the distribution and sale of current, while the central executive body—the British Electricity Authority—is charged with the duties of generation and transmission. Each of the Area Gas Boards consists of a full-time chairman and deputy-chairman, in some cases one full-time member, and always five or six part-time members including the chairman of the Area Consultative Council. There is no common pattern of organization; each Board is fully independent and has devised its own subordinate structure.

A link between the industry and the consuming public was established under the nationalization scheme by the creation of a *Consultative Council* in each board area. These councils consist of not fewer than 20 and not more than 30 members, of whom between 50 and 75 per cent are chosen from panels of persons nominated by the local authority associations.

In Northern Ireland, as in the case of electricity, the gas supply industry remains in the hands of a number of municipal undertakings and statutory and non-statutory companies.

Production

In 1953 in Great Britain 27 million tons of coal were carbonized by gas undertakings and 26 million tons by coke ovens operated outside the gas industry. About one quarter of the output of gas from coke ovens is sold to gas undertakings for general distribution; the remainder is mainly consumed at the ovens or at collieries or steelworks.

In 1921, 250,300 million cubic feet of gas was manufactured by authorized gas undertakings or acquired from coke ovens, and the number of consumers was 7.6 million. By 1953, gas manufactured and acquired from coke ovens for distribution had risen to 564,635 million cubic feet and the number of consumers had risen to about 12.3 million, an increase of 126 per cent in the volume of gas available and of about 62 per cent in the number of consumers.

The total number of persons employed in the gas industry in December 1953 was 144 thousand, including 13 thousand women. There has been an increase of 9 thousand in the number of workers since September 1948. Table 25 illustrates the trends in the manufacture of gas over the last three decades, showing the steady rise in the manufacture of gas at gasworks and the very rapid increase in the acquisition of supplies from coke ovens and other sources.

TABLE 25
PRODUCTION AND AVAILABILITY OF GAS IN GREAT BRITAIN, 1921-53
Thousand million cubic feet

Year	Gas made at gasworks				Gas bought from coke ovens and other sources	Total gas available
	Coal gas	Water gas	Other gas	Total		
1921 (a)	194.5	49.9	4.6	249.0	1.3	250.3
1925 (a)	231.3	48.2	4.3	283.8	4.8	288.6
1930 (a)	255.3	39.5	5.0	299.8	13.2	313.0
1935 (a)	260.5	32.4	6.0	298.9	20.5	319.4
1940 (a)	260.8	29.8	7.1	297.7	36.9	334.6
1945	302.4	65.3	8.5	376.2	51.5	427.7
1950	382.4	84.8	14.1	481.3	63.1	544.4
1951	399.1	84.1	14.9	498.1	65.9	564.0
1952	409.6	80.4	15.7	505.7	68.5	574.2
1953	406.2	79.1	10.2	495.5	69.1	564.6

Source: Ministry of Fuel and Power.

(a) Statutory undertakings only.

Consumption

Nearly three-fifths of all gas produced is sold for household use and the remainder for industry, commerce and public services. (See Table 26.)

TABLE 26
CONSUMPTION OF GAS IN GREAT BRITAIN, 1948-53
Thousand million cubic feet

	1948	1949	1950	1951	1952	1953 (provisional)
Domestic	288.2	286.5	287.1	294.2	288.8	285.1
Industrial	105.0	109.2	122.6	133.2	137.0	137.2
Commercial	52.6	58.0	61.6	68.9	71.8	72.5
Public administration ..	11.1	9.9	11.2	11.2	11.0	10.5
Public lighting	8.2	10.4	11.6	11.0	11.0	10.6
Total	465.1	474.0	494.1	518.5	519.6	515.9

Source: Ministry of Fuel and Power.

Domestic Use. While an accurate statistical analysis of the domestic load is not possible, evidence given before the Ridley Committee (on Fuel and Power Policy), appointed by the Minister of Fuel and Power in 1951, suggested that about 70 per cent of the domestic load was used for cooking, the remaining 30 per cent being spread over space heating, water heating and other installations. Most homes in Britain are now supplied with gas, except in some rural areas where, owing to difficulties in storage and transmission, gas is not economic. These difficulties have been overcome to some extent by the use of local high-pressure storage tanks, but this development is unlikely to grow owing to the steady extension of rural electricity supplies. Bottled gas, derived from petroleum, is widely used in rural areas.

Industrial and Commercial Use. Gas is used extensively in industries which require a simple control of temperature to a fine degree of accuracy. Among such industries are pottery and certain processes in the manufacture of iron and steel products. Industrial use of gas increased greatly during the second world war and reached 103 thousand million cubic feet in 1943. By 1952 industrial consumption had risen further to 137 thousand million cubic feet.

By-products

With the rapid increase in the volume of gas produced, the problems of the disposal of substances which were regarded originally as the 'waste' products of the carbonization of coal (notably tar, benzole, sulphur and ammonia) became increasingly important.

Production of coke at gas works in 1953 was 12,254,000 tons, and at coke ovens 17,481,000 tons. The gas industry and coke ovens jointly produce over 2½ million tons of crude coal tar and about 100 million gallons of crude benzole a year. These products, together with those of the sulphur and ammonia type, provide a source for the manufacture of a long and ever-growing list of essential derivatives which includes dyestuffs (of which Britain now produces more than 80 per cent of its requirements), fertilizers, plastics, germicides (the sulphonamides and sulphanilamides), insecticides, refrigerants, perfumes, and synthetic yarns.

With further research and development, more especially in the field of organic chemistry, the production of coal carbonization derivatives is becoming of increasing importance to the economy of the industry.

Development and Research

The chief objects of capital expenditure since the war have been to overtake arrears of plant renewal; plans for substantial expansion have had to be postponed.

Under the Gas Act, 1948, borrowing by the Gas Council and the Area Gas Boards was limited to £250 million. Borrowings to a total of £235 million had been authorized up to 30th June 1954. The Gas and Electricity (Borrowing Powers) Act, 1954, extended these borrowing powers to £450 million.

Capital expenditure in 1953 was £48 million, compared with £46 million in 1952 and £34 million in 1950.

The post-war structure of the industry has already permitted considerable integration by the linking of undertakings for the transmission of gas, enabling production to be concentrated in the most efficient units. Progress is also being made in interconnections for the reception of gas from coke ovens, notably in the East and West Gas Grids of South Wales.

Supplies of suitable coal to meet a steadily increasing gas consumption are becoming more difficult to obtain. Investigations into alternative sources of gas are being actively undertaken by the Gas Council. Residual gases from oil refineries (butane or propane) are used in installations at Whitland, Carmarthenshire, and at

Bungay and Framlingham in the Eastern area. Progress has also been made with the possible use of methane—a gas drained from coal mines. In agreement with the National Coal Board, Area Gas Boards have agreed to schemes for using methane at Point of Ayr Colliery in North Wales and at Haig Pit at Whitehaven, in Northumberland. Plants for the gasification of heavy oil are in operation. Towards the end of 1953 the Gas Council announced that it would spend £1 million during the next five years on a survey, to be carried out by an oil prospecting company, to try to discover natural gas within Britain in commercial quantities, and drilling operations are in progress in several areas.

The research organization established by the Gas Council consists of a research committee which advises the Council on policy and sees that it is carried out; and two research stations, one in London and one in Birmingham. Research is also carried out on behalf of the Gas Council at Leeds University and by the British Ceramic Association (an autonomous research association grant-aided by DSIR, see p. 344). Further, the Council and Area Boards support a number of research associations, the work of which has a bearing on the gas industry. These include the Coal Tar Research Association, the British Coal Utilization Research Association and the National Benzole Association. The underlying aim of the Council's research programme is to 'make the most economic use of the natural resources available to the nation, whether by improvements in existing processes of gas manufacture, by seeking new processes or new sources of supply of gas and in the extraction and use of other products of gas-making'.

During the past two years the North Western Gas Board has been conducting a series of experiments with the object of accelerating the manufacture of coal gas. A new process, first thought out in 1917 but not then seriously developed, consists of injecting gas into the base of a standard vertical retort during carbonization. Results, still to be confirmed by full-scale operational tests, already suggest that substantial economies may be obtained both in capital expenditure and in running costs.

FUEL EFFICIENCY

The Government has for some time sought to promote efficiency in the use of fuel, among both industrial and domestic users, and has been assisted by various bodies representative of producers and consumers.

The *Coal Utilization Council*, consisting of representatives of coal producers, distributors, coal appliance manufacturers and the Ministry of Fuel and Power, was formed in 1932 to give information and advice on the best use of solid fuel, including the choice of installation and operation of solid fuel appliances, to domestic consumers and retailers of appliances. During the second world war the reduction in coal production and the demands of war industry made economy imperative. When the Ministry of Fuel and Power was formed in 1942, an *Industrial Fuel Advisory Service* with regional branches was incorporated within it. In 1943 the *Women's Advisory Committee on Solid Fuel*, consisting mainly of representatives of appliance manufacturers, women's organizations and others interested in the housewife's point of view on domestic fuel arrangements, was formed to advise women on the use of solid fuel for heating and cooking.

Further measures have been taken during the last three years. Under a scheme introduced in 1952, loans on favourable terms are available from the Exchequer to industrialists for financing approved fuel-saving schemes. At present these loans are interest-free for the first two years, repayment may be spread over a maximum period of twenty years and no security is required. In October 1953 a non-profit-making company, known as the *National Industrial Fuel Efficiency Service*,

sponsored by the British Productivity Council (see p. 127), was formed to promote fuel-saving in industry. The new company, which replaced the Industrial Fuel Advisory Service of the Ministry of Fuel and Power, came into operation on 1st May 1954. It provides advice and services to all non-domestic fuel users both directly and through independent consultants and fuel technologists. A survey into the generation and usage of steam in British industry is being carried out by the Ministry with a view to effecting large savings in the use of fuel. The electricity and gas industries, the largest consumers of primary fuel, are succeeding each year in obtaining more energy from each ton of coal they use by increasing the thermal efficiency of their plants.

WATER SUPPLY

Britain has a sufficient rainfall to ensure enough water to supply all its domestic and industrial requirements. Water problems are mainly concerned with abstraction, storage, treatment and distribution. Supplies are obtained partly from surface sources such as mountain lakes, streams impounded in upland gathering grounds and by river intakes, and partly from underground sources by means of wells, adits and boreholes. Unlike other public services in Great Britain, such as electricity and gas, water supply remains in the hands of a large number of water undertakings of different kinds. Ministerial responsibility for national water policy rests with the Ministry of Housing and Local Government in England and Wales, with the Secretary of State for Scotland in Scotland and with the Ministry of Health and Local Government in Northern Ireland.

Growth and Development of Water Supplies

It was not until the nineteenth century that the provision of water supplies became a general public service and then only after long and bitter controversy. It was largely due to the efforts of Edwin Chadwick and his colleagues, who demonstrated the dangers to pure water supply and sanitation brought about by the new industrialization, that the Public Health Act, 1848, became law. The Act laid down a common minimum standard of sanitary service and became the foundation of all subsequent legislation on sanitation. For example, the Sanitary Act of 1866 prescribed that local authorities should inspect their areas and suppress nuisances.

From the middle of the nineteenth century onwards a number of separate large water undertakings were set up to provide adequate supplies of pure water to the expanding urban population and the water supply system developed rapidly in piecemeal fashion with some overlapping and waste. Over the past eighty years there have been a number of amalgamations; the outstanding example has been the *Metropolitan Water Board*, established in 1902, which is responsible for providing an adequate supply of pure water in the London area. Eight separate undertakings were combined to form the Board, which is probably the largest single water undertaking in the world, and supplies about 330 million gallons daily to nearly 7 million people in Greater London. The Board consists of 66 part-time members who are the elected representatives of the various local authorities within the Board's area of operations, including one representative each from the Thames and Lee Conservancies, and a chairman and vice-chairman, chosen by members of the Board for their experience in water undertakings.

To meet the urgent need for co-ordination and long-term planning, the Ministry of Health was assisted from 1923 onwards by an Advisory Committee on Water, and since 1924 the responsible Ministry has encouraged the formation of Regional Advisory Water Committees for important areas having a common water problem.

The Water Act, 1945, gave the Minister of Health powers to implement national water policy to promote the conservation and proper use of water supplies in England and Wales. Provision was also made for a Central Advisory Water Committee to advise the Government on general questions relating to water. The Act dealt with the local organization of water supplies and the powers and duties of local authorities and water undertakings. Local authorities were required to supply piped wholesome water to every part of their districts where there were houses or schools, unless it was impracticable to do so at reasonable cost. They were also required to maintain wells, springs and water mains, and to ensure that supplies were free from pollution.

The provision of piped supplies for rural districts was assisted by an initial grant of £1 million under the Rural Water Supplies Act, 1934; further grants of up to £45 million (in England and Wales) were provided under the Rural Water Supplies and Sewerage Acts, 1944 and 1951.

Since the Water Act was passed, more than 100 smaller water authorities in England and Wales have been absorbed by larger authorities or by the creation of joint boards. Notable examples are the North Devon Water Board, which took over a water company and the undertakings of 10 rural authorities, and the Mid-Northamptonshire Water Board, which absorbed 13 small undertakings. The principal object of such amalgamation is the constitution of more efficient units in the water supply industry.

On the formation of the Ministry of Local Government and Planning in January 1951, the responsibilities of the Minister of Health in regard to water were transferred to that Ministry, renamed the Ministry of Housing and Local Government in November 1951.

The Ministry has completed some 30 surveys of existing water requirements and supplies covering the whole of England and Wales, which provide a basis for planning possible future developments.

Present Supplies in England and Wales

In March 1954 in England and Wales there were 893 local authority water undertakings, 56 joint water boards (including bulk supply boards) and 14 joint water committees, 104 statutory water companies, 34 non-statutory water companies, and 6 private proprietors with statutory powers. A considerable number of private proprietors without statutory powers also provide small supplies. Water undertakings vary greatly in size; of the statutory undertakings, some 2½ per cent supply about half the population.

The water storage capacity in England and Wales is rather more than 236,000 million gallons, or enough to supply those countries for more than 100 days. Statutory water undertakings together supply about 1,750 million gallons a day or about 40 to 45 gallons per head of the population (including water supplied to industry). They spend about £22 million a year on capital development, financed mainly by loans, the interest on which, together with running costs, is paid by the undertakings from a total annual income of some £50 million. This income is derived from local water rates or charges levied on domestic consumers calculated as a percentage of the annual rateable value of their property and from prescribed charges for meters in the case of most industrial users. In addition to supplies from water undertakings, large quantities of water are taken by industry from rivers or underground sources.

Today, piped water supplies reach some 95 per cent of the total population of England and Wales. More than 70 per cent of persons living in rural areas have piped water supplies or are within easy reach of water mains.

The steady growth of towns in England and Wales has meant increased demands for water, and, in so far as such growth involves covering the ground with impervious material so that water which previously would have percolated through to underground natural reservoirs is now carried off in drains and rivers, some diminution in water supplies may result. On the other hand, improved methods of purification in recent years have resulted in greater use being made of water drawn from the lower reaches of rivers.

Present Supplies in Scotland and Northern Ireland

Ninety-five per cent of the total population of Scotland is reached by piped supplies, as compared with 82 per cent in the country areas. Although the water problem in Scotland is broadly similar to that of England and Wales, the differences in geography, law and organization have led to special legislation being enacted. The Water (Scotland) Act, 1949, provided for a £20 million grant for rural water supplies, set up the Scottish Water Advisory Committee to advise the Secretary of State for Scotland, and made the domestic water rate uniform over the country area of a county.

Northern Ireland has abundant supplies of fairly uniform soft water. Gravitation water systems supply the large towns. The Water Supplies and Sewerage Act (Northern Ireland), 1945, places certain statutory obligations on local authorities with regard to water supply, drainage and sewerage, and provides grants towards the cost of improvements which are made.

River Boards

Under the River Boards Act, 1948, 32 River Boards have been set up to carry out and co-ordinate the various aspects of river management previously performed by a large number of separate authorities, including catchment boards responsible for land drainage, fishery boards and local authorities.

Each River Board covers a River Board Area. The River Board Areas together comprise the whole of England and Wales, except the Thames and Lee Catchment areas (which are under the jurisdiction of the Thames and Lee Conservancy Boards¹ respectively), the administrative County of London, and areas adjoining that county not included in any catchment area.

River Boards are composite bodies representing local government, agricultural and fishery interests, and most of their expenses are apportioned among the councils of the counties or county boroughs concerned in them in proportion to the rateable values of property in the River Board Area.

River management in Scotland and Northern Ireland has not been concentrated to the same extent.

Inland Water Survey

A survey is being carried out to provide Government Departments, water undertakings, industry, agriculture and other water users with information on the yield, behaviour and quantity of the nation's water resources. The field work on surface water is being undertaken mainly by the River Boards under the guidance of the Ministry of Housing and Local Government and the Ministry of Agriculture and Fisheries. The other two aspects of the survey, rainfall and underground

¹ The Thames and Lee Conservancy Boards are similar in constitution and powers to the River Boards. Because London draws most of its water supplies from these two rivers, however, they have long been regulated under powers granted by Acts of Parliament of purely local application.

water supplies, are the responsibility of the Meteorological Office (see p. 40) and the Geological Survey and Museum respectively. There are arrangements for consultation between the interested bodies.

Prevention of River Pollution

A sub-committee to investigate measures for the prevention of river pollution was set up by the Central Advisory Water Committee in 1949. Its recommendations were incorporated in the Rivers (Prevention of Pollution) Act, 1951, which revises and strengthens previous legislation. There is a similar Act for Scotland. It is now an offence for any person to permit any polluting matter, solid or liquid, to enter a river. Enforcement of the Act is vested in the River Boards and the Thames and Lee Conservators.

SOME MANUFACTURING INDUSTRIES

In terms of production and exports the most important British industries are the metals and metal-using group (which contributed more than half the total value of United Kingdom exports in 1953), the textiles group and the chemicals group. This section gives notes on some of the industries in these broad categories as well as on some traditional British craft industries and some newer industries which have started, or greatly increased, their export trade since the second world war.

METALS INDUSTRIES

The metals industries are those producing iron and steel and the various non-ferrous metals, which are the basic materials of the metal-using group.

Iron and Steel Industry

Britain pioneered the application of coal to the smelting of iron ore from the seventeenth century onwards and was responsible for the technical development which led to the great expansion of steelmaking in the second half of the nineteenth century. Today Britain is the world's third largest producer (after the United States and the Soviet Union) and is renowned for the quality of its special and alloy steels. In 1953 direct exports of steel amounted to 2.2 million tons (in terms of ingot equivalent), at a value of £141 million, in addition to indirect exports through the sales of the steel-consuming industries. As will be seen later in this section, export sales of the vehicles industries (which are the major consumers of steel) amounted to some £470 million in 1953.

At the beginning of the twentieth century British steel production averaged about 5 million tons a year and 11.2 million tons in the pre-war years 1935 to 1938. Output in 1945 was 11.8 million tons.

Modernization of the industry was interrupted by the war. A post-war development plan was drawn up in 1945 by the British Iron and Steel Federation, the main trade organization of the industry. This plan, which was generally approved by the Government in 1946, aimed to modernize steelmaking capacity in Britain and to increase it to 16 million tons a year by the early 1950s. In fact, the objective was exceeded with the production of 16.4 million tons in 1952 and 17.6 million tons in 1953. Work on the greater part of a further development plan to raise the country's steel production to at least 20 million tons by 1957 is well in hand. Notable projects completed under the first plan include the Abbey Works at Margam, the tinplate works at Trostre (both in South Wales) and the new sintering process incorporated in the *Seraphim* extensions at Scunthorpe, in Lincolnshire, where the largest blast furnace in Europe was installed in 1954.

About 450,000 people were employed in those industries generally regarded as iron and steel manufacture at the end of 1953, a figure only slightly greater than at the end of 1948.

South Wales and the north-east coast of England are the United Kingdom's two greatest steel-producing areas, together responsible for an annual production of well over 7 million tons. South Wales is engaged mainly in the production of flat products, and is especially noted for its tinplate production. In the north-east coast area of England production is concentrated on heavy sections and rails, and plates for the shipbuilding industry. Scotland, with an annual production of over 2 million tons, finds its chief internal markets in the shipbuilding and engineering industries of the Clyde Valley. Sheffield is known all over the world for its alloy and special steels.

The iron and steel industry has been subject to some form of public supervision since 1932 when a Government-appointed body, the Import Duties Advisory Committee, gave special attention to the reorganization of the industry. During the second world war detailed control was exercised by the Iron and Steel Control of the Ministry of Supply, and from 1946 to 1949 the industry was supervised by an Iron and Steel Board responsible to the Minister of Supply. On 15th February 1951 the greater part of the industry came into public ownership by virtue of the Iron and Steel Act, 1949. On that day the securities of the eighty major iron and steel producing companies were transferred from private shareholders to the Iron and Steel Corporation of Great Britain established under the Act, although the companies retained their separate identities and managements and the control of their subsidiaries.

The 1949 Act was repealed by the Iron and Steel Act, 1953, which established an Iron and Steel Holding and Realization Agency with the duty of returning these companies to private ownership. By the middle of 1954 considerable progress had been made with this task. The Act also provided for the establishment of an Iron and Steel Board to exercise a general supervision over the iron and steel industry with a view to promoting efficient, economic and adequate supply of iron and steel products under competitive conditions. The Board was appointed by the Minister of Supply in June 1953 and includes, in addition to the chairman and two other full-time members, a number of part-time members drawn from steel producers, steel consumers and trade unions. The Board has particular powers in relation to development, the procurement of raw materials and prices. Maximum prices for most iron and steel products are determined by the Board.

Non-ferrous Metals Industries

Non-ferrous metals industries in Britain contributed direct exports to the value of £90 million in 1953. Apart from a little mining of lead, tin, tungsten and copper, the British industry consists of factories for smelting, rolling, extrusion, drawing, casting and fabrication, chiefly of aluminium, copper, lead, zinc, tin, magnesium and the precious metals. Some of these and other non-ferrous metals, such as nickel, molybdenum and tungsten, are used in steel alloys, and science is finding new uses for non-ferrous metals of all kinds which are vital to industries as diverse as, for example, production of nuclear energy (uranium), jet aircraft engines (aluminium, columbium, magnesium, titanium), and electronic apparatus (selenium, tungsten, germanium).

METAL-USING INDUSTRIES

Of the metal-using industries the vehicles group makes the largest contribution to the export trade (some £470 million in 1953). It employed at the end of 1953 over

one million people: 209,000 in shipbuilding and repairing, 293,000 in the manufacture of motor vehicles and cycles, 218,000 in the manufacture and repair of aircraft, 142,000 in the manufacture of parts and accessories for motor vehicles and aircraft, and 171,000 in the manufacture and repair of locomotives, railway carriages, wagons and trains.

Motor Vehicles Industry

In size and value the vehicles industries are headed by the motor vehicles industry, which comprises the manufacture of cars and commercial vehicles other than tractors. Exports in 1953 (including parts) were valued at £222 million. Britain is the world's largest exporter of these products, and has been responsible for some of the latest technical advances, such as the application of the gas turbine engine to motor car propulsion, for which at least four British manufacturers have patents.

On the production side, some of the new assembly plants in Britain, electrically controlled and using the minimum of labour, may stand comparison with similar plants anywhere in the world for efficiency and reliability.

Total production of motor vehicles in Britain rose from 10,500 in 1908 to a peak of 783,672 in 1950. This total fell slightly in 1951, through steel shortages, and again in 1952, through restriction in some export markets, but rose again in 1953 to the record level of 834,901, of which half was exported. Production and exports in all categories of motor vehicles showed further substantial increases in 1954. An encouraging factor in the last few years has been the increase in exports of cars to the United States and Canada. In 1953 the total of cars sent to the United States declined, but that to Canada considerably increased.

The industry is to be found mainly in the Midlands and in London and in south-east England, but is represented in most regions. Motor vehicle producers may be divided into four main groups: (1) the 'Big Five', which control between them 12 establishments producing over 90 per cent of the output of cars and light vehicles; (2) specialist producers of cars; (3) specialist producers of cars and commercial vehicles; (4) manufacturers of commercial vehicles excluding the 'Big Five' and specialist producers. The two largest firms in the first category, Austin and Nuffield, were acquired by a holding company, the British Motor Corporation, in February 1952, with the object of obtaining economies and standardization. This group, with assets totalling £66 million, is the fourth largest motor manufacturing group in the world, representing some 35 per cent of British output of cars and commercial vehicles. Capital expansion plans involving more than £120 million over the next five years were announced by the leading manufacturers in October 1954.

The principal trade association in the industry is the Society of Motor Manufacturers and Traders (SMMT), founded in 1902, which holds in London a Motor Exhibition annually and a Commercial Motor Exhibition every two years.

Research is carried out by the Motor Industry Research Association, at Lindley, Warwickshire, an autonomous body founded in 1946 and partly financed by the Department of Scientific and Industrial Research (see p. 344) but mainly by the industry and the SMMT; and also by DSIR's Mechanical Engineering Research Laboratory at East Kilbride, Scotland.

Cycle and Motor Cycle Industry

Exports of motor cycles, motor tricycles and cycles (including parts) made in Britain earned £34 million in 1953. Exports of pedal cycles and parts alone were valued at £25 million. The industry making cycles is quite separate from, though akin to, the motor vehicles industry. Britain is the world's largest exporter of these products.

A Scotsman, McMillan, built the first pedal cycle in 1840. Factory production began in 1868, when a sewing-machine firm undertook a contract for 100 pedal cycles. The modern pedal cycle industry is one of the most concentrated in the country, three large firms being responsible for about two-thirds of the output. Cycle manufacturers buy some components from specialist component manufacturers, often the same firms which supply the motor vehicles and aircraft industries. The chief centres of production are at Nottingham and Birmingham. The labour force is about 20,000, excluding persons employed by specialist component firms. Output rose from two million cycles in 1935 to four million in 1952; in 1953 it was over three million.

The trade association of this industry is the British Cycle and Motor Cycle Manufacturers' and Traders' Union, which holds an annual show in London, usually in November.

Aircraft Industry

Aircraft exports, including parts other than tyres, reached a value of £65 million in 1953. British contributions to aeronautical science have been numerous, from the early nineteenth century, when Sir George Cayley founded the science of aerodynamics, to the twentieth century, when the use of a gas turbine for jet propulsion, for which Sir Frank Whittle was granted a patent in 1930, came to fruition with the flight of the first jet-propelled aircraft on 15th May 1941. Since the second world war, the United Kingdom aircraft industry (which dates from 1905) has built over 1,000 commercial transport aircraft for operators at home and abroad. It has concentrated mainly on the development and production of gas turbine aircraft for civil and military purposes, although a range of piston-engined types is still produced.

A new private company entitled Air Finance Ltd. (see p. 259) was formed in September 1953 to assist aircraft manufacturers to promote exports by offering credit facilities to oversea customers.

The industry employs over 230,000 people compared with 134,219 in 1948, 1·8 million in 1944 (the war-time peak) and 35,890 in 1935.

The representative body of the United Kingdom aircraft industry is the Society of British Aircraft Constructors, founded in 1916. The annual exhibition and flying display held by this society at Farnborough is a fixture of international importance.

The greater part of research on fundamental problems of aerodynamics, structures and engines is carried out by the Ministry of Supply. This work is done in collaboration with the industry and results are made known to manufacturers, who are in close and constant touch with the Ministry's establishments. The actual design, construction and initial testing of aircraft are, however, carried out by the manufacturer. British technical achievements recently disclosed include the by-pass type of engine (the first distinct step forward in the evolution of the aircraft gas turbine engine), the delta and aero-isoclinic wing shapes, and the first experimental machine to be capable of vertical take-off from a normal horizontal position.

Shipbuilding

Ships built in British yards and exported to other countries in 1953 were valued at £40 million, compared with £36 million in 1952.

Britain has for centuries been one of the most important shipbuilding countries. Modern shipbuilding dates from the middle of the nineteenth century, when the iron and steam-driven vessel replaced the earlier sailing ship. Britain led the way in the substitution of steel for iron and in the development of the steam turbine,

and within the last few years has produced the first ships to be powered by gas turbines. Between 1890 and 1913 Britain produced more than half the world's new tonnage, and in 1920 she launched over two million tons, still the peace-time record for the industry. The problem of surplus capacity and periodic heavy unemployment appeared in all shipbuilding countries during the inter-war years. During the second world war the industry was fully occupied in building and repairing warships and merchant ships of all kinds, and a high level of activity in the building and repair of merchant ships has continued since 1945.

Shipbuilding is mainly an assembly trade, and Britain's economy is well equipped to meet this demand, with a highly developed iron and steel industry to provide plates, sections and angles, a modern marine engineering industry, and a widely diversified pattern of general industry to supply the numerous components that go to the making of a ship.

Well over three-quarters of the tonnage of ships built in the United Kingdom is produced in four areas:

- (1) On the River Clyde in Scotland (where the *Queen Mary* and *Queen Elizabeth* were built in the inter-war years).
- (2) On the north-east coast of England—along the lower reaches of the Rivers Tyne, Wear and Tees, and at West Hartlepool.
- (3) On the north-west coast of England—on the River Mersey and at Barrow-in-Furness.
- (4) At Belfast, in Northern Ireland, where the largest individual shipyard is situated, and where the *Southern Cross*, a passenger liner of revolutionary design, was launched in 1954.

In each of these areas there is capacity for building warships and all types of merchant ships from large passenger liners and tankers to small sea-going ships such as coasters and cross-Channel steamers. Ships are also built in the Southampton area, in the Isle of Wight, and along the estuary of the Rivers Forth and Tay, while numerous places along the coast build fishing vessels, yachts, harbour craft and barges.

Repair yards and dry docks are situated in all the great ports and there are important repair facilities in all the shipbuilding areas.

There are many firms engaged in shipbuilding, although nearly half the output of new ships is concentrated in the hands of about a dozen.

In the years 1946 to 1948 British shipyards launched nearly half the world's total new tonnage. Since then, with the recovery of the shipbuilding industries in Germany and Japan and the rebuilding of shipyards in some European countries after their destruction in the war, the British shipyards have built a rather smaller proportion of world tonnage, though total output from the shipyards has been fully maintained. The construction of tankers still predominates in the British yards, 55 per cent of the tonnage under construction at the end of 1953 being tankers.

In mid-1954 there were about 213,000 employees in the shipbuilding and repairing industries, including those employed in naval dockyards.

Locomotives Industry

Locomotives, rail vehicles and parts provided exports valued at £42 million in 1953.

Britain was the first country to develop the locomotive railway and British engineers pioneered railway development in all parts of the world.

Locomotive production in Britain has come to be divided into two separate

sections: one of these comprises the locomotive works of the main British Railways, and is engaged in building and repairing locomotives and rolling-stock for their use; the other consists of private firms providing locomotives for all purposes, but mainly for export.

The first section was taken over from the main railway companies of Great Britain by the British Transport Commission, when rail transport was nationalized.

Locomotive building and repairing by British Railways is carried on in such railway centres as Crewe, Swindon, Doncaster, Darlington, Derby, Eastleigh and Ashford, and in a number of other construction and repairing shops. In 1953 some 38,000 British Railways staff were employed on construction and repairing in locomotive workshops, and another 42,000 in carriage and wagon workshops.

The second section of the industry comprises a number of firms which make steam, electric, and all forms of diesel locomotives as part of their other engineering activities. These firms employ about 60,000 workers but not more than one-third are employed in locomotive building. Of this third, about 14,000 are engaged in the production of steam locomotives, mainly in a few large firms in south-east Lancashire and the west of Scotland, and, on a smaller scale, on the north-east coast of England and in the West Riding of Yorkshire.

Table 27 shows the production of locomotives by British Railways workshops and private firms during 1953 analysed according to type of locomotive and its destination.

TABLE 27
UNITED KINGDOM LOCOMOTIVE PRODUCTION IN 1953

	United Kingdom Railways	Industrial	Export
By British Railways' Workshops			
Steam	140	—	—
Diesel and diesel-electric ..	41	—	—
Carriages	648	—	—
Wagons	13,407	—	—
By private manufacturers			
Steam	11	72	275
Diesel and diesel-electric ..	8	205	336
Carriages	485	—	299
Wagons	27,413	716	9,170

Source: Ministry of Supply and British Transport Commission.

During the same period 7 electric locomotives were also produced for main line railways in the United Kingdom, as well as a considerable number for export.

The Electrical Engineering Industry

The electrical engineering industry, using that term to cover the manufacture of electrical and allied machinery, electronic apparatus (see p. 186), domestic and commercial appliances, insulating materials, cables and wires and electric locomotives and vehicles, has been, during the last few years, one of the largest export groups, with exports totalling £179 million in 1953. The industry in its present

form is not much more than fifty years old. Output in 1953 was valued at £750 million compared with £14 million in 1907 and £310 million in 1946. Some 600,000 people were employed in the industry in all its branches in 1953.

Machinery Industry

Machinery in one word embraces a vast range of industries including agricultural machinery (see p. 181), ball and roller bearings, boilers, motors, excavators, mechanical handling equipment, furnace plant, gas and chemical machinery, machine tools, oil refining plant (see p. 183), office machinery (see p. 183), packaging machinery, prime movers, pumps, sewing machines, textile machinery, and electrical machinery (also included under electrical engineering above). Exports of this whole group in 1953 totalled in value £405 million, compared with £422 million in 1952, £363 million in 1951 and £318 million in 1950.

Textile Machinery

One of the oldest of Britain's mechanical engineering industries is the textile machinery industry which developed rapidly after the introduction of mechanical spinning and weaving towards the end of the eighteenth century. The industry now gives employment to about 83,000 people and comprises some 600 firms making every kind of machine and accessory for processing all types of natural and synthetic fibres. It enjoys a world-wide reputation, not only for the high quality of its products but also because it can offer a complete and modern range of equipment consisting of: spinning machinery, including machinery for all the preparatory processes; winding machinery and machinery for other processes prior to weaving; weaving machinery; knitting, hosiery and lace machinery; printing, dyeing and other finishing machinery; bast and leaf fibre machinery, of which the United Kingdom is still by far the world's largest supplier; and all types of mill stores and textile machinery accessories. In 1953 exports were valued at over £40 million.

To assist the efforts of the home mills to maintain their pre-eminence in world textile production, and to keep its own place as the world's traditional supplier of textile machinery, the industry is spending more and more of its resources and time on research into the structure and peculiarities of various fibres and into new and improved methods of processing, and is developing machines capable of producing more efficiently yarns and fabrics of higher quality. For example, the new 'Autoleveller', for worsted roving preparation, claimed to be one of the most important developments in the wool textile industry for 100 years, was in full-scale production in September 1954. The research laboratories and design departments of machinery makers are also energetically and successfully seeking the solution of new problems arising from the introduction of the synthetic fibres, such as nylon, 'Terylene' and 'Ardil' (see pp. 176-7).

TEXTILE INDUSTRIES

The value of exports in the textiles and clothing group as a whole, including manufactures of wool, cotton, linen, jute, silk, rayon and synthetic fibres, lace, hosiery, woven apparel and carpets, amounted in 1953 to £383½ million, or 15 per cent of total United Kingdom exports. About 1½ million people were employed in these industries in June 1953, including 162,000 in cotton spinning and doubling, 122,000 in cotton weaving, etc., 210,000 in the wool textile industry, 88,000 in rayon and nylon production and weaving and silk, 124,000 in hosiery and other knitted goods, 92,000 in textile finishing, etc., 164,000 in other textiles, and 499,000 in clothing (excluding footwear).

The Wool Industry

The wool textile industry is the most ancient of Britain's staple industries and has been an important source of wealth since medieval times. There are two main branches—woollen and worsted. Over 80 per cent of woollens and over 90 per cent of worsteds are made in Yorkshire. Scotland and the West of England have retained their importance as specialized producers of high-quality woollen cloth. The woollen side of the industry is normally organized on a vertical basis, with each firm undertaking the full process of manufacture from raw material to finished product, but for a variety of reasons the worsted industry is mainly organized horizontally—combing, spinning and weaving being done by separate firms. Small firms employing fewer than 300 workers predominate in the industry. Output reached a post-war peak at the end of 1950. There was a downward trend for most of 1951 and recession—reflecting a world-wide recession in textile trade—became marked in the last quarter of that year. The first half of 1952 was a period of much reduced activity, but production recovered thereafter.

In 1953 production showed a marked improvement over 1952. It was in general at about the same level as in 1951, but below that of 1950.

The wool industry remains one of Britain's leading export industries; the total value of exports of woollen and worsted yarns and manufactures in 1953 was £139.8 million, or over 5 per cent of United Kingdom exports. After the tourist trade, vehicles and machinery, the wool industry is Britain's best dollar earner; exports of wool manufactures to the United States and Canada were valued at £36.6 million in 1953. British tops are used by worsted spinners in all parts of the world.

Research is carried on mainly by the Wool Industries Research Association, which is financed partly by a grant from the Department of Scientific and Industrial Research and partly by a statutory levy on the industry.

The Cotton Industry

Spinning and weaving of cotton for the making of fustian with a cotton weft and linen warp began to assume importance in the United Kingdom in the sixteenth century; but it was the invention of mechanical spinning and weaving in the second half of the eighteenth century that led to cotton becoming Britain's chief consumer-goods industry and cotton piece-goods its largest export.

In the twentieth century increasing foreign competition and the tendency of many countries, notably India, to set up their own textile industry cut progressively into British markets. During the second world war numbers of mills were closed and, though many have since been brought back into production, the industry still employs only about two-thirds as many workers as in 1937. It remains, however, one of Britain's largest consumer-goods industries, being the principal source of the clothing worn in Britain and playing an important part in the export trade.

Since the war a vigorous drive for quality and efficiency has been pressed forward by the industry with support and assistance from the Government. Important in this drive are the Cotton Board, a statutory body with the constitution and powers of a Development Council, and the British Cotton Industry Research Association (Shirley Institute), founded in 1919 for promoting scientific and technical research in connection with cotton and its utilization. The industry now uses a considerable and increasing amount of rayon as well as cotton, and its dependence on imported raw material has thus been reduced.

Production rose steadily from 1945 until the end of 1951, when the industry began to feel the effects of the world textile recession. It did not begin to recover until the second half of 1952; and in 1953 it was still well below the 1951 post-war

peak figure, which was itself below the 1937 level, but was making steady progress towards recovery.

There were about 171,000 persons employed in the spinning and doubling section of the industry in December 1953, and 125,000 in weaving. In addition the great majority of 54,000 persons recorded as employed in the weaving of rayon, synthetic fibres and silk, were in mills within the Cotton Board's sphere. About two-thirds of the workers in the industry are women.

Despite the contraction of the industry between 1914 and 1945 and the recession in 1952, cotton remains a leading export industry. In 1953 exports of cotton yarn and manufactures were valued at £133 million, or about 5 per cent of United Kingdom exports, and exports of rayon, synthetic fibres and woven fabrics amounted to £28 million. Most of the industry is located in south and east Lancashire, Manchester occupying a special position as its commercial centre.

Other Textiles

Linen has been made in Britain for more than a thousand years and it is believed that the art of linen weaving was already being practised during the seventh century. Today it is an industry of small firms, chiefly in Northern Ireland (the greatest linen manufacturing region in the world). The principal raw material of the industry is flax, which is mainly imported (the chief supplier is Belgium), but in England and Scotland particularly a certain amount of soft hemp and jute is used. In Scotland the industry is concentrated in the eastern part of the country and specializes in the production of coarse linens and light canvas, probably because of its association with jute and hemp. Technical problems are investigated by the Research Institute of the Linen Industry Research Association, formed in 1919. Exports in 1953 were valued at £21 million, the United States being the chief market.

Jute, most of which comes from India and Pakistan, is the raw material for a considerable industry centred in Dundee. Jute cloth is used for sacks and bags, tarpaulins and backing for linoleum; yarns are sold for carpet backing and for ropemaking. Exports other than cordage were valued at nearly £2 million in 1953; the Commonwealth and United States were the chief markets.

Silk goods to the value of £1 million were exported to many markets in 1953. Raw silk is supplied mainly from Japan and Italy.

Rayon is produced from cellulose, either in the form of wood pulp or cotton linters. Its early development took place to a large extent in Britain. Production is spread throughout the Midlands and Lancashire, with outposts in other areas. There are nine companies engaged in the production of rayon, five producing only viscose, three producing only acetate, and one both viscose and acetate. In 1953 viscose rayon accounted for 67 per cent of filament yarn production, including yarn for industrial purposes, but 82 per cent of all rayon produced (i.e. including staple fibre) was of the viscose type. Rayon, besides being used for textile purposes (where it is sometimes used alone but more usually in blend with natural fibres) is being used increasingly for industrial purposes (e.g., for the manufacture of tyre cord) and in 1953 over 28 per cent of all rayon produced was of the industrial type.

Other Man-made Fibres

Nylon is produced from a combination of chemical substances, most of which are obtained from indigenous raw materials. It was discovered in the United States and first used in Britain in the second world war for parachutes. It is now used for general textile and industrial purposes. Production is expected to reach an annual rate of 25 million lb. by the end of 1954, and 30 million lb. before the

end of 1955. A new plant is now being built and is expected to come into production in the closing months of 1955.

'Terylene', a product of research in the laboratories of the Calico Printers' Association, Manchester, is at present being made in Britain by Imperial Chemical Industries Ltd. (ICI) in a pilot scale plant, but a £10 million plant is under construction with an annual capacity of over 11 million lb. scheduled for operation in 1955, and a further similar sum is to be spent on doubling the capacity of this new plant. ICI is also setting up a plant in Canada, and the fibre has been made for some years under licence in the United States under the name 'Dacron'. It is also to be made under licence in France, the German Federal Republic, Italy and the Netherlands.

'Ardil' and 'Fibrolane' are protein fibres with wool-like properties. 'Ardil' was evolved in the Scottish laboratories of ICI Ltd. Experimental quantities were first produced in 1938 and a plant with a capacity of 10,000 tons a year, started in 1949, is now in production. 'Fibrolane' is manufactured in commercial quantities by Courtaulds, Ltd.

At the end of 1953, about 37,000 people were employed in the production of rayon and other man-made continuous filament yarn and staple fibre, and direct exports of these goods for the year totalled £11 million. A considerably larger number of people were employed in the production of spun yarns and the weaving and knitting of rayon, nylon and similar goods, exports of which totalled about £40 million in 1953.

Since the advent of rayon in its various forms and, more recently, of the new synthetic fibres, British textile manufacturers have been developing a number of ways of blending these with natural fibres. By this means they can produce economically fabrics and garments with attractive and useful new combinations of texture, colour, and finish, and with moisture-absorbent, hard-wearing and crease-resisting properties.

CHEMICAL INDUSTRIES

Broadly, the chemical industries include the manufacture of such products as acids, alcohols, alkalis, paints, dyestuffs, plastics and pharmaceuticals. The industry employs about half a million people, contributes about 3 per cent of the total national output of goods and services, and in 1953 exported goods valued at £130 million, or 5 per cent of United Kingdom exports. British pioneers made great contributions to the science of chemistry, as the names of Robert Boyle, Joseph Priestley, Michael Faraday and John Dalton testify. Contemporary British chemists who maintain the tradition include Sir Alexander Fleming (discoverer of penicillin), Sir Robert Robinson (who has done outstanding work on vitamins and hormones) and Doctor A. J. P. Martin and Doctor R. M. Synge (who were awarded the Nobel prize in 1952 for their work in developing chromatography, a method of separating chemical substances).

Heavy Chemicals and Dyestuffs

In the heavy chemicals section sulphuric acid is being made increasingly from anhydrite (calcium sulphate), of which the United Kingdom has immense deposits. More than a thousand different dyestuffs are now available, and the level of investment in research and development is reflected in the continuing success of the British dyestuffs industry. In 1948 (the last year for which these figures have yet been published) total sales of finished dyestuffs amounted to approximately £18.5 million, and in that year direct exports were worth £7.7 million. In the course of

1953, the dyestuffs industry, in common with most others, was recovering from the effects of the setbacks received in 1952, and exports of finished dyestuffs reached a total of £8.3 million.

Petroleum Chemicals

The large-scale manufacture of organic chemicals from petroleum in Britain has developed since the second world war. Previously they were either imported or made from coal, coal tar, molasses and calcium carbide. Some £40 million are invested in the five major petroleum chemicals plants built over this period. The principal products include gases, e.g., ethylene and propylene from which are made industrial alcohol, solvents and other chemicals and intermediate products used in plastics (see below), synthetic fibres (see pp. 176-7), leather finishing, paint and synthetic detergents.

Synthetic Detergents possess qualities associated with soap but are in addition free from scum formation and are able to break up and remove grease. Estimated United Kingdom production of synthetic detergents rose from 12,000 tons in 1946 to over 150,000 tons in 1953, of which 18,763 tons were exported.

Fertilizers

The British scientists Sir John Lawes and Sir Joseph Gilbert contributed to the evolution of fertilizers, which now constitute a major branch of the chemical industry. Scientific knowledge has increased rapidly in recent years and the research carried on in the United Kingdom at Rothamsted, Hertfordshire, and the Macaulay Institute at Aberdeen is of world-wide importance. Production in 1952-53 (July to June) of phosphatic fertilizers totalled 362,000 tons of plant food, of nitrogenous fertilizers 308,000 tons of plant food, and of compound fertilizers over 1½ million tons.

Pesticides

Pesticides have been used for hundreds of years but it was not until about 1920 that they were based on accurate scientific methods. Important discoveries in Britain in the last decade have led to major developments in the production of selective weed killers, e.g., methyl chloro phenoxy acetic acid (MCPA) and insecticides based on benzene hexachloride (BHC).

Exports of disinfectants and insecticides rose in value from £880,000 in 1939 to £4½ million in 1953.

Pharmaceuticals

Pharmaceuticals provided exports valued at £31 million in 1953 compared with £3 million in 1938. The present annual rate of United Kingdom output is valued at some £120 million. About three-quarters of the pharmaceutical products sold today have been introduced within the last twenty years, including sulphonamides, antibiotics (e.g., penicillin), hormones, anti-malarial drugs, liver extracts, anti-histamines and anti-tubercular drugs.

Plastics

Plastics are man-made materials, generally of organic and synthetic origin, which at some time in their manufacture are in a plastic (i.e. flowing) condition and thus capable of being shaped under heat and pressure. The first plastic, 'Parkesine', was produced in Britain in 1865 by Alexander Parkes; modern plastics originating in Britain include 'Perspex' and 'Polythene'. A class of plastics known as 'silicones', with valuable heat-resisting and other properties, which were discovered by Professor Kipping at Nottingham and developed in the United States, are now being made in Britain in a new factory at Barry in Glamorganshire, South Wales,

which was opened in November 1954. The plastics industry falls into two separate and self-contained groups. The first, the production of plastic materials, falls within the chemical industry, but the fabricating side which uses those materials does not.

Overall production of plastic materials has probably increased about six times since 1939. Exports reached a value of over £16 million in 1951 and were a little over £16 million in 1953.

TRADITIONAL CRAFT INDUSTRIES

There are a number of industries noted for the quality of their traditional craftsmanship which make an important contribution to Britain's export trade.

Pottery

The pottery industry is one of Britain's most successful dollar earners, and is almost completely independent of oversea raw materials. The manufacture of high-grade pottery requires china clay found in Cornwall and Devon, ball clay from Devon and Dorset, and china stone from Cornwall. Suitable clays are found in Staffordshire for items such as drainpipes, chimney-pots and roofing tiles.

Of the £29 million worth of domestic pottery produced in the peak year, 1952, £15 million worth was exported. The chief customers for china (excluding electrical porcelain) were Canada, the United States and Australia, and for earthenware Canada, Australia, the United States and the Union of South Africa.

Between 75 and 80 per cent of the industry is concentrated in the area of Stoke-on-Trent in Staffordshire, comprising the six towns of Stoke, Burslem, Tunstall, Hanley, Fenton and Longton; the pottery industry employs about 35 per cent of the whole working population of the area, while a large proportion of the rest is employed in allied industries. Other centres include Worcester, Derby, Bristol, and Poole (in Dorset). The industry is divided into distinct sections. The largest section produces domestic pottery, subdivided into china, earthenware, stoneware, and Jet and Rockingham used mainly for tea and coffee-pots. The other main sections produce respectively glazed tiles, sanitary ware and electrical porcelain (e.g., insulators and fittings). Excluding the smaller concerns there are about 300 firms, of which about 200 make domestic pottery. The labour force is nearly 80,000 including over 45,000 women.

Since the second world war steps have been taken to increase output per man-hour. Improved factory layout, standardization and semi-automatic and fully automatic 'making' machines have been introduced. Perhaps the greatest advance has been the installation of gas and electric tunnel kilns, through which trolleys, stacked with clay shapes, pass continuously.

The modern industry benefits from a tradition of good design and craftsmanship, made world-famous by a long line of great British potters, which is the basis of the large oversea and domestic demand for its products. Among the famous makes of British pottery are: Wedgwood, Spode, Royal Worcester, Royal Doulton, Minton, Royal Crown Derby and Coalport.

Research is carried out by the British Ceramic Research Association, financed partly by the industry and partly by the Government through the Department of Scientific and Industrial Research. The Association's new laboratories at Penkhull, Stoke-on-Trent, were opened in 1951.

Scientific Instruments

Scientific instruments were made commercially in Britain at the beginning of the seventeenth century and probably earlier. At that time navigational aids, such as compasses, and microscopes (mainly for medical purposes) were made.

The industry increased in size during the eighteenth and nineteenth centuries, but in 1914 it was still small; it manufactured a variety of optical, mechanical and electrical instruments for laboratory and industrial uses. The first world war proved that its products were of prime importance to the war effort and when peace came it expanded under the protection afforded by special tariffs.

During the second world war the industry expanded again very substantially to meet defence needs. Since 1945 its production has further increased to meet the pent-up demands from home and overseas for instruments for use in research and in industry, where their extended use has become recognized as essential to efficiency. Some 87,000 people, mostly skilled craftsmen, are now employed. In 1953 goods of a wide variety, including photographic, cinematographic and commercial types of instruments and apparatus, to the value of approximately £17 million were exported directly, excluding indirect exports of instruments as part of plant and equipment.

Every two years the industry holds an exhibition of instruments in commercial production, instruments under development being the subject of an annual exhibition held by the Physical Society.

Jewellery, Gold and Silver Ware

The making of jewellery, gold and silver ware is an industry in which British craftsmen are heirs to a great tradition. Exports in 1953 were valued at over £5 million. Of the firms producing in 1950, 735 were in Birmingham, 610 in the London area, 194 in Sheffield and 135 in the southern counties. A Design and Research Centre for the gold, silver and jewellery industries was incorporated in 1951.

The quality of the metal in gold and silver wares made or sold in the United Kingdom is guaranteed by a 'hall-mark'. The law requires that gold and silver plate shall not be sold until it has been hall-marked at one of the Assay Offices. These are in London, Birmingham, Chester, Sheffield, Edinburgh and Glasgow.

The importance of maintaining definite standards of fineness for wares of gold and silver has always been recognized and the Goldsmiths' Company in London has carried out the assay and hall-marking of such wares since 1327 when Edward III gave the Company its first charter.

Whisky

Whisky is one of the United Kingdom's largest individual dollar earners. Exports in 1953 were valued at £37.7 million; over half of these exports went to the United States. The earliest mention of Scotch whisky was in the fifteenth century, and in the following years domestic distillation became very common. During the eighteenth century illicit whisky making was practised frequently in remote places. The world-wide popularity of Scotch whisky may be said to date from the end of the nineteenth century when blending became general. Before that time distilleries either bottled their own whisky or blended it with that of other distilleries. 'Single' whiskies are still produced for local consumption on a small scale, but modern whiskies are blends of twenty or more different kinds, some made from malted barley and others from other grains.

The Leather Industry

The leather (tanning and dressing) industry in Britain is one of the largest in the world, employing over 30,000 workers and producing a gross output valued at over £109 million in 1950. Despite the growing use of rubber, and of plastics and other synthetic materials in clothing, footwear and personal articles, leather possesses intrinsic qualities which enable it to hold its own. Exports of leather and leather

manufactures, excluding footwear, in 1953 totalled £13·8 million in value. The British Leather Manufacturers' Research Association, costing about £50,000 a year, has, according to a survey conducted by the Department of Scientific and Industrial Research, saved the industry some £305,000 a year. The boot and shoe industry is one of the main users of leather and employs over 100,000 workers. Gross output was valued at £143·7 million in 1950 and exports of footwear made preponderantly of leather in 1953 totalled over £12 million in value. The British Boot, Shoe and Allied Trades Research Association encourages the application of science and mechanization in an industry based upon traditional craft. The bulk of the Association's work is now carried on in new laboratories at its headquarters at Kettering, Northamptonshire.

NEW AND EXPANDING EXPORT INDUSTRIES

An important feature in the expansion of United Kingdom exports since the second world war has been the development of new types of commodities, meeting new and growing needs. In many cases, the industries making them are based on inventions or discoveries made during or after the war; in others, the basic research had been done before the war but production on a commercial scale was not undertaken until later. The development of gas turbine aircraft, radar and penicillin are well-known examples of these new industries.

In addition, there are other commodities which, while produced in Britain before the war, were then exported on a very small scale indeed, but which have developed into important exports.

Finally, there is a group of export industries which, though important exporters even before the war, have expanded exceptionally rapidly since then. Their products are not, strictly speaking, new exports, but their importance in the growth of the United Kingdom export trade since the end of the war is of no less significance than exports based on new inventions or new techniques.

All these growing points of the economy have required a great deal of research, capital development and skilled manpower for their successful development. Their rapid growth and their success in the export trade illustrate the way in which the United Kingdom economy has been adapting itself to the changing pattern of world demand.

Tables 28 to 31 show the kinds of products included in these categories and their increasing contribution to total exports; notes follow on some of the industries which make them, in so far as these have not been specifically mentioned in the previous sections.

The Agricultural Machinery Industry

The agricultural machinery industry has grown to be one of the largest in Britain, employing 40,000 people with an annual output valued at over £100 million. In 1953 it produced among other implements 136,808 tractors, 36,677 mouldboard ploughs, 8,203 disc harrows, 15,860 mowers, 4,757 combine harvesters, and 10,882 milking machines. Britain, where production dates virtually from 1933 when the English Ford Company produced 2,788 tractors, now has the largest annual output of tractors in Europe and the second largest in the world, exports the greatest proportion of its output and is the second largest exporter in the world. Exports of agricultural tractors in 1953 were valued at £37 million compared with £28 million in 1950. Important markets are Australia, New Zealand, Turkey, Sweden and Denmark. Exports of other agricultural machinery were valued at £12½ million in 1953 compared with £9½ million in 1950.

TABLE 28
NEW EXPORTS

£ Thousands

Commodity	1948	1951	1953
<i>Electrical equipment and apparatus</i>			
Radio-communication and navigational aid equipment including radar (a)	2,265	5,337	10,071
Television			
Transmitters (a)	38	91	261
Receivers (a)(b)	4	24	428
Cathode ray tubes (c)	13	71	153
Industrial radio-frequency equipment (a)	64	168	174
Tape recorders, other than office machinery	...	...	312
Recording tapes .. .. .	...	...	101
Floor polishers .. .. .	...	1,126	706
Hair clippers and dry shavers	121	478	518
<i>Other Engineering Products</i>			
Combine harvester-threshers .. ..	...	2,147	3,196
Fork-lift trucks .. .. .	...	1,384	1,622
Diesel locomotives (d) .. .. .	...	1,274	869
<i>Textiles</i>			
Nylon			
Piece-goods (knitted) .. .. .	...	973	2,022
Women's knitted underwear .. .. .	...	243	334
Women's stockings .. .. .	...	6,767	4,303
<i>Chemicals</i>			
Drugs			
Penicillin	2,048	6,779	4,455
Other antibiotics .. .. .	...	...	3,253
Sulphonamides .. .. .	...	2,797	2,546
Anti-histamines .. .. .	...	...	356
Anti-paludics .. .. .	...	1,169	780
Synthetic detergents .. .. .	...	1,453	2,597
<i>Other</i>			
Prefabricated buildings .. .. .	...	5,456	3,815
Permanent waving kits (e)	64	180	161

Source: Board of Trade.

...Not shown separately in official figures for that year.

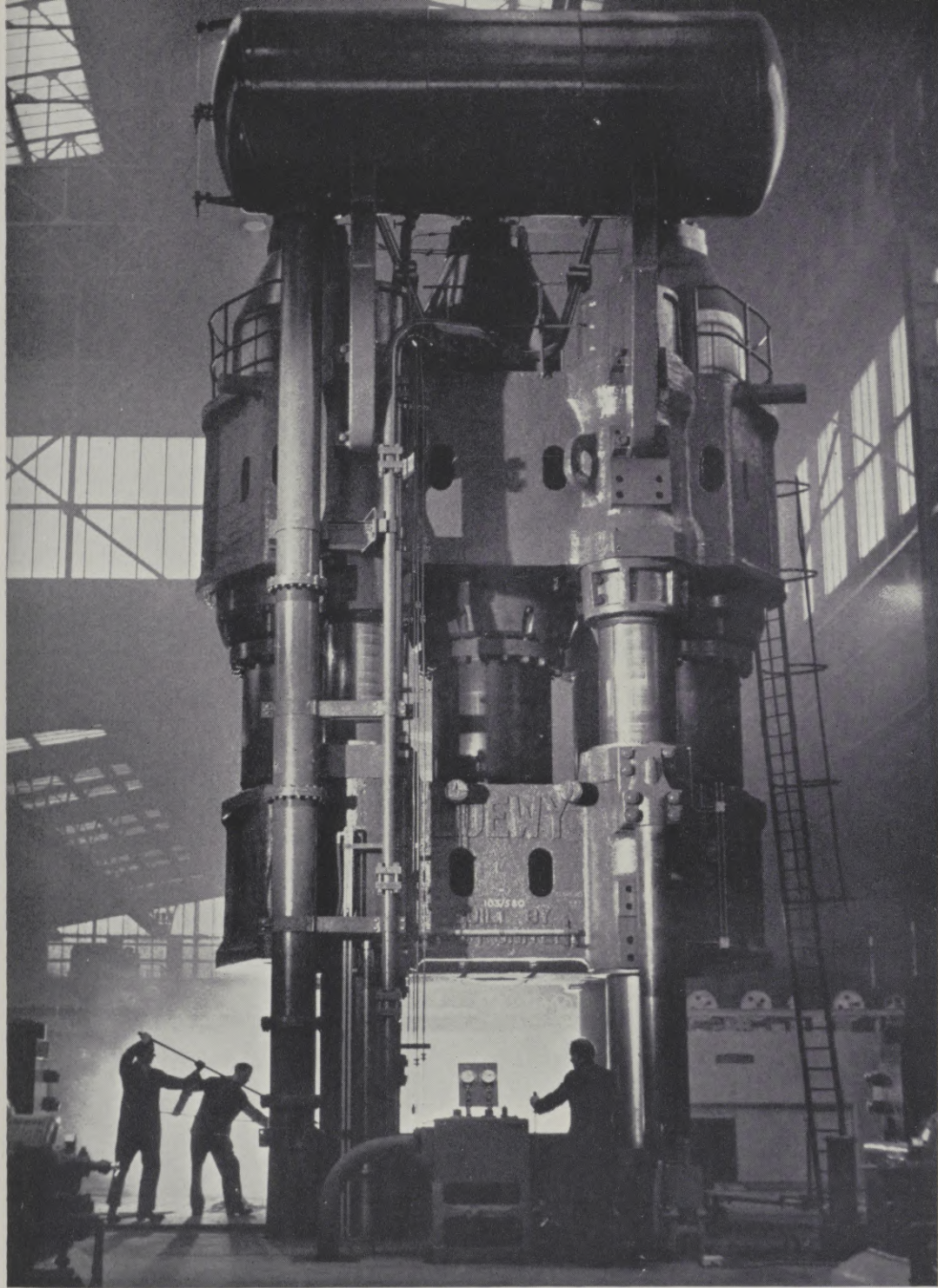
(a) The figures for 1953 include valves and cathode ray tubes forming part of the apparatus and exported therewith.

(b) The figures for 1953 include chassis substantially assembled.

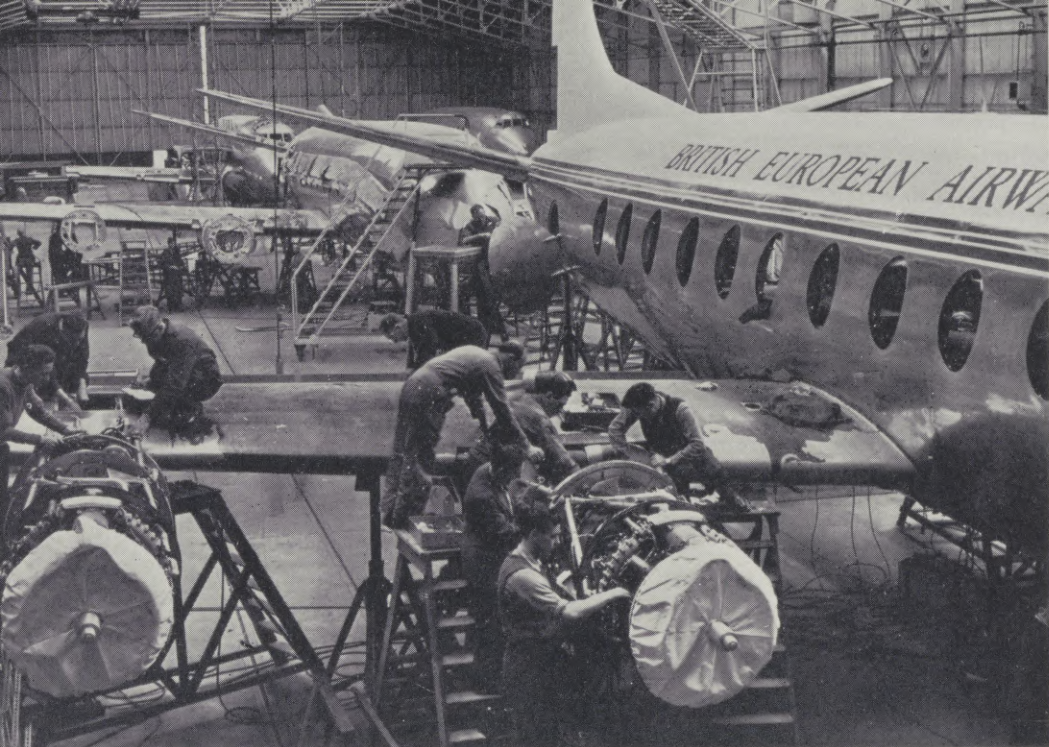
(c) Before 1953 the figures include cathode ray tubes forming part of the apparatus and exported therewith.

(d) Excluding locomotives with mechanical transmission of under 200 b.h.p.

(e) Figures for 1948 are for 'cold perm' kits.



Large forgings for jet aircraft are made on this 12,000-ton press at Redditch, Worcestershire.



Vickers *Viscount* turbo-prop
airliners in production at
Weybridge, Surrey.



A gas turbine locomotive
on the Western Region of
British Railways.



The world's first merchant
ship to be powered by a
gas turbine engine: the
tanker *Auris*.

TABLE 29
VIRTUALLY NEW EXPORTS

£ Thousands

Commodity	1938	1948	1951	1953
<i>Engineering Products</i>				
Tracklaying tractors	1	504	2,931	3,315(b)
Petroleum well-drilling machinery .. ..	...	...	1,784	2,547
Mineral oil-refining machinery .. ..	...	...	942	2,258
Air-conditioning machines, self-contained	10(a)	345	738	1,797
Mechanical lighters	7	467	806	745
Cash registers	2	276	743	575
Alarm clocks (other than electric)	1	265	314	473
Fluorescent tubular lamps .. ..	...	...	634	438
Dictating machines	1(a)	31	385	435
<i>Other Products</i>				
Cellular rubber mattresses, upholstery and cushions .. ..	...	332	978	817

Source: Board of Trade.

... Not shown separately in official figures ; exports in 1938 known to be small.

(a) 1939 figure.

(b) Figures for 1953 are not completely comparable with those for previous years.

The Office Equipment Industry

The office equipment industry is now second in size only to that of the United States and provides an example of remarkable expansion since the second world war. The value of its output is now over £40 million a year compared with about £2 million in 1939, and its exports of office machinery alone were valued at nearly £11 million in 1953, of which nearly £3 million went to North American dollar markets.

The Petroleum Refining Industry

This industry, in which capital of some £190 million has been invested since 1947, provided exports of refined petroleum products valued at over £71 million in 1953 compared with £52 million in 1952 and £12·8 million in 1950. At the same time imports of refined products fell from £140·9 million in 1951 to £90·4 million in 1953.

The Petroleum Equipment Industry

Exports of specialized petroleum equipment were extremely small before the second world war. The substantial growth in Britain's post-war export trade in petroleum equipment is a reflection of the remarkable expansion in the oil industry throughout the world. According to statistics compiled by the Oil Companies Materials Secretariat and released by the Council of British Manufacturers of Petroleum Equipment, British firms received orders for oil equipment valued at over £67 million during 1953. A large but unspecified part of these orders (which amounted to less than those received in 1952, valued at £90 million, chiefly because of the completion of major projects within Britain during 1953) was for use overseas.

TABLE 30
GREATLY EXPANDED EXPORTS

Commodity	1938	1948	1951	1953	1953 as multiple of 1938
	£ Thousands				
<i>Engineering Products</i>					
Domestic electrical refrigerators ..	42(a)	1,659	7,197	5,991	143
Agricultural tractors(b)	513	18,930	41,132	37,170	72
Laundering and washing machinery and parts(c)	149	1,538	8,359	5,697	38
Accounting machinery	104	427	2,947	3,584	34
Excavating and earth-moving equipment	681	5,014	9,838	16,147	24
Aircraft and parts	5,400	26,000	42,000	65,000	12
<i>Other Manufactures</i>					
Plastic materials ..	377	4,703	16,322	16,113	43
Platinum/palladium, etc.	316	2,812	8,404	11,253	36
Refined petroleum	2,854	5,342	30,133	71,118	25

Source: Board of Trade.

(a) 1939 figure.

(b) Other than tracklaying.

(c) Excluding hand-operated domestic machinery; for 1951 and 1953 the figures also exclude other types of hand-operated machinery.

TABLE 31
SUMMARY

Group of Export Commodities	Value of United Kingdom Exports			
	1938	1948	1951	1953
	£ million			
New exports	—	—	40.0*	43.0
Virtually new exports	—	3.0*	10.3	13.4
Greatly expanded exports				
Refined petroleum	2.9	5.3	30.1	71.1
Other	2.2	35.1	94.2	96.0
Aircraft and parts	5.4	26.0	42.0	65.0
Total of above	10.5	—	216.6	288.5
Total as proportion of all United Kingdom exports	2.3	per cent		11.2
		—	8.4	

Source: Board of Trade.

* Approximate estimates.

The Prefabricated Buildings Industry

The British prefabricated buildings industry, based on long experience dating back in various forms to before 1830, has contributed to solving the problem of housing shortage not only in Britain but in many other countries of the world. Exports of prefabricated buildings increased in value from £2·8 million in 1950 to nearly £7 million in 1952, when they were sent to over fifty different countries, including Canada and some other dollar countries. In 1953 exports were valued at £3·8 million.

Radioactive Isotopes

Britain now produces at least as great a quantity and range of radio-isotopes as any other country. Sales of radioactive materials are expected to reach a record value of more than £400,000 in 1954, about one-third of which will represent exports. In 1953 the Atomic Energy Research Establishment at Harwell exported radio-isotopes direct to 38 countries, and the Radiochemical Centre at Amersham to 36. France received the largest number of consignments sent abroad from Harwell (983), followed by Sweden (532), German Federal Republic (411), Belgium (259) and Switzerland (258); 26 consignments were made to the United States. Owing to the growing urgency of demands from different countries the British Overseas Airways Corporation has converted a fleet of *Argonauts* to carry the isotopes in their wing-tips. This method reduces the cost of transport by over 60 per cent by cutting out the cost of heavy lead containers. Radioactive isotopes are used mainly for medical purposes, but also increasingly in scientific research and in industry. At the Isotope School at Harwell, started in April 1951 to impart knowledge of isotope production and uses, one-third of the graduate students come from overseas.

The Refrigeration Industry

This industry falls broadly into three classes—domestic, commercial and industrial. It has made remarkable strides since the end of the second world war. Although before the war production of commercial and industrial refrigeration machinery was well established, domestic refrigeration production, now large, was then quite small.

The 200 firms engaged in the industry employ some 12,000 workers and produce annually goods worth nearly £27 million (nearly ten times the value of production in 1935), of which about £13 million worth is exported. A full range of refrigeration machinery and equipment is available.

Contractors' Plant

Production in the United Kingdom before the war was mainly concerned with small excavators, concrete mixing machinery and road surfacing plant, including road rollers. But now many new machines, especially for earth-moving, are in production. Examples are industrial crawler tractors, motor graders, scrapers, trenchers, dozer equipment, dumpers, rippers and rooters.

Whereas output in 1935 was valued at only £2 million, in 1953 it reached nearly £48 million, of which nearly £18 million was exported.

Recent developments in the manufacture of the heaviest types of crawler tractors, rear and bottom dumpers, motor scrapers, soil stabilizers and mobile crushers will ensure the continued expansion of this industry.

The Electronics Industry

British engineers invented radar and pioneered the first public television transmission, and Britain now has the largest electronics industry outside the United States. The industry has grown enormously in the past fifteen years. It employs about 125,000 people, and the value of its annual production is some £135 million, of which some £26 million (including separate components) was exported in 1953, compared with less than £2 million in 1938. Only 40 per cent of this production is of sound radio and television receiving sets ; the remainder is of such important products as military equipment, sound radio and television transmitters, electronic computers, underwater television apparatus, communications equipment, navigational aids and industrial equipment.

VI. TRANSPORT AND COMMUNICATIONS

SHIPPING

Twenty per cent of the world's shipping tonnage of 100 gross tons and over is registered in the United Kingdom, which has the largest merchant navy in active employment. A greater tonnage—26 million—is registered in the United States but over half of this is in the Reserve Fleet. United Kingdom ships carry probably over one-third of the world's international sea-borne traffic in passengers and goods, and shipping makes the largest single contribution to the United Kingdom's net invisible earnings of foreign exchange: £122 million out of a total of £320 million in 1953. This £122 million excludes earnings of tankers and includes payments by foreign ships in British ports. An inquiry conducted by the General Council of British Shipping which takes account of these two factors estimated net foreign exchange earnings by British shipping at £221 million in 1952.

THE MERCHANT FLEET

As at 30th June 1953, a total of 18·7 million gross tons was registered in the United Kingdom. Excluding river craft, vessels not ordinarily carrying passengers or cargo such as fishing vessels, tugs and cable ships, Admiralty vessels (about 375,000 gross tons, mainly tankers) and vessels registered in the United Kingdom but owned abroad, the gross tonnage was 16 million. These 16 million gross tons, referred to as the United Kingdom trading fleet, are analysed by type, number and average age in Table 32.

TABLE 32
TRADING VESSELS OWNED AND REGISTERED IN THE UNITED KINGDOM
JUNE 1953

	No.	Thousand gross tons	Average age (years)
<i>Foreign-going</i>			
Passenger-cargo liners	243	3,055	} 12·12
Cargo liners	850	5,373	
Tramps	470	2,505	10·92
Tankers	457	3,924	8·76
<i>Total</i>	2,020	14,857	11·03
<i>Coasting and Home Trade</i>			
Passenger-cargo liners	135	227	} 17·11
Cargo liners	222	212	
Tramps	725	662	16·28
Tankers	103	63	15·67
<i>Total</i>	1,185	1,164	16·56
<i>Grand Total</i>	3,205	16,021	11·43

Source: *Chamber of Shipping of the United Kingdom Annual Report 1953-54.*

Two important trends in recent years have been the growth of tanker tonnage, to meet increased demands for oil, and the fall in coal-fired tonnage.

World tanker tonnage (500 gross tons and over) has increased from 11½ million gross tons in 1939 to over 22 million gross tons in 1953, an increase of 90 per cent compared with an increase of only about 28 per cent in the world dry cargo tonnage. Including Admiralty and other tankers, the United Kingdom accounts for 4.6 million gross tons or 21 per cent of the world's total tanker tonnage.

Propulsion

The amount of coal-fired tonnage in the United Kingdom trading fleet has fallen in recent years to less than 1¼ million tons. This is only 7½ per cent of the total, while of foreign-going tonnage only 4½ per cent is coal-fired. Oil has taken the place of coal in steamships, while the steam engine is itself giving way to the diesel engine. In 1953, of 220 merchant ships launched in the United Kingdom, 85 (521,918 gross tons) were steamships and 135 (795,545 gross tons) were motor ships. The latest development is the investigation being made into the use of gas turbines in ships. In March 1952 the first crossing of the Atlantic using this form of propulsion was made by the tanker *Auris*.

Size Distribution

As to the size of foreign-going trading tonnage, about 52 per cent of tonnage of liners—passenger and cargo—are in the 6,000–10,000 ton group, and over 68 per cent in the size group 6,000–15,000 tons. Tankers are predominantly in the 8,000–15,000 ton group. Tramps are under 8,000 tons and mainly over 5,000. Total tramp tonnage has fallen by one million since 1935.

There are four ships of 30,000 tons and over. These are the *Queen Elizabeth* (83,000 tons), the *Queen Mary* (81,000 tons), the *Mauretania* (35,667 tons), and the *Caronia* (34,000 tons). Of ships built since the war, the largest amount of tonnage falls in the size group 10,000–15,000 tons, the group covering the bulk of tanker tonnage. Of total launchings in 1953, 7 ships exceeded 20,000 tons, 4 were between 15,000 and 20,000 tons, 52 between 10,000 and 15,000 tons, 12 between 8,000 and 10,000 tons, and 40 between 4,000 and 8,000 tons. The 7 ships exceeding 20,000 tons were passenger liners or tankers and they included: ss. *Orsova* (28,250 tons); ss. *Arcadia* (28,000 tons); ss. *Melika* (22,000 tons); ss. *British Merchant* (21,000 tons); and ss. *British Engineer* (20,960 tons), the last three being tankers. There is, indeed, a trend in the direction of tankers larger than 15,000 tons. In the year 1953 also the Royal steam yacht *Britannia* of 5,769 tons was launched.

Specialized Ships

In addition to oil tankers, there are other specialized ships such as whaling ships—including factory ships which process the catch into whale oil; cable ships which undertake the laying, maintenance and repair of 20,000 miles of submarine cable; and four weather ships which serve weather stations in the North Atlantic under the joint support scheme of the International Civil Aviation Organization (see p. 219). Relative newcomers to this category include vessels specially built to carry ore, bulk sugar and other commodities. In 1953, four ore carriers were launched, ranging from 6,000 to 11,000 gross tons.

SHIPPING ORGANIZATIONS

Excluding Government-owned tankers, cable ships, and ships owned by the British Transport Commission (see p. 195), the business of merchant shipping

in peace time is in the hands of private enterprise. The main organizations concerned with the activities, interests and common problems of the industry are as follows:

The Corporation of Lloyd's

This body, which was founded in the seventeenth century, is a society of underwriters whose main business is marine insurance (see also p. 261).

Lloyd's Register of Shipping

Lloyd's Register is an organization, distinct from the Corporation, which surveys and classifies ships with particular regard to their safety and operational efficiency. It will accept responsibility for surveying and giving technical advice on vessels of all flags from the initial stages of building, at regular intervals during their service, and after casualties. A satisfactory Lloyd's classification is a guarantee to an underwriter that he may accept the risk of a vessel, and this forms a strong link between the Register and the Corporation of Lloyd's.

The Corporation of Trinity House

This Corporation is administered by a Board of ten Elder Brethren elected from the Royal Navy and the Merchant Navy. The Corporation, which received its first Royal Charter in the sixteenth century, is the general lighthouse authority for England and Wales, the Channel Islands and Gibraltar. It is also the chief pilotage authority in the United Kingdom, having the management of all matters relating to pilots and pilotage in the London area, the English Channel and certain other coastal districts of the United Kingdom. (Lighthouses in Scotland and Ireland are the responsibility respectively of the Commissioners of Northern Lighthouses and the Commissioners of Irish Lights.)

Shipowners' Organizations

The representative bodies speaking for shipowners generally (excluding, for the most part, owners of fishing vessels) are the *Chamber of Shipping* and the *Liverpool Steamship Owners' Association*. The *General Council of British Shipping* co-ordinates the views of the shipping industry as a whole on all matters of major policy.

There are a number of local associations of shipowners, centred around the main port areas. There are, for example, the *Bristol Steamship Owners' Association*, the *London General Shipowners' Society*, and the *North of England Shipowners' Association*. Others represent companies specializing in a particular trade or type of cargo.

Employers' Organizations

The *Shipping Federation* and the *Employers' Association of the Port of Liverpool* are the employers' organizations concerned with labour relations and the regulation of employment throughout the Merchant Navy. They are responsible for the administration of the Merchant Navy Established Service Scheme, under which shipowners engaging crews for ships of 200 tons and above engage them through the Merchant Navy Establishment Administration unless they are prepared to offer two-year Company Service contracts. The Shipping Federation, which is under the control of a Management Committee consisting of representatives of shipowners' and seafarers' organizations and the Government Departments concerned, also operates the National Sea Training Schools set up for the purpose of training ratings for the deck and catering department and as firemen.

Seafarers' Organizations

Masters and officers are represented by the *Mercantile Marine Service Association*, the *Navigators' and Engineer Officers' Union*, the *Marine Engineers' Association*, the *Amalgamated Engineering Union* and the *Radio Officers' Union*, as the case may be. The *National Union of Seamen* represents the interests of Merchant Navy ratings.

The National Maritime Board

The National Maritime Board is composed of equal numbers of representatives of the shipowners and seafarers and is responsible for all negotiations of wages and conditions of service in the Merchant Navy, although, except by special arrangements, National Maritime Board Agreements do not apply to vessels under 200 gross tons, or to tugs, salvage vessels, etc. Detailed working of the Board is carried on by a number of 'panels' representing the various interests of those forming the seafarers' part of the Board.

The Royal National Lifeboat Institution

Lifeboats in the United Kingdom are maintained by the Royal National Lifeboat Institution, which depends entirely for its funds on voluntary subscriptions, and very largely for its operation on voluntary workers.

Conferences

British shipping companies operating liners have associated with each other and with the companies of other countries operating on the same routes in a series of 'conferences' designed to secure standardization and stability of rates, and to maintain frequency and regularity of services. The essential principle of a conference is the establishment of a common tariff of freight rates or passenger fares from each port of departure. Each conference meets from time to time to review and revise existing rates, or to compile new ones. Some of the conferences may be connected by rate agreements, or may have joined together to form wider groupings.

The Baltic Exchange

British tramp shipping, and indeed the tramp shipping of the world, is offered and engaged for charter hire in London's Baltic Exchange, where ship brokers and owners meet and arrange contracts for the movement of all types of cargo between any ports in the world.

RELATIONS WITH THE GOVERNMENT

The relations of the State with merchant shipping go back as far as 1381 when the first of a series of Navigation Acts was passed. In the seventeenth and eighteenth centuries these Acts were designed to give British ships a monopoly in the carriage of goods to and from Britain and its colonies. The last of them was repealed in 1849 under the influence of free trade ideas. But the same period found the State taking an increasing interest in the shipping industry, particularly in matters of safety and welfare. Today, the Government Department chiefly concerned is the Ministry of Transport and Civil Aviation. In the sphere of safety, it is responsible for such matters as seeing that the load-line, which shows the depth to which a ship may be safely loaded, is correctly indicated; that every ship has adequate life-saving and fire-fighting equipment; and that the necessary standard of safety is maintained in passenger ship construction. The Ministry is also responsible for the issuing of certificates of competency to masters, navigating and engineer officers, able seamen and lifeboatmen, and for the certification

of ships' cooks. It also regulates such matters as crew accommodation on board ship, scales and quality of provisions, and the carriage of medical stores. It is responsible for running the Mercantile Marine offices at United Kingdom ports at which crews are signed on, and for keeping the central registers of shipping and seamen. The Ministry (with other Government Departments) is represented on the Merchant Navy Welfare Board and the Merchant Navy Training Board (see below). It also administers the Coastguard Service, which with a personnel of about 500, working from some 170 stations, is responsible for rescue from shipwreck; it works closely with the Royal National Lifeboat Institution. Apart from these administrative functions, the Ministry maintains a close and friendly liaison with the shipping industry on matters of policy and problems relating to imports and exports and also to special passenger requirements.

Abroad, the Merchant Shipping Acts are administered by H.M. Consuls and by officers of Commonwealth and Colonial Governments.

THE MERCHANT NAVY

Strength

The number of masters, officers and men (excluding Asiatic seamen serving on articles of agreement opened in Asia) making up the strength of the British Merchant Navy in December 1953 was about 145,000. In addition about 45,000 Indian, Pakistani and other Asiatic seamen serve regularly in British ships.

Training

The policy of Merchant Navy training is determined by the Merchant Navy Training Board, which comprises representatives of the shipowners, officers' and men's societies, the Government Departments concerned, pre-sea training establishments, the Association of Education Committees and the Association of Navigation Schools. The function of the Board is to consider and make recommendations concerning the training of the various classes of boys and men who enter the different departments in the Merchant Navy, but it rests with the shipping industry itself and the appropriate Government Departments to decide whether any particular recommendation should be adopted. Separate panels have been formed within the Board to consider training of the various categories of seafarers, namely, deck officers and deck ratings, engineer officers and engine-room ratings, and catering ratings.

All boys who wish to join the Merchant Navy as deck or junior catering ratings must undergo a course of pre-sea training. The majority receive their training at the National Sea Training Schools but courses are also provided by certain private organizations and by a number of local education authorities.

A seaman may not be rated as A.B. (Able Seaman) in United Kingdom registered ships unless he holds a certificate of competency as A.B., granted by the Ministry of Transport and Civil Aviation. To obtain this certificate a seaman must, among other qualifications, have served three years at sea on deck, have attained a Certificate of Proficiency as Lifeboatman and have passed an oral and practical qualifying examination. This qualifying examination for the certificate may, however, be taken on reaching the age of 18 after twelve months' service at sea as a deck rating, and those who pass may be issued with an Efficient Deck Hand Certificate, which enables the holder to serve at sea in a similar capacity to an A.B.

Seamen qualify by seniority for promotion to the rating of Petty Officer. Service as a deck rating qualifies for the purpose of admission to the examination for a Second Mate's Certificate.

Pre-sea training is not compulsory for those who go to sea as apprentices or cadets but most shipping companies will, in practice, accept only those who have undergone such a course. There are a number of residential and non-residential training establishments, some of which are Public Schools, which provide courses of varying length. The Ministry of Transport and Civil Aviation allows a proportion of the time spent in approved establishments to count towards the period of sea service which the apprentice or cadet is required to perform before becoming eligible to take the examination for a Second Mate's Certificate. Navigating Officers become eligible for examinations for First Mate's and Master's Certificates after further periods of qualifying sea service.

Sea-going engineer officers usually receive their basic training in engineering by serving a suitable apprenticeship of not less than four years in engineering workshops ashore, although part of this period may be spent at approved courses in mechanical engineering. An alternative scheme of training has, however, recently been introduced under which shipping companies themselves select apprentices for a special course of training consisting of a two-year diploma course in a technical college, followed by eighteen months' training at sea and finally twelve months' training in an engineering workshop ashore. Sea-going engineer officers are first employed as Junior Engineers: they become eligible to take examinations for Second and First Class Certificates of competency after performing periods of qualifying sea service.

Radio officers are required to hold certificates of Proficiency in Wireless Telegraphy issued by the Postmaster-General on the results of an open examination.

Conditions of Employment and Welfare

Wages and conditions of employment are negotiated by the National Maritime Board (see p. 190). Minimum wages and holidays with pay are guaranteed for both officers and ratings. Moreover, the Merchant Navy Established Service Scheme, introduced by the Board, has removed a great deal of the uncertainty formerly associated with a seafaring life. Officers and men can now take two-year contracts, not only with individual shipping companies but with the industry as a whole, and get special benefits, in addition to the normal unemployment insurance when they are ashore between voyages.

The Merchant Navy Welfare Board, on which are represented officers' and seamen's unions and associations, shipowners, voluntary societies, the Ministries of Transport and Civil Aviation, Labour and National Service, Pensions and National Insurance, and the Colonial Office, has been responsible since 1948 for the control and co-ordination of the welfare services for merchant seamen in the United Kingdom and of British merchant seamen abroad.

In the United Kingdom, the Board runs 15 Port Welfare Committees and has regional seamen's welfare officers in Glasgow, Liverpool and South Shields. It manages directly a number of Merchant Navy houses and clubs, and many others are run by voluntary societies. In overseas ports the voluntary societies run some 300 clubs for British merchant seamen.

PORTS

There are over 300 ports in the United Kingdom. The ten largest are shown in Table 33, which lists them in order of tonnage of shipping arriving and departing and does not relate to the volume of cargo handled. Most ports, other than those owned by the British Transport Commission, are represented on the Dock and Harbour Authorities' Association, formed in 1917 to represent the common interests of port authorities in their relations with Government, shipowners and traders.

TABLE 33
PORT ARRIVALS AND DEPARTURES* 1953
Thousand tons net

Port	Foreign Trade	Coasting Trade	Total
London	45,068	21,705	66,773
Liverpool	29,406	7,587	36,993
Southampton	28,854	7,869	36,723
Tyne Ports	7,227	9,299	16,526
Glasgow	9,863	4,189	14,052
Hull	9,812	3,288	13,100
Belfast	1,847	10,500	12,347
Swansea	7,508	3,274	10,782
Bristol	6,357	3,978	10,335
Middlesbrough	5,926	2,512	8,438
<i>Total</i>	151,868	74,201	226,069
<i>Total All Ports</i>	217,385	148,235	365,620

* With cargo and in ballast.

Source : *Board of Trade Journal*.

The Principal Ports

The Port of London, with 69 miles of waterway and over 4,000 acres of dock estate, handles more tonnage annually than any other in the world except New York. Goods of every imaginable kind, from meat to marble, from plywood to perfume, pass through the docks. Imports are distributed all over the United Kingdom, though the port supplies primarily Greater London and the Home Counties with a population of some 11½ million persons.

Liverpool—with *Manchester*, an inland city made into a port by the construction of the Manchester Ship Canal—serves the industrial Midlands, Lancashire and Yorkshire. Grain is prominent among the imports of Liverpool, which, including Birkenhead on the opposite bank of the Mersey, is the second largest milling centre in the world. Tobacco is another major import and is stored in what is probably the world's largest warehouse. Liverpool is also important for transatlantic passenger traffic and short sea-routes and coastwise trading. Manchester's chief import is raw cotton.

Southampton, largest of the Channel ports, is the chief port for ocean passenger traffic. It owes its importance to its double tides and easy access from London. A considerable volume of oil is now handled for the refinery at Fawley.

Newcastle upon Tyne and the other Tyne ports serve the industrial North-East and comprise the most important coal-shipping and largest ship-repairing centre in the country.

Hull, on the Humber estuary, serves particularly the industrial centres of Yorkshire and the Midlands. *Middlesbrough* imports iron ore for, and exports iron and steel from, the local iron and steel industries.

Swansea has the largest trade of the group of ports serving South Wales. As well as coal, Swansea exports the steel and tinplate manufactured in its immediate neighbourhood, but its rapidly increasing importance derives largely from the oil which it imports and exports for local refineries.

Bristol and *Avonmouth* serve the industrial Midlands as well as the highly industrialized city of Bristol itself, and have also a large coastal trade.

Glasgow, the principal Scottish port, serves as an entrepot centre for the industrial area dependent on the Lanarkshire coalfields.

Grangemouth, also in Scotland, handles mainly crude oil for the local refinery, and also imports timber and paper-making materials.

Belfast is the principal port of Northern Ireland and handles the main Irish Sea traffic.

Ownership

The ports previously owned by the main-line railway companies are now under national ownership and are administered by the British Transport Commission (see p. 195). Important examples are Southampton (docks only), Hull, Swansea, Cardiff and Middlesbrough (docks only), Harwich, Folkestone, Newhaven and Holyhead.

Others are controlled by a public trust on which are represented users of the port (such as shippers, importers and shipping companies) and other bodies such as Government Departments and local authorities. Examples are London (controlled by the Port of London Authority), Liverpool (Mersey Docks and Harbour Board), Belfast (Belfast Harbour Commissioners) and Glasgow (Clyde Navigation Trust). *The Port of London Authority* has 28 members. Ten of the members are nominated as follows: by the Admiralty (1), the Ministry of Transport and Civil Aviation (2), the London County Council (4), the Corporation of the City of London (2), and the Corporation of Trinity House (1). Eighteen of the members represent various port users: shipowners (8), merchants (8), owners of river craft (1), and public wharfingers (1). The Authority's duties include the maintenance of adequate river channels, the regulation of traffic, the provision and upkeep of moorings and the licensing of wharves and structures in the area under its control.

A few ports—Bristol is the most important example—are owned by the town or city council and controlled entirely by a committee of the council.

Finally, there are about 100 ports which are privately owned. Manchester is the only major port so owned—by the Manchester Ship Canal Company—and here the Manchester City Council exercises considerable control by appointing 11 of the Company's 21 directors.

The powers and responsibilities of the port authorities are, in the main, set down in private Acts of Parliament which relate specifically to the ports concerned.

Labour

There are about 150,000 people employed in the operation of British ports. Just under half of these are administrative, clerical and technical staff, and pilots, lightermen, customs officials and so on. Over half are the dock workers (formerly and still popularly called 'dockers') who do the physical work of handling cargo.

Shipping arrivals and departures do not all conform to a regular schedule, with the result that there is sometimes too much work for the dock workers available, sometimes too little. Dock labour was therefore largely casual labour until 1941, when war-time schemes were introduced to control the port registers of employers and workers. The war-time schemes were superseded in 1947 by a permanent

scheme administered by the *National Dock Labour Board*. Workers on these registers now receive a guaranteed minimum wage even when there is not enough work for all of them. The Board consists of a chairman, vice-chairman, and eight members appointed by the Minister of Labour and National Service, four to represent employers and four to represent dock workers.

INLAND TRANSPORT

In 1953 the number of passenger journeys made in public service vehicles (road and rail) in the United Kingdom was about 20,000 million, rather over one per day for every person in the country. In addition, about 2,800,000 motor cars and over one million motor cycles were licensed for use on the roads. The annual mileage of most of these vehicles is believed to be between five and ten thousand. Journeys by public transport are mainly short and a great many of them are to and from places of work. The resultant concentration of travel in the morning and evening 'rush hours' constitutes a formidable problem in London and other centres of industry and commerce.

The extent of freight traffic in the United Kingdom can be roughly gauged from the fact that in 1953 British Railways carried over 22,000 million net ton miles¹ of goods, while there were nearly a million goods vehicles on the roads, whose aggregate net ton mileage is believed to be little less than that of the railways.

The dense traffic of the United Kingdom is carried mainly by road and rail, though some freight is carried by canal. There are in the United Kingdom some 52,000 miles of railway track and nearly 200,000 miles of road, of which only about one quarter can be classed as main roads. The railway network was developed mainly in the nineteenth century from 1840 onwards (and there are now more railways per square mile in Britain than in any other country, except Belgium), while the building of new motor roads and the widening and strengthening of old ones to accommodate the increasing motor vehicle traffic has been a feature of the twentieth century.

The State has for a long time exercised considerable control over public transport operators, and the scope and degree of regulation in the interest both of public safety and of efficiency has increased throughout the twentieth century.

The Transport Act, 1947

On 1st January 1948, in accordance with the provisions of the Transport Act, 1947, most of Great Britain's² inland transport system, other than road transport, passed into public ownership. On that date, the railways, all railway-owned steamships, docks, hotels and road transport interests, most of the country's canals (including all those owned by the railways) and the whole of London's passenger transport system came under the control of the British Transport Commission, a public corporation which was given the duty of providing an efficient, adequate, economical and properly integrated system of public inland transport and port facilities for passengers and goods. In addition, the Commission was to arrange for the gradual acquisition of privately owned long-distance road haulage firms.

Road passenger transport outside London was not taken over, but the Commission was given power to prepare area schemes for co-ordinating passenger services

¹ Net ton miles are calculated by multiplying the tonnage carried by the actual distance it was carried.

² In Northern Ireland, public ownership was brought into effect by the Transport Act (Northern Ireland), 1948 (see p. 207).

by road and rail, including power to acquire road passenger undertakings for this purpose. A considerable amount of road haulage, several waterways and many docks were left outside the Commission's scope.

By the 1947 Act the Commission was made responsible to the Minister of Transport (now the Minister of Transport and Civil Aviation) who, in turn, is responsible to Parliament. The Minister was to appoint the members of the Commission, and was empowered to give general directions to the Commission in the national interest and to approve the general outline of programmes of major development and of training, education and research. With the consent of the Minister, the Commission was given power to borrow up to £275 million. An annual report and statement of accounts was to be submitted to the Minister who would lay it before Parliament. Jurisdiction over transport charges of all kinds was given to the Transport Tribunal (formerly the Railway Rates Tribunal established in 1921): all charges schemes proposed by the Commission were to be approved by the Tribunal. Transport users were to be given an opportunity of putting forward criticism and constructive suggestions for improving transport services through a Central Transport Consultative Committee for Great Britain and Area Transport Users' Consultative Committees, including one each for Scotland and Wales. The members of these Committees were to be appointed by the Minister, after consultation with the interests concerned, to represent commerce, industry, labour and local authorities. The Minister would also appoint members from persons nominated by the Commission. Eleven area committees have in fact been set up. They report to the Central Committee and the Commission, and the Central Committee reports to the Commission and the Minister who can give directions to the Commission upon any recommendation of the Central Committee. (Since 1953 the Scottish and Welsh committees also report direct to the Minister, who can give directions upon their recommendations.)

As agents of the Commission, six executives were appointed to run different parts of the system it took over: (1) the Railway Executive, to be responsible for the railways, which were organized in six regions; (2) the Road Transport Executive, which in June 1949 was renamed the Road Haulage Executive, to operate long-distance road transport which was organized in eight geographical divisions; (3) the Road Passenger Executive, which was set up in June 1949 as a planning and advisory body to promote area schemes for the co-ordination of road passenger transport services; (4) the Hotels Executive to run the railway hotels and catering services; (5) the London Transport Executive to operate road and rail passenger transport in the London area; and (6) the Docks and Inland Waterways Executive to be responsible for canals and the former railway-owned docks.

The Transport Act, 1953

Changes in the organization briefly outlined above are now being put into effect under the Transport Act, 1953.

The broad purpose of this Act was described by the Minister of Transport, speaking for the Conservative Government during the second reading of the Bill. He said: 'We believe that competition gives a better service than monopoly. We believe that the best way to have a good service is through decentralization; and that independent private enterprise, or in the case of the railways, regional enterprise, is the best way to achieve this decentralization'.

The main provisions of this Act were accordingly directed to returning road haulage to private enterprise by arranging for the disposal of most of the Commission's road haulage undertaking, and to increasing the competitive efficiency of the railways. To this end the Commission was ordered to submit a scheme of railway

organization and decentralization including the abolition of the Railway Executive; it was also given more latitude in fixing railway charges. Further details of these provisions and an account of the action taken to implement them are given on pp. 198-9 and 203-4.

Other important provisions of the Act were as follows:

1. The Commission's power to make area schemes for the co-ordination of road and rail passenger services and trade harbours schemes was revoked.
2. The Commission's maximum membership was to be increased. It would consist of a chairman and up to 14 members, all of whom could be part time.

Abolition of Executives

All the Commission's remaining Executives (the Road Passenger Executive had been abolished in October 1952) except the London Transport Executive were abolished as from 1st October 1953. The Docks and Inland Waterways Executive was replaced by a Board of Management, and the Hotels Executive by a Hotels and Catering Services Committee to be known as British Transport Hotels and Catering Services; interim arrangements were made for the railways (see p. 199), and pending the disposal of the road haulage assets a Board of Management was set up for road haulage (see p. 204).

RAILWAYS

Britain was the pioneer of railway development which provided the improved transport essential to industrial and commercial expansion.

Railroads were in use around pits and iron works before the end of the sixteenth century. Trucks were mainly drawn by horses. The first railroad to carry goods for the public was the Surrey Iron Railway built between Wandsworth and Croydon in 1801 to 1803. In 1812, William Hedley, a colliery engineer, following up the work of William Symington, William Murdock, Richard Trevithick and others, showed how locomotives could be used on railroads. About the same time, George Stephenson improved the efficiency of existing models by increasing the draught to the fire-box. In 1825 the Stockton to Darlington railway was opened and became the first public railroad on which locomotives were used. The first public line built expressly to use only locomotive haulage was the Liverpool and Manchester railway of 1830. Stephenson's 'Rocket' was the chosen locomotive, as a result of a competition in 1829. From that time, the potentialities of the locomotive railway began to be fully developed.

At first, railway projects were mainly local, promoted by groups of people concerned with the needs of particular areas. Parliamentary sanction had to be sought for each project. The general opinion was that the company would provide the track but would not necessarily act as carriers. Private carriers often ran their vehicles over the companies' lines. But the realization that for reasons of safety and efficiency the company must have all traffic under its own control was endorsed by a Parliamentary Committee in 1839. Railway building was particularly rapid between 1840 and 1875, with a short lull following the collapse of a speculative railway boom in 1846. This period also saw the beginning of a process of amalgamation in order to achieve the economics of concentration and large-scale operation. The State began to intervene. Thus, in 1846 an Act of Parliament prescribed a standard gauge of 4 feet 8½ inches for all new lines except extensions of the Great Western Railway which had a gauge of 7 feet. Not until 1892 was the Great Western gauge completely converted to the standard gauge. In 1850 statutory recognition was given to the Railway Clearing House which began in 1842 and had

the function of facilitating through traffic by providing for the adjustment of balances between companies. The Railway and Canal Traffic Act of 1854 laid upon the companies the obligation of providing reasonable facilities, especially for through traffic, and of avoiding undue preference between users. In 1873 jurisdiction under this Act was given to a body of three Railway Commissioners which in 1888 was renamed the Railway and Canal Commission. The Railway and Canal Traffic Act of 1888 drew up a standard freight classification and schedules of maximum freight charges which came into operation in 1893. A company wishing to increase these rates had to justify itself to the Railway and Canal Commission.

During the 1914-18 war the railways were controlled by the Government, acting through a Railway Executive Committee consisting of the general managers of some of the larger companies. This arrangement made clear the advantages of concentration and it was decided that the handing back of the railways to the companies should be accompanied by a comprehensive reorganization. By the Railways Act of 1921, 123 companies were amalgamated into four large groups—the London, Midland and Scottish; London and North Eastern; Great Western; and Southern. A new tribunal, the Railway Rates Tribunal, was established to take over the jurisdiction over charges and questions of undue preference of the Railway and Canal Commission. It was to carry out an annual review of standard rates and fares which were to be adjusted with reference to the principle of maintaining to the companies a standard net revenue equivalent to that of 1913.

In the inter-war years, the railways suffered both from the general industrial depression and from the growing competition of road transport, and the standard net revenue was never earned. Efforts were made to improve services and efficiency. In 1928 powers were obtained from Parliament to own and operate road services. But the railways were at a disadvantage in competing with road hauliers; the latter were not, as were the railways, bound to accept all traffic; their rates were flexible and need not avoid undue preference, and they were not heavily capitalized undertakings. In 1938, the railways put forward 'Square Deal' proposals calling for relief from statutory regulation of charges and for freedom to decide for themselves the rates for merchandise carried. The campaign was interrupted by the outbreak of war in 1939 when the railways again passed under the control of Government, acting, as in the 1914-18 war, through a Railway Executive Committee.

British Railways

In 1947 the Transport Act brought the railways of Great Britain¹ into public ownership and created a Railway Executive empowered to operate them on behalf of the British Transport Commission as a single enterprise known as British Railways, with six regional sub-divisions—London-Midland, Western, Eastern, Southern, North Eastern and Scottish—corresponding broadly to the former companies.

The Transport Act, 1953, reversed the policy of centralization, and instructed the British Transport Commission to prepare a scheme for railway reorganization and decentralization. The scheme was to provide for the abolition of the Railway Executive (if not already abolished) and for the setting up of area administrations which might follow the existing pattern of regions, to which many of the Commission's powers would be delegated. But there would still be central responsibility for some matters including wages and charges.

To increase the competitive power of the railways, the Commission was to have more latitude in fixing railway charges, e.g., only the maximum rates would need

¹ For information on the railway system of Northern Ireland see p. 207.

Britain's first Telecobalt Unit, for cancer treatment, in use at Bristol General Hospital. The Unit was built by the Department of Engineering, Cambridge University, with advice from the Atomic Energy Research Establishment, Harwell.



Pupils arriving at Kidbrooke School, the London County Council's first comprehensive school, opened in 1954.



Houses and flats at Harlow, Essex, one of the eight New Towns near London (see p. 330).



Boys of an Outward Bound School learn map reading (p. 319).

to be provided for and published and not concessions made to secure competitive business.

From 1st October 1953 interim arrangements came into effect pending the reorganization envisaged in the Act. The Railway Executive was abolished and the Commission became the employer of all officers and staff of the British Railways. The six regions remained unchanged but wider powers were given to the Chief Regional Officers who became known as Chief Regional Managers.

The Commission's scheme for the reorganization of the railways was published as a White Paper on 13th July 1954 and followed the general principles of the interim arrangements.

The Commission proposed that the existing six regions should be the areas envisaged under the Act. The area authorities should be boards, each consisting of not more than seven persons including a chairman, one or more of the members being a member of the Commission. Members would be drawn in part from outside the industry but would not be representatives of particular interests; they would not be expected to devote the whole of their time to the work of the authorities. The Commission considered that its control in the scheme of organization should be absolute and that it alone should appoint the members of the area authorities. The area authorities would not be incorporated, and the Commission would remain the employers of staff; it would also retain general financial control including the control of charges.

Within the framework of their responsibilities to the Commission, the area authorities would be responsible for the management of the railway system in their areas, but they would leave day-to-day management to their Chief Regional Managers who would continue to maintain close contact with the staff at Commission Headquarters. Functions delegated to the area authorities, which they would exercise in the name of the Commission, would be to promote initiative in improving services and facilities and in effecting economies; to ensure that contact would be made with users to meet their requirements to the fullest extent possible; and to ensure that proper measures would be taken regarding the safety, health and welfare of the Commission's employees.

The scheme was accepted and is being put into operation.

Staff and Assets

The following figures summarize the numbers of staff employed and vehicles, ships and track owned by British Railways at the end of December 1953.

Staff, total number	..	..	..	..	..	593,768
of which: Administrative	..	..	..	..	..	76,436
Operative	..	..	..	..	..	305,278
Maintenance	..	..	..	..	..	197,854
Permanent Way (standard gauge)						
Railroad mileage (incl. electrified)	..	..	..	..	..	19,222
Track mileage (incl. electrified)	..	..	..	..	..	51,607
Locomotives						
Steam	..	..	..	..	..	18,584
Electric	..	..	..	..	..	65
Diesel	..	..	..	..	..	14
Diesel-electric	..	..	..	..	..	242
Gas-turbine electric	..	..	..	..	..	2
Petrol	..	..	..	..	..	2
Narrow-gauge ¹	..	..	..	..	..	5

¹ There are about 27 miles of narrow-gauge track open for traffic.

Passenger carriages ¹							
Steam	..	..	..	..	..	..	37,197
Electric	..	..	..	..	..	..	4,565
Freight vehicles	..	..	..	..	..	..	1,122,044
Ships ²	..	..	..	..	..	..	135
Net tonnage of ships	..	..	..	..	..	..	78,436
Road vehicles							
Motors and tractors	..	..	..	..	..	..	5,409
Articulated Motive Units	..	..	..	..	..	..	9,960
Trailers for above	..	..	..	..	..	..	25,823
Horse-drawn vehicles	..	..	..	..	..	..	5,394

The railway system is, of course, fully signalled and has a complete telephone and telegraphic network. A system whereby trains are automatically warned and controlled if signals are against them has been in operation on the Western Region—formerly the area of the Great Western Railway—since 1905. The general adoption of a suitable system on all main line railways has been studied since nationalization and plans are in hand for its installation.

The largest railway station in the country is Waterloo, the London terminus of the South Western main and suburban lines in the Southern Region. It has 14,901 feet of platform face (i.e. the side of the platform towards lines). The longest single platform face on British Railways is at Manchester; it extends for 2,194 feet through the adjacent Victoria and Exchange Stations.

Major development works include the electrification of the line between Manchester, Sheffield and Wath, which was opened in September 1954.

Motive power is the subject of continuous study. Twelve standard classes of steam locomotives are being introduced, while experiments are being carried out with diesel-electric locomotives on main line work. Diesel-electric traction is already being employed for shunting in marshalling yards, where it is more economic than steam traction, and in multiple unit passenger trains. The testing of the design, construction and operation of steam locomotives is carried out at the Locomotive Testing Station at Rugby, which was opened in October 1948.

Refreshment rooms and restaurant and buffet car services are the responsibility of British Transport Hotels and Catering Services. Staff employed at the end of 1953 numbered 15,374. Refreshment rooms are operated, often by concessionaires, at 400 stations, and in 1953 approximately ten million meals were served on trains. There are 40 railway hotels. The policy has been to sell hotels not connected with transport.

Accidents on British Railways are rare; the only major accident in 1953, a collision between a steam passenger train and an electric train on the Irk Valley viaduct in Lancashire on 15th August, caused the death of ten persons.

ROADS

The road system is complex and to a large extent haphazard. For centuries after the Romans left Britain, road building and maintenance was left mainly to the

¹ Including rail motor vehicles.

² Including 10 jointly owned and 5 operated but not owned. British Railways operate services on twelve routes to the Continent including two train-ferry services, Harwich-Zeebrugge and Dover-Dunkirk. Services are also operated across the Irish Sea, and on coastal waters and lakes.

parish which was naturally concerned only with local needs. The most effective intervention by the central Government was in the seventeenth century with the institution of turnpike trusts. The maintenance of a length of road was placed in the hands of a trust, made up of private individuals, empowered to levy tolls at the gates it erected at the limits of its jurisdiction. Early in the nineteenth century there were 1,000 of these trusts administering some 22,000 miles of road. The same period was also notable for improvements in construction associated with the names of Telford, who emphasized the importance of solid foundations, and McAdam, who demonstrated the value of an arched surface of broken stone or flint. Turnpike roads made it possible for coaches to reach an average speed of 12 miles an hour. But transport by river and canal retained the advantage in handling bulky traffic, and as the nineteenth century progressed, the railways almost drove long-distance road transport out of existence. Roads held their own in towns where horse-drawn omnibus services were developed and then horse tramways, the first of which were introduced into London and Birkenhead in the early 1860s. Towards the end of the nineteenth century the tramways were electrified and largely taken over by local authorities. London's trams have now disappeared, as have those of many other towns and cities.

While tramways were still being developed, there came the internal combustion engine and the rapid increase in the number of motor cars. In 1909, the Government set up a Road Board to assist in providing new and better roads to meet the needs of the new traffic. In 1919 the Board's responsibilities were taken over by the newly created Ministry of Transport.

In 1953, Great Britain had 186,261 miles of public highway, over two miles for every square mile of territory. There were 8,254 miles of trunk roads, 19,551 miles of Class I roads, 17,700 miles of Class II roads, 48,693 miles of Class III roads, and 92,063 miles of unclassified roads. Roads are classified according to their traffic value, those of purely local traffic importance remaining unclassified. Trunk roads are the main arteries of national traffic and the whole cost of their upkeep is met from the Road Fund, administered by the Minister of Transport, who is the highway authority for these roads. On maps and signposts the trunk and Class I roads can mostly be identified by the letter 'A' in front of a route number, and Class II roads by the letter 'B'. The Minister makes grants from the Road Fund towards approved expenditure on Class I, II and III roads at the rates of 75, 60 and 50 per cent respectively. The highway authorities for these and for unclassified roads are the local authorities—in most cases the councils of counties and county boroughs. The Road Fund, established in 1921, was originally financed by the proceeds from motor vehicle and driving licence duties, but since the Finance Act, 1936, the proceeds of motor taxation have been paid into the Exchequer and the Road Fund is financed, like any other Government-assisted service, by means of annual grants voted by Parliament.

In the year ended 31st March 1953 total expenditure on highways amounted to £86,028,000, of which £10,794,000 was spent on trunk roads. In all, £31,459,000 of the expenditure was borne by the Road Fund. Economic difficulties since the war have restricted expenditure on major improvements and new construction. But a programme of such works has been put in hand in the financial year 1954-55 which will cost the Exchequer a total of £19½ million in 1954-55 and about £50 million in the three years 1954-57.

In November 1954 the Government decided to embark on an expanded programme of road construction and improvement designed to increase safety on the roads and to relieve traffic congestion, and in February 1955 announced its intention of spending £147 million on these projects over the next four years.

Roads in Northern Ireland

There are 13,255 miles of public roads in Northern Ireland, comprising 347 miles of trunk roads, 960 miles of Class I roads, 1,742 miles of Class II roads, 2,749 miles of Class III roads and 7,457 miles of unclassified roads.

In the year ended 31st March 1953 approximately £4 million was spent on road works.

The Ministry of Commerce is the road authority for the trunk roads and the cost of maintenance and improvement is met out of moneys voted by Parliament. The road authorities for the other classes of public roads are the local authorities within whose areas the roads lie, and the cost of reconstruction, maintenance and improvement of the roads is a charge on the income of those bodies. Grants from the Northern Ireland Road Fund are, however, made to the local authorities in aid of their expenditure on road works. The rates of grant range from 72 per cent to 30 per cent for reconstruction and from 60 per cent to 20 per cent for maintenance and improvement, according to the classification of the road.

ROAD TRANSPORT

Between 1830 and the 1914-18 war, the railways were unchallenged as the chief means of transport in the country; the war, however, greatly stimulated the development and use of motor transport. In the period immediately following the 1914-18 war, the growth of public road transport began to make itself felt as a serious competitor of the railways and there was violent competition within the road transport industry itself. In 1928 a Royal Commission on Transport was appointed to consider the issues involved, and following its recommendations legislation was introduced. The Road Traffic Act, 1930, provided either directly or by regulations for (i) a reclassification of motor vehicles and the re-enactment of the licensing system for drivers; (ii) the prescription of speed limits and a variety of 'safety' measures, including a restriction on the hours during which drivers of public service and goods vehicles could remain continuously on duty; (iii) the issue of orders governing the construction and use of motor vehicles; (iv) compulsory insurance against third party risks; and (v) the introduction of a comprehensive licensing system for public service (passenger) vehicles, under which bodies of Traffic Commissioners (now called Licensing Authorities for Public Service Vehicles) were created to have the duty, within defined Traffic Areas, of licensing vehicles, drivers and conductors, and services operated. Each Licensing Authority consists of a full-time chairman appointed by the Minister and two part-time members chosen by the Minister from a panel of persons nominated by local authorities. Applications for licences for road services are considered at public sittings at which the applicants and competing operators or local authorities can exercise a right of objection; the Licensing Authority has power to suspend or revoke a licence in certain circumstances. Although the Minister can issue general directions to Licensing Authorities he has no power to intervene in their decisions, unless an applicant or an objector being aggrieved at a decision appeals to him. The effect of this system has been to ensure for road passenger transport the regularity and reliability which has been a feature of railway services.

In 1933 the Road and Rail Traffic Act was passed; it was based on the recommendations of the Royal Commission and on those contained in a report of a conference of experts, known as the Salter Report. A system of licensing for road haulage vehicles was introduced and three types of carriers' licences were instituted: the 'A' licence for general public haulage; the 'B' licence for public haulage limited to certain goods or certain areas and covering also the carriage of

the licensee's own goods; and the 'C' licence for the carriage by traders of their own goods alone. The Licensing Authorities for Goods Vehicles are the Chairmen of the Licensing Authorities for Public Service Vehicles in each Traffic Area, and applications for 'A' and 'B' licences are considered at public inquiries as in the case of road service licences under the Road Traffic Act, 1930; 'C' licences are granted on application without public inquiry. A licence can be suspended or revoked by a Licensing Authority for breaches of licence conditions committed frequently, wilfully or to the public danger. There is a right of appeal against a decision of a Licensing Authority to an independent tribunal, the Transport Tribunal, and not as under the Act of 1930 to the Minister. The effect of this system has been to relate the operations of vehicles under 'A' and 'B' licences to approved needs and to eliminate wasteful competition between the different forms of transport.

During the 1939-45 war commercial vehicles were subject to a considerable degree of direct control through a system of permits and fuel rationing. The Ministry of War Transport's Road Haulage Organization, set up in 1943, came to control many of the larger undertakings and hired a large number of vehicles engaged in long and short distance work. Vehicles were handed back to their owners when the Organization came to an end in 1946 and the carriers' licence system, which had been suspended, was resumed. At the end of 1946 there were 90,683 vehicles on 'A' licences, 58,386 on 'B' licences and 383,738 on 'C' licences, a total of 532,807 vehicles.

The Transport Act, 1947, established the British Transport Commission which took over 'A' and 'B' hauliers predominantly engaged on long-distance haulage. Vehicles operating under 'C' licences and those used for carrying certain specialized traffics were not affected by the Act; 'A' and 'B' licensed vehicles which were not acquired by the Commission could only be used on journeys of over 25 miles from base under permits granted by the Commission. By the end of 1951, when the acquisition of vehicles by the Commission was completed, 3,266 undertakings with 41,265 vehicles and 3,018 trailers had been acquired. Carriers' licences were not required for vehicles operated by the various Executives of the Commission.

The Transport Act, 1953, required the British Transport Commission to dispose of the bulk of its road haulage undertaking and all vehicles operated by the Commission were made subject to the carriers' licence system.

The Commission was to be allowed to retain a proportion of its road haulage fleet corresponding broadly to the interest the railways had in road haulage when they were taken over on 1st January 1948. The disposal operation was to be carried out by the Commission as quickly as possible under the supervision of a Road Haulage Disposal Board. Purchasers of the Commission's road haulage property were entitled to operate the vehicles bought immediately without restriction as to distance from their operating centres, while the 25 miles radius limit was to be removed from all operators on 1st January 1955.

The Act also provided for a levy on ordinary goods vehicles of more than $1\frac{1}{2}$ tons unladen weight, and on general haulage tractors. The levy was required to defray the capital loss suffered by the Commission on the disposal of its road haulage undertaking and for 'disturbance' during the process. The rate of the levy was fixed for 1954 and 1955, at a level which would produce approximately £4 million a year, and could then be varied at three-yearly intervals according to requirements. When sufficient money had been collected to meet the necessary payments, the levy would cease.

The Road Haulage Disposal Board was set up in May 1953. There are six members appointed by the Minister of Transport and Civil Aviation. Invitations to tender for the first transport units offered for sale were published in November

1953. In its first report, covering the six months to 28th November 1953, the Board emphasized the difficulties of the task. 'This undertaking is not merely a collection of motor vehicles and trailers, but is a large integrated business ordered to be sold at the best aggregate price. The land and premises included in the undertaking stand in the books of the Commission (at the end of 1952) at £14·8 million; plant and equipment and the stocks of stores stand at £8·9 million and cover some millions of separate items. These sums together, at £23·7 million, compare with a slightly smaller figure for vehicles (after deduction of accumulated depreciation) of £21·9 million.'

Pending the disposal of the road haulage assets, the road haulage activities of the Road Haulage Executive are being carried on as British Road Services by a Board of Management consisting of the chairman of the old Executive and three full-time and two part-time members also drawn from the Executive.

At the end of 1953, including British Transport Commission vehicles, there were 89,444 goods vehicles on 'A' licences, 63,622 vehicles on 'B' licences and 866,322 on 'C' licences, making a total of 1,019,388 vehicles.

Road Safety

There are now some five million road vehicles licensed to use Great Britain's roads, of which two and three-quarter million are motor cars and over a million are motor cycles. Traffic density is, therefore, high, presenting problems of control and safety. In 1953, 5,090 people were killed on the roads and 221,680 injured. Vigorous road safety campaigns are conducted by local authorities with the aid of government grants. The Royal Society for the Prevention of Accidents, the police and education authorities are all actively at work to the same end. A new system of pedestrian crossings has been introduced, a feature of which is the more conspicuous marking which takes the form of white stripes—hence the name 'zebra crossings'—illuminated by flashing beacons. The standard of conduct for all road users—pedestrians and drivers—is set out in *The Highway Code* issued by the Minister of Transport and Civil Aviation. A failure to observe any provision of this code does not of itself render a person liable to criminal proceedings of any kind but it may be taken into account in any such proceedings. Drivers of motor vehicles—including motor cycles and powered pedal cycles—all have to pass a driving test before being granted a substantive licence to drive; until they pass the test they may obtain a 'provisional' licence which necessitates their displaying 'L' (Learner) plates and, in all cases of vehicles constructed to carry passengers, being accompanied by a qualified driver.

INLAND WATERWAYS

In 1761 James Brindley completed the Bridgewater Canal to take coal from the collieries owned by the Duke of Bridgewater at Worsley to Manchester. This marked the beginning of canal building in modern Britain which played an important part in promoting the industrial and commercial expansion of the late eighteenth and early nineteenth centuries. Most of the present network—except, notably, the Manchester Ship Canal which was built between 1888 and 1894—was completed by 1840 when the development of railways brought to an end the golden age of canals.

There are some 2,200 miles of inland waterways open to traffic in Great Britain. The British Transport Commission is responsible for about 2,000 miles. Canals account for 1,750 miles. Under the Docks and Inland Waterways Board of Management, the canals in England and Wales are grouped into four divisions based on the main navigable river estuaries:

- (1) The North-Eastern Division is based on the Humber estuary and the ports of Hull, Grimsby, Goole and Immingham.
- (2) The North-Western Division is based on the Mersey estuary and its waterways are connected with Liverpool and Birkenhead, Ellesmere Port, Weston Point Docks, Manchester, and with Hull via Leeds.
- (3) The South-Western Division is based on the Severn estuary and its waterways are related to the ports of Avonmouth, Gloucester, Sharpness, Barry, Lydney, Cardiff, Newport and Swansea.
- (4) The South-Eastern Division is based on the Thames estuary and its waterways give access to the Port of London.

Canals in Scotland, which are separately administered under the Board of Management are the Caledonian Canal, the Crinan Canal, the Forth and Clyde Canal and the Union Canal.

There are broad waterways which can be used by craft with up to 400 tons capacity and narrow waterways which can generally be used only by boats not exceeding 7 feet in width. Broad waterways are mainly the canalized rivers—e.g., the Severn, Lee and Stort Navigation, Trent Navigation, Aire and Calder Navigation—while narrow waterways are mainly the canals in the interior—e.g., the Grand Union, the Shropshire Union and the Birmingham network. The canals in Scotland are broad. Most of the traffic on the waterways is carried by independent carriers or by traders in their own craft. The British Transport Commission, however, at the end of 1953 owned 1,283 craft with a carrying capacity of 44,227 tons, including 246 power-driven craft with a capacity of 8,270 tons. Work is being done to increase canal capacities, e.g., by dredging, straightening bends, deepening and opening up bottle-necks, and by developing improved types of craft. In 1953, total traffic on the Commission's waterways amounted to 12.7 million tons, of which 6.9 million tons were coal and coke, 1.9 million tons liquids in bulk and 3.9 million tons general merchandise. About 98 per cent of this traffic is carried on 1,200 miles of the Commission's 2,000 miles of waterway. This indicates a problem of moribund canals which has to be tackled.

Docks and Harbours Administered by the Commission

The British Transport Commission owns about 30 per cent of Britain's dock accommodation with a total of over half a million feet of quays. A few of the Commission's ports are docks developed by former canal undertakings such as the Aire and Calder Navigation which developed Goole. The rest are those formerly owned by the railways. In some cases—e.g., at Southampton and Middlesbrough—the railways owned the main docks in ports where the statutory authority was a harbour board. In other cases—e.g., at Grangemouth, Garston and Grimsby—the port was largely developed by the railway company which was itself the statutory harbour authority. Some railway-owned ports were mainly links with the railway: Folkestone, Harwich, Newhaven, Fishguard and Heysham are in this category. In 1953, nearly 70 million tons of cargo were handled at the Commission's docks and harbours, at which, at the end of the year, about 21,000 people were employed.

LONDON TRANSPORT

London's transport system, in its modern sense, may be said to have begun when in 1829, four years after the opening of the Stockton and Darlington Railway, the first omnibus—horse-drawn—appeared on the London streets. Trams, also horse-drawn, appeared in 1861. In 1863 the first underground steam railway, the

Metropolitan, was built by digging a great trench for the line and roofing it over. In 1870 a better method for building a railway inside a city was found when the Tower Subway was constructed. The line was laid in an entirely underground tunnel shaped like a hollow tube and thus became the world's first tube railway. In 1890 the City and South London, the first electric tube railway in the world, was opened, and it was followed soon after by the Central London Railway, called the 'twopenny tube' because all journeys on it cost twopence. Soon after this buses and trams ceased to be horse-drawn and used petrol and electricity respectively for their motive power, and trams, buses and underground railways rapidly developed into the vast network of London's transport system.

Until 1933 there was no unified operation. The large number of transport interests included: the main line railways with their suburban services; an Underground Group controlling most of the underground railways, the General buses, Green Line coaches and three tramway companies; the independent Metropolitan Railway Company; London County Council tramways; 13 municipal tramway undertakings; and some 60 small independent bus undertakings. But in 1933, the whole system, except the main line railways' suburban services, was vested in a public corporation, the London Passenger Transport Board. During the 1939-45 war, London transport was taken over by the Government and operated, like the main line railways, through the Railway Executive Committee. In 1948, following the establishment of the British Transport Commission, the London Transport Executive took over control.

The London Transport Executive is responsible for the operation of passenger road and rail services in the London area with the exception of the main line railways, certain suburban services which came under the Railway Executive, and taxicabs, which are all privately operated by companies or owner-drivers.¹

The Executive consists of a chairman and five members, of whom four are full-time and one part-time. The chairman and full-time members each have special functional responsibilities apart from their general responsibility for the smooth running of the London Transport system.

The operation of London's transport is a vast undertaking. It serves an area of nearly 2,000 square miles, extending for an average distance of 25 miles from Charing Cross in the centre of London. It covers, in whole or in part, 10 counties, the cities of London and Westminster, 27 other metropolitan boroughs, 2 county boroughs, 48 municipal boroughs, 59 urban and 29 rural districts. The total population of the area approaches 10 million.

From north to south the railway stretches 18 miles, from east to west 32 miles and from north-west to east 49 miles. The total length of the railway over which London Transport trains operate is 223 miles, of which just over a third is underground, including the longest tube tunnel in the world, 17¼ miles. There are 230 London Transport passenger stations.

Diesel buses travel over routes whose total length is 2,975 miles, coaches over 665 miles, trolleybuses (which use electricity) 253 miles.

To carry traffic over all this area, the London Transport Executive in December 1953 owned 4,099 railway coaches, 8,466 buses and coaches, and 1,797 trolleybuses. The total staff employed at the end of 1953 was 94,605, of whom 10,600 were women. The total number of passenger journeys in 1953 was 4,238,128,000, or about 11.6 million every day.

¹ During the year 1953 in the Metropolitan Police District, which covers the counties of London and Middlesex and parts of Kent, Surrey, Essex and Hertfordshire, annual licences were issued for 5,609 taxicabs; licensed taxicab drivers numbered 9,077 at the end of 1953. Taxicab fares are prescribed by the Home Secretary.

To meet the challenge to the efficiency of London Transport presented by growing traffic, plans have been put forward by the British Transport Commission for extensive developments. These would cost approximately £340 million and take 20-30 years to complete. Among the recommendations are the construction of new tubes, the electrification of steam suburban railways and the substitution of buses for trams. A start on this plan has already been made by the removal, completed in 1952, of all London trams, and by some extensions to the underground railways.

THE ULSTER TRANSPORT AUTHORITY

Public inland transport in Northern Ireland, with the exception of passenger transport in the City of Belfast, a section of the railway system previously owned by the Great Northern Railway Company (Ireland), and some small rail and road transport undertakings, is owned and controlled by the Ulster Transport Authority established under the Transport Act (Northern Ireland), 1948. The railway system formerly operated by the Great Northern Railway Company (Ireland) has passed to a public body called the Great Northern Railway Board, established on 1st September 1953 by the Northern Ireland and Republic of Ireland Governments.

Before the 1948 Act was passed, all the railways in Northern Ireland were separately owned and, from 1935, road transport (except for passenger transport in Belfast City and certain types of specialized and ancillary freight haulage) was under the control of the Northern Ireland Road Transport Board, a public undertaking formed to provide public transport services by road and to co-ordinate these services with those of the railways. Now the Ulster Transport Authority operates all the road services formerly provided by the Northern Ireland Road Transport Board, together with the railway services provided before 1949 by the Northern Counties Committee of the British Railways Executive and by the Belfast and County Down Railway Company.

When the railway undertaking of the Northern Counties Committee was acquired by the Ulster Transport Authority from the British Transport Commission in 1949 it was agreed that each of the parties should co-operate with the other to 'foster and encourage by all means in their power traffic and intercourse between Great Britain on the one hand and Northern Ireland on the other and to . . . maintain the principles of through rates and fares and facilities as between places in Great Britain and places in Northern Ireland'.

The Ulster Transport Authority is a less complex organization than the British Transport Commission and has no subsidiary Executives. The following figures for the year ended September 1953 show the scope of its operations:

Railway track mileage	broad gauge, 301 miles
	narrow gauge, 15 miles
Road route mileage	2,603 miles
Locomotives	92
Railway coaching vehicles	452
Railway freight vehicles	2,642
Omnibuses and coaches	1,096
Goods motor vehicles	1,151
Employees	9,535
Passengers carried during year	106,155,103
Merchandise carried during year	1,904,549 tons
Livestock carried during year	1,263,445 head
Number of transport stations and depots	155
Hotels	5

CIVIL AVIATION

British civil aviation is now organized as follows:

1. Responsibility for its general development and supervision rests with the Minister of Transport and Civil Aviation.¹
2. Scheduled public air transport services are reserved to the two Public Corporations—British Overseas Airways Corporation (BOAC) and British European Airways (BEA)—and their associates. Such services are those operated regularly or systematically between two places, one of which is in the United Kingdom, for the transport of passengers, mail or cargo for remuneration, in such a manner that each flight is open to use by members of the public.
3. Non-scheduled or charter flights are operated in the main by independent air transport companies, although the Corporations undertake such flights as opportunity offers with aircraft not required for their scheduled services at any particular time. Some of these independent firms have large fleets of aircraft and many of them operate scheduled services as associates of one or other of the Corporations.

Early Development

British airmen were the first to carry mails (at the time of the Coronation of H.M. King George V in 1910) and the first to operate regular mail and passenger services. The actual inauguration of civil air transport came on 25th August 1919, when a daily passenger service was opened between London (Hounslow) and Paris (Le Bourget) by a company called Aircraft Transport and Travel Limited. The year 1919 was also marked by notable pioneer flights including the crossing of the Atlantic by John Alcock and Arthur Whitten Brown in June (both were later knighted for their achievement) and the first flight between England and Australia by Captain (later Sir) Ross Smith and his crew in November.

In 1923 a Civil Air Transport Subsidies Committee recommended the merger of the four existing small British companies into one organization capable of developing overseas routes. In April 1924 the merger took place and there came into being Imperial Airways Limited, which received a Government grant of £1 million spread over the next 10 years. As a substantial shareholder the Government was represented on the Board of Directors.

Imperial Airways Limited proceeded to pioneer the commercial development of intercontinental air-routes, following up, in most cases, the exploratory work of the Royal Air Force. Pioneering involved organizing the ground services upon which civil aviation could rely. The route to the Far East came first. In 1927, a link was established between Cairo and Basra and by 1929 there was a through service from England to India. In 1931 the first service was established to Central Africa. The first mail service between London and Australia was begun in December 1934, followed by a passenger service in 1935.

In 1937 crossings of the Atlantic were made simultaneously by Imperial Airways with the modified 'Empire' class flying-boat and by Pan American Airways. In 1939 a transatlantic service was operated by both companies. The British Overseas Airways Corporation was established by the British Overseas Airways Act, 1939,

¹ Up to 1945 civil aviation was administered by the Department of Civil Aviation of the Air Ministry. Between 1945 and 1953 the Ministry of Civil Aviation was the responsible Government Department. But, in October 1953, the Ministries of Civil Aviation and of Transport were amalgamated. In the rest of this section, reference will usually be made only to 'the Minister' or 'the Ministry'.

and took over the undertakings of Imperial Airways Limited and British Airways Limited in 1940.

During the second world war the British Overseas Airways Corporation operated essential overseas air services in support of the war effort. By the end of the war it was carrying more than twice as many passengers as in 1939 and more than three times as much freight. The routes were, moreover, left with efficient radio and radar systems installed for war purposes which were adapted for civilian use. There were also about 700 aerodromes in the United Kingdom, but most of them, having been constructed for war purposes away from large towns, were unsuitably placed for civil use.

The one serious obstacle to a continued expansion of British civil air transport after the war was the absence of any new British civil aircraft to take the place of the pre-war types. The British aircraft industry throughout the war had concentrated entirely on the production of fighters and bombers for the Allied Forces, leaving the production of all transport aircraft to the Americans. Since the evolution of a new airliner takes anything from five to ten years, there was an awkward gap in the natural development of British civil air services which could be filled only by the use of uneconomical converted military types, or the purchase of foreign aircraft. Both expedients together with the use of the highly successful interim short-range Viking aircraft were, in fact, used while the British aircraft industry concentrated on the development of the turbo-jet and turbo-prop airliners, e.g., *Comets*, *Viscounts* and *Britannias*.

The Corporations

As already noted, the British Overseas Airways Corporation (BOAC) was set up in 1939. The Civil Aviation Act, 1946, set up two additional public corporations; British European Airways (BEA) to cover the United Kingdom and Europe, and British South American Airways (BSAA) to operate to South America and the Caribbean, leaving the North Atlantic and Eastern Hemisphere routes to BOAC. In 1949 BSAA was merged into BOAC by the Air Corporations Act of that year. The statutory provisions (now laid down by the Air Corporations Act, 1949) relating to their powers, constitution, etc., are as follows:

Operations. Scheduled services are reserved to the two Corporations, working alone or through associates. They can also engage in charter work. They may not manufacture airframes, aero-engines or propellers.

Constitution. Each Corporation consists of a chairman, deputy chairman and not less than five or more than eleven directors. Appointments are made by the Minister who, in the case of BOAC, may, if he wishes, appoint two deputy-chairmen.

Finance. Each Corporation may, with Treasury consent, borrow either by raising temporary loans or by issuing stock to a maximum of £80 million in the case of BOAC and £35 million in the case of BEA. The Treasury may guarantee redemption or repayment of, and payment of interest on, any stock issued and temporary loans raised. Provision is also made for Exchequer grants up to a limit of £8 million a year (for both Corporations together) until April 1956, so as to enable the Corporations to build up their organization and services over a period of years. (For 1946-47 and 1947-48 the maximum was £10 million.) The Corporations are not exempt from liability for any taxes or rates.

Accounts. Statements of accounts in a form approved by the Minister and the Treasury have to be prepared by the Corporations for each financial year. The accounts are audited by auditors appointed annually by the Minister.

Annual Reports. Each Corporation must also make an annual report to the Minister and the Minister must lay a copy of this report and of the accounts before each House of Parliament. In addition, each Corporation must submit before the beginning of every planning period (each three-year period beginning 1st April 1947) a programme of the services it proposes to provide and of any other activities it proposes to engage in as well as an estimate of its receipts and expenditure on revenue and capital account during the period.

Labour Relations. Each Corporation must, unless it is satisfied that adequate machinery already exists, consult with any organization which it considers appropriate with a view to establishing machinery for settling terms and conditions of employment and for discussing matters affecting the safety, health and welfare of its employees and other matters of interest to both parties, including efficiency in operating the Corporation's services. In 1946 the *National Joint Council for Civil Air Transport* was set up as the body through which terms and conditions of service between the Corporations and the 18 Trade Unions representing the employees are negotiated. A number of the independent air transport companies have since become members of the Council.

Ministerial Control. The Corporations conduct their own affairs as commercial businesses. The Minister can give general directions on matters affecting the national interest but in practice this power is rarely, if ever, used, since it has been found much more suitable to proceed by means of close consultation and discussion with the Corporations. In fact, the Minister has maintained closer control over them than has been the case for the other nationalized industries. This has largely been the consequence of the payment of subsidy to the Corporations through the Exchequer grants, since this has meant that the Minister has had to discharge a considerable responsibility for their general efficiency. He has to decide in consultation with the Treasury what grants, within the ceiling of £8 million, should be given to each Corporation in any particular year. This necessitates a close examination of the Corporations' programmes of air services and estimates. The Minister also keeps in close touch with the Corporations regarding plans for new aircraft and new routes since he has to negotiate the necessary rights with foreign governments. He also provides most of the aerodromes from which the Corporations operate and the navigational aids and communications necessary to the conduct of their flights. Contact between the Corporations and the Ministry is, therefore, close, mainly in the form of daily informal exchanges of information between their staffs.

Independent Companies

The Government considers that non-scheduled or charter services are mainly the domain of the independent companies. The Corporations are not precluded from engaging in this work but they do not maintain aircraft specially for it. The operation of scheduled services by independent companies under associate agreements with the Corporations was introduced in 1948. Applications to operate these services were considered by the Air Transport Advisory Council (see p. 216), which recommended to the Minister whether or not approval should be given. In the main, agreements were of short duration, the routes being those which the Corporations did not, at the time, plan to operate, e.g., some internal routes, short-haul ferry services across the English Channel and a few holiday routes to the Continent.

The opportunities for independent companies to take part in air transport developments were increased in 1952. In May of that year the Ministry outlined the principles which would be followed in shaping the Government's policy for air transport development. These were broadly to combine public and private

enterprise in the best interests of British civil aviation; and to promote sound development, reduce the cost to the taxpayer and give greater opportunities to private enterprise without impairing the competitive strength of Britain's international services and without undermining the existing international networks of BOAC and BEA. This policy is being implemented within the existing legislation so that independent companies seeking to take advantage of new opportunities to operate scheduled services continue to be appointed associates of one of the Corporations.

Applications by independent companies continue to be made to the Air Transport Advisory Council but are considered under new terms of reference issued to the Council in July 1952. Under these terms of reference, the Corporations' position is safeguarded by reserving to them the sole right to operate standard and tourist class services on their own routes. Independent companies and the Corporations alike, however, are eligible to apply for the right to develop new routes not so reserved and new types of scheduled services: for example, national services which do not materially divert traffic from BEA or independent companies already approved, all-freight services which do not affect the services of established operators, and 'Colonial Coach Class' services to any point in the United Kingdom dependencies which generate a new class of traffic by providing a lower class of service than a normal scheduled service.

The Air Transport Advisory Council considers applications in the light of its terms of reference and, after hearing evidence from interested parties, makes recommendations to the Minister. Approval of the operations of scheduled services by independent companies as associates of the Corporations is now normally valid for seven years with extension to ten years in special circumstances, for example, where the purchase of new aircraft is involved. In this way, it is intended to give independent companies sufficient long-term security to justify capital outlay and expansion.

Operations

The latest available information about the services, fleets and results of the two Corporations, and the activities of the independent companies are summarized below.

British Overseas Airways Corporation

The British Overseas Airways Corporation (BOAC) operates services to the Middle and Far East and to Australia, with terminals at Sydney, Tokyo, Hong Kong, Singapore, Colombo, Bahrein, Tel Aviv, Tripoli and Aden; to Africa with terminals at Johannesburg, Salisbury, Nairobi, Cairo, Accra/Lagos and Dar es Salaam; and to North and South America and the Caribbean with terminals at New York, Montreal, Santiago, Jamaica and Trinidad. In April 1954 operation of routes to South America was temporarily interrupted because of a shortage of aircraft resulting from the decision to discontinue *Comet* services pending a full investigation into recent accidents which had involved the loss of two aircraft of that type.¹ As extensions to the London-New York route there are services between New York and Bermuda, Nassau and Montego Bay. The routes to Central and South Africa are operated in co-operation with Central African Airways and in partnership with South African Airways, and the route to Sydney in partnership with

¹ A public inquiry into the cause of the loss of the two *Comet* airliners, on 10th January and 8th April 1954, was opened in London on 19th October 1954, when scientists of the Royal Aircraft Establishment at Farnborough advanced the view that the cause lay in a sudden break-up of the pressurized cabin due to metal fatigue.

Qantas Empire Airways of Australia. Qantas carries on the service from Australia by operating routes to North America—formerly operated by British Commonwealth Pacific Airlines which went out of existence on 31st March 1954—and it will connect with the planned extension to San Francisco of BOAC's North American service. Tasman Empire Airways, jointly owned by the Australian and New Zealand Governments, operates services between Australia and New Zealand and from New Zealand to Fiji and other islands of the South Pacific.

This network of services (see end-paper maps) is supplemented by the activities of subsidiary and associated enterprises overseas in which BOAC participates financially or with which it has technical or management agreements.

Those in which BOAC has a controlling financial interest include *Aden Airways Ltd.*, which develops services in the Red Sea area; *Bahamas Airways Ltd.*, providing services linking the islands of the Bahamas with each other; *British West Indian Airways Ltd.*, providing services throughout the Caribbean area; and *Gulf Aviation Company Bahrein Ltd.*, which operates between Bahrein and nearby ports of call. Those with which BOAC is associated either financially or through advisory and other agreements include *West African Airways Corporation* and *East African Airways Corporation*, serving West and East Africa; *Malayan Airways Ltd.*, which operates services in the Federation of Malaya, Singapore, North Borneo, Brunei and Sarawak and services between those territories and the Asian mainland; *Cyprus Airways Ltd.*; and *Iraqi Airways*.

To implement its policy of extending the benefits of air travel to a wider public by charging lower fares, BOAC has introduced tourist services on many routes and by the end of March 1954, 35 per cent of BOAC's available seat mileage was offered at tourist fares.

On all its services, BOAC carried, in 1953-54, 304,980 passengers, 5,409 tons of freight and 3,366 tons of mail. The figures in 1947-48 were 115,678 passengers, 2,447 tons of freight and 2,088 tons of mail.

During 1953-54 the progressive introduction of the *Comet I* enabled the *Hermes* to be withdrawn from service so that at 31st March 1954 BOAC's fleet consisted of 22 *Argonauts*, 7 *Comets*, 11 *Constellations*, 10 *Stratocruisers* and 4 *York* freighters. When the *Comet I* (with which the world's first scheduled jet service was started on 2nd May 1952) was withdrawn from service on 9th April 1954, BOAC lost 21 per cent of its planned capacity for 1954-55, and as a temporary stop-gap is arranging to acquire some additional American piston-engined aircraft. But BOAC retains its faith in the future of jet-propelled aircraft and has on order *Comet IIs* and *IIIs* to the value of £15 million. The prototype of the *Comet III*—intended for the North American service—made its first flight on 19th July 1954.

In the year 1951-52 BOAC for the first time made a net profit after allowing for interest on capital and before crediting the Exchequer grant of £1½ million. In 1952-53, when the profit (before providing for interest on capital) was reduced from £1.2 million to £104,000 mainly owing to an increase in costs—including increased wage rates and costs of materials, spares and fuel—BOAC abstained from claiming any Exchequer grant and the deficit remaining after paying interest on capital was carried forward. In 1953-54 the profit was £2 million, and after paying interest on capital and providing for future income tax and profits tax, there remained a balance of £936,911 to be applied to the reduction of the accumulated deficiency.

Over the whole seven-year period up to the end of March 1954, the capacity on BOAC services increased from 89.5 million to 220.5 million ton miles; operating revenue increased from £14.6 million to £38.3 million; operating costs were

reduced from 56·6 pence per ton mile to 40·1 pence; and the break-even load factor (the proportion of aircraft space it is necessary to sell in order to cover all costs of operation and administration including interest on capital) fell from 115 per cent to 63 per cent.

British European Airways

British European Airways (BEA) is the seventh largest airline in the world judged by annual number of passengers carried: 1,656,000 in 1953-54 when it operated on its own behalf in conjunction with its associated companies and subsidiaries, a network of services covering 18,230 unduplicated route miles serving 26 airports in the United Kingdom and 40 airports in Europe and the Mediterranean within a periphery on which the farthest points to the north, south, west and east are Oslo, Cairo, Lisbon and Beirut. Its services within the United Kingdom include a number which cannot be operated commercially with the equipment now available but which meet a vital social need. These include services to the Highlands and Islands of Scotland, winter services to the Isle of Man and inter-Channel Islands services. Reduced tourist fares have been introduced on all BEA's domestic routes and on practically all its international routes. BEA maintains a close working relationship with BOAC, whose aircraft of necessity fly through a number of European stopping points on their way east and south. BEA also co-operates with other airlines in order to create 'through travel' facilities. In addition to passengers, BEA carried 14,559 tons of freight and 6,582 tons of mail in the year 1953-54.

A subsidiary of BEA, *Gibraltar Airways Ltd.*, operates services between Gibraltar and Tangier. BEA is associated financially with *Aer Lingus Teoranta*, working primarily between the Irish Republic and the United Kingdom; *Aerolinee Italiane Internazionali (Alitalia)* which operates services within Europe and also to East Africa, the Middle East and South America; *Cyprus Airways Ltd.*, which operates services to Turkey, Greece, Lebanon, Egypt, Jordan, Israel, North Africa, the Sudan and the Persian Gulf; and *Malta Airways Company Ltd.* BEA is also associated with *Société Internationale de Télécommunications Aéronautiques (SITA)*, a Belgian company which provides communications circuits for subscribing operators; and, like BOAC, with *International Aeradio Ltd.* (see p. 219).

BEA's operational fleet on 19th October 1954 comprised 21 *Viscounts V701* (another 5 are on order), 20 *Elizabethans*, 18 *Vikings* ('Admiral' class, the rest of the *Viking* fleet has been withdrawn), 38 *Pionairs* (Douglas DC3, used on domestic routes), 8 *Pionair-Leopard* freighters, and 8 *Islanders* (DH89, used on local services in the Channel Islands and the Outer Hebrides, and for ambulance service in the Highlands and Islands of Scotland), and 5 helicopters.

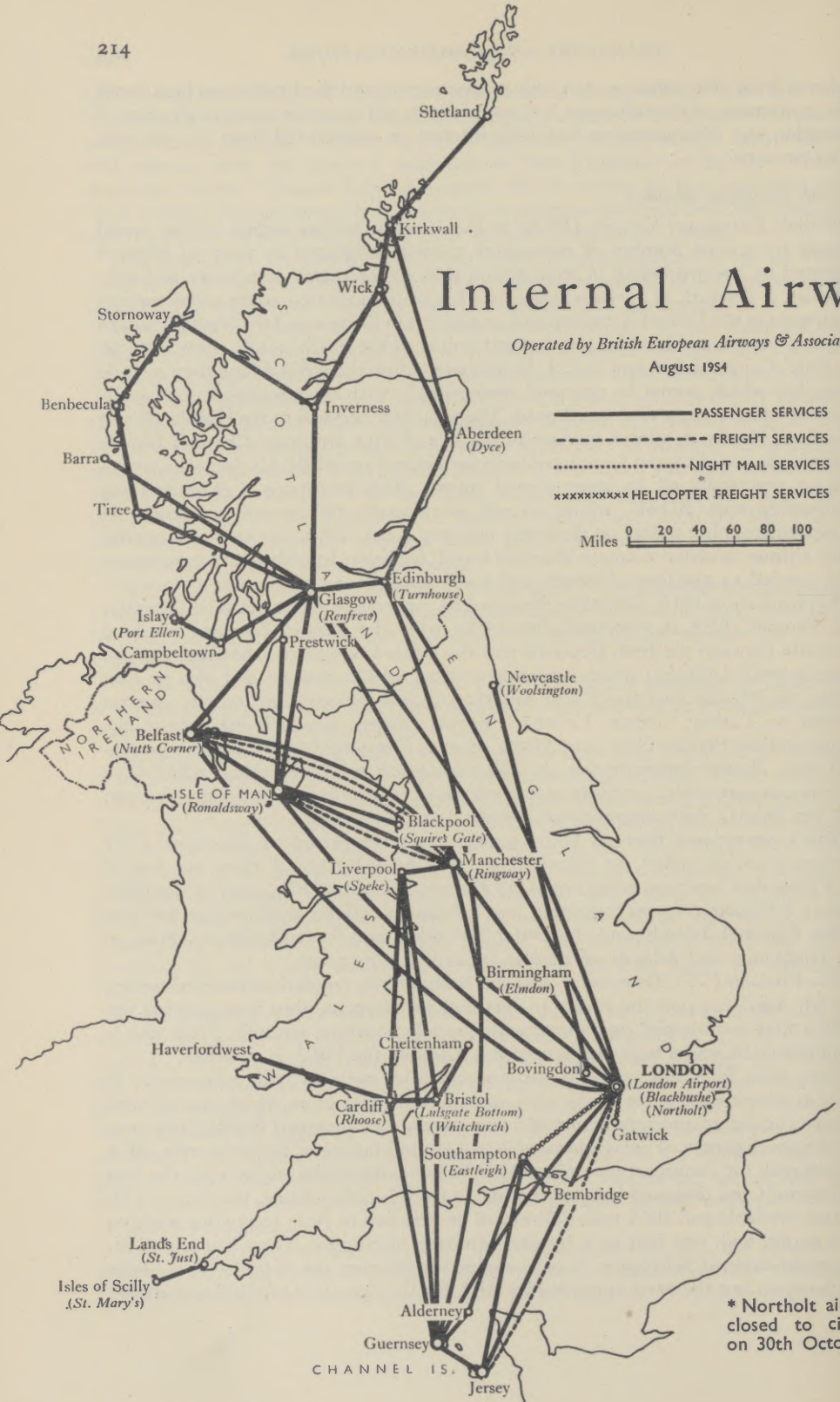
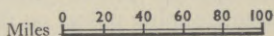
The *Viscount V701* 'Discovery' class was brought into regularly scheduled service on 18th April 1953 on the routes to Istanbul and Cyprus, thus inaugurating the world's first commercial operations with propeller-turbine aircraft. Their use is being extended, and a larger version of the *Viscount*, the *V802*, is on order.

Since 1950 BEA has operated various scheduled services with helicopters, in order to obtain experience in the civil operation of helicopters which can be used to assist the design and production of a commercial twin-engined British helicopter and the development of navigational aids and ground facilities. To begin with, BEA worked with the American type *Sikorsky S.51* but towards the end of 1951 the first British-built and designed helicopter suitable for scheduled flying, the *Bristol 171*, became available and BEA took delivery of its first two in June 1953 after working for a period with one lent to it by the Ministry of Supply. This, like the *S.51*, is a single-engined helicopter. A twin-engined helicopter, the *Bristol 173*, is under development but the version needed by BEA for the operation of the first network

Internal Airways

Operated by British European Airways & Associates
August 1954

- PASSENGER SERVICES
- - - - - FREIGHT SERVICES
- NIGHT MAIL SERVICES
- XXXXXXXXX HELICOPTER FREIGHT SERVICES



* Northolt airport was closed to civil flying on 30th October 1954.

of passenger services is not likely to be available for airline service for some years. Two *Bell 47s* are used for training and experimental work.

As part of the process of obtaining experience, BEA opened a service on 15th June 1954 with a *Bristol 171* between Eastleigh Airport, Southampton and London Airport. The service operates daily except Saturdays and Sundays. In June 1954 BEA was authorized by the Minister of Transport and Civil Aviation to buy two *Sikorsky 55* machines (twin-engined) which would be made in Britain and would be used to start an experimental passenger service between London Airport and the centre of London. A site on the South Bank of the Thames near County Hall would be developed as an airstop and would be available for use by any helicopter coming into the centre of London.

Over the period 1947-48 to 1953-54, BEA's capacity increased from 22 million to 84 million ton miles, operating revenue from £4 million to £14.7 million, operating costs were reduced from 80.4 pence per ton mile to 47.5 pence, and the break-even load factor on operating costs fell from 115 per cent to 71.8 per cent. BEA is faced with the problem of securing adequate revenue from short-haul routes aggravated by a marked seasonal variation in its traffic.

In 1953-54 BEA earned for the first time a small operating surplus of £64,000, but after providing for depreciation and increased aircraft amortization charges, its net deficit was £1.7 million, against which was set an Exchequer grant of £1.5 million.

Independent Companies

The operation of scheduled services by independent companies as Associates of the Corporations has been described above. In 1953 some 239,000 passengers were carried on associate services compared with 55,000 in 1951 and 122,000 in 1952. In addition, as already mentioned, non-scheduled or charter operations are regarded as mainly their province. They cover a wide range of business including moving troops on government account; transporting to and from their place of work personnel belonging to commercial and other companies operating overseas; carrying livestock, including zoological specimens, machinery and other cargo; taking parties to football matches and race meetings in Britain; taking parties on trips or tours to oversea resorts; transporting, to and from the Hejaz, Mohammedans making the Pilgrimage to Mecca; and bringing perishable foodstuffs and flowers from the Continent to the United Kingdom market. There are also firms which specialize in such activities as aerial photography and crop spraying.

The independent companies engaged in business of this kind operate a total of about 195 twin-engined and 60 four-engined aircraft. A number of these companies are members of the British Independent Air Transport Association Ltd. The larger of them have subsidiary companies abroad and in some cases provide the management of small foreign airlines. Much charter business is now arranged through the Air Section of the Baltic Exchange, the London market for shipping space. In this market, business from any part of the world is handled between brokers representing, on the one side, the owners of aircraft available for hire and, on the other, the prospective shippers of cargo or organizers of passenger trips. Inquiries for the charter of aircraft were first received on the Exchange as long ago as 1925 but it was not until 1947 that an Air Section was formed. To assist the market, the Baltic Exchange set up an air freight advisory committee but this was dissolved on 1st February 1949 when the Airbrokers' Association was formed. Among the objects of the Association are to promote and establish uniformity in transactions and usages in the airbroking trade, to establish in London a world market for chartering aircraft to carry cargo and passengers, to represent the interests of its

members to Government Departments and other bodies, and to provide commercial arbitration machinery for the assistance of its members.

A recent development has been the increasing participation of shipping finance in independent air companies: e.g., the Clan line has acquired a 50 per cent non-controlling interest in the Hunting Group, Furness Withy has acquired a substantial interest in Airwork Ltd., and an associate of the Peninsular and Oriental Steam Navigation Company, Ltd. (P and O) has acquired a majority shareholding in another independent company, Britavia.

Powers and Duties of the Minister

The Civil Aviation Act of 1949, which superseded the 1946 Act, gives the Minister the duty of 'organizing, carrying out and encouraging measures for the development of civil aviation, for the designing, development and production of civil aircraft, for the promotion of safety and efficiency in the use thereof, and for research into questions relating to air navigation'.

Under the heading 'measures for the development of civil aviation' come the Minister's relationship to the Corporations (as laid down in the Air Corporations Act of 1949) and his general responsibility for carrying out policy; participation in the International Civil Aviation Organization; responsibility, in concert with the Foreign Office and Commonwealth Relations Office, for dealing with other countries in civil aviation matters; and the work of the *Air Transport Advisory Council*. This body was established by the 1946 Act primarily to bring to the Minister's notice any important representations from the public about the adequacy or otherwise of the services provided by the Corporations. It was also laid down that its duties should include the study of any question related to the air transport services which the Minister may refer to it. Under this provision, the Minister has given the Council the task of considering and making recommendations to him on applications from independent companies to operate scheduled services as associates of one of the Corporations. This has, in fact, provided most of the Council's work, which has been increased following the new arrangements for permitting greater participation by independent companies, announced in 1952 (see p. 210).

The Act requires that the chairman of the Council must be a lawyer and, of its two to four members, at least one must be experienced in the operation of air transport services and one in other forms of transport. The Council makes an annual report to the Minister who lays it before Parliament.

The supervision of design, development and production of civil aircraft has been delegated to the Ministry of Supply which is also responsible for the provision of all Service aircraft and carries on an extensive programme of research and development to meet civil and Service needs. The Minister of Transport and Civil Aviation is specifically debarred from 'producing' aircraft, and any dealings he may have in aircraft, engines and equipment are subject to Treasury approval.

In exercising his responsibility for safety, the Minister regulates the operation of aircraft and controls the licensing of flight crews. On all safety matters, the Minister may call upon the advice of the *Air Safety Board*, a standing advisory body of experts responsible to him for keeping under continuous review the needs of safety in British civil aviation and for recommending measures calculated to promote safety, in respect of both the operation of British civil aircraft throughout the world and the efficiency of the system of ground facilities provided for all civil aircraft operating over the United Kingdom.

On airworthiness matters the Minister is advised by the *Air Registration Board* to which he has delegated certain functions relating to the design, construction and maintenance of civil aircraft. The Board is a non-profit-making incorporated

body which was set up in February 1937 and consists of 18 members, 16 of whom represent the interests concerned with civil aviation, and two who are appointed by the Minister. The Board is responsible, *inter alia*, for the investigation of aircraft for the purpose of making recommendations to the Minister for the issue of Certificates of Airworthiness. Persons engaged in the maintenance of civil aircraft must be the holders of appropriate licences issued by the Board or be members of firms approved by the Board for the purpose.

The Minister is authorized (as are local authorities, subject to his approval) to establish and maintain aerodromes for civil aviation. All civil aerodromes not under the Minister's direct control, which are used for hire or reward passenger flying, are subject to his licensing, inspection and regulation.

The Minister is responsible for determining the conditions, e.g., use of aerodromes and choice of routes, under which aircraft may fly within the United Kingdom and of those under which passengers or cargo may be carried. He is also responsible for various other matters, including the use of signals to and from aircraft; the prevention of interference, e.g., from displays of lights and signs from shops, and with the effectiveness of navigational aids. The Minister is jointly responsible with the Minister of Health for sanitary control at his aerodromes and he also assists the appropriate Departments in the application of customs and immigration regulations.

Aerodromes

There are approximately 100 civil aerodromes in the United Kingdom and, in addition, about 50 Service aerodromes are available for civil use. Those under civil control include 30 directly controlled by the Ministry, 3 in the Channel Islands and 1 in the Isle of Man administered by the local governments, and 28 aerodromes licensed for public use, of which 17 are owned by municipalities. Customs facilities are provided at 17 of the Ministry's aerodromes and at 9 others. The Ministry, which provides the Colonial Office with advice on civil aviation matters, has also assisted United Kingdom dependencies overseas in equipping and maintaining civil aerodromes and necessary technical facilities to accepted international standards.

The main airports used by international scheduled services in 1953-54 were:

for European services: London, Northolt, Renfrew, Birmingham (Elmdon),
Liverpool (Speke), Manchester (Ringway);

for North Atlantic services: London, Prestwick;

for South Atlantic, Middle East, Africa and Far East services: London.

Substantial increases in aircraft and passenger movements at the principal aerodromes have continued from 1945 to 1953. In the latter year, all United Kingdom aerodromes handled over 3½ million passengers. Of this total London Airport dealt with 1,205,000 and Northolt 723,000. Outside the London area, Glasgow (Renfrew) handled the largest number, 210,000; followed by Manchester (Ringway) 209,000; Prestwick 187,000; Belfast (Nutt's Corner) 167,000; and Isle of Man (Ronaldsway) 148,000. The number of movements of aircraft engaged on commercial transport operations in 1953 was 213,563 for all United Kingdom aerodromes.

As the main alternate to London Airport, to be used when bad visibility involves diversion and also as a base for seasonal services, it is proposed to develop Gatwick, 25 miles south of London, while Blackbushe, west of London, would be used as the supplementary aerodrome to handle aircraft which for any reason could not use the main alternate. Northolt was closed to civil flying on 30th October 1954. Prestwick is being developed as the second international airport in the United Kingdom.

Air Traffic Control

The main air traffic control centres are at Uxbridge for Southern England, Preston for the North and Prestwick for Scotland and the Atlantic, while each airport has its own traffic control unit.

An airliner flying into Britain comes first under the control of one of these centres. It enters a Control Zone by one of the routes leading up to it, called National Airways. Each airway has a number of traffic lanes one above the other at intervals of 1,000 feet. The airliner must fly along one of these lanes at a height specified by Control. This ensures that it can pass from the coast to the Control Zone at its destination without any other aircraft being in that section of the airway at that height at the same time. As the airliner reaches the Control Zone boundary, it is passed to the airport control tower. It is brought to within a few miles of the airport by the Approach Controller and then handed over to the Aerodrome Control for landing and taxi-ing instructions.

Radar plays an important part in airport control, enabling aircraft to be brought to the runway in close succession and enabling safe separation to be maintained between arriving and departing aircraft. Even in bad weather a pilot can be brought down to within sight of the runway by means of the radio and radar aids now in use, such as the Ground Controlled Approach system (GCA), operated by a mobile radar unit on the airport, which provides the control officer on the ground with a picture of the aircraft's position in the air, and the Instrument Landing system (ILS), which operates an indicator in the pilot's cockpit to guide him along the correct course and angle of descent required for the approach. Meteorological information is provided by the Meteorological Office of the Air Ministry.

Navigational Aids

Adequate radio navigational facilities are essential to enable aircraft to remain safely within controlled airspace and to make accurate estimates of their times of arrival.

During the next two or three years a number of very-high-frequency (VHF) omni-directional radio ranges will be installed at strategic points in the country, and this system may eventually replace many of the medium-frequency ranges and radio beacons which now mark the airways. In addition, the coverage provided by the three Decca 'chains' now operating in Britain will enable any aircraft fitted with the appropriate receivers and automatic flight log to follow any of the air patterns at present planned. The pilot of such an aircraft can obtain a 'fix' of his position by the readings of two meters recording radio signals from ground stations of the Decca Air and Marine Navigator System. The process of deriving the position from the readings is unsuitable when a pilot is operating in air traffic control areas of high density and so the flight log was evolved whereby the aircraft's track and position are presented continuously on a chart. Further improvements of the system are being developed.

A vital part of the technical services provided by the Ministry is a network of radio stations giving communication between ground and air. About fifty of these stations, at aerodromes and other places, provide rapid and efficient communication operating in the VHF band to aircraft in flight over and near the United Kingdom. Special stations at Birdlip (Gloucestershire) and Prestwick, operating in the high frequency (HF) band, maintain communication with aircraft on the long-distance routes such as the North Atlantic and South African routes. There is also an extensive system of point-to-point communication between aerodromes and air traffic control centres in the United Kingdom, and to places abroad.

Over this system are transmitted such messages as flight plans and weather, so vital to safety and regularity. The main United Kingdom signals centre is at Croydon, where an entirely new station, specially designed for the purpose, sends and receives traffic over a network of teleprinter and radio circuits. The Croydon centre already handles about 15,000 messages a day; its handling capacity is about 30,000 messages a day.

On routes outside the United Kingdom, British airline operators rely upon ground organization provided by the countries over which they fly. In January 1947 the Airways Corporations (which at that time included BSAA) took the initiative in forming a company, registered in the United Kingdom, called *International Aeradio Limited* (IAL), for the purpose of helping countries in need of assistance in providing radio communications, flying control and navigational facilities for civil aviation. Airlines of other countries have accepted invitations to become shareholders and the membership is broadly representative of international civil aviation. IAL operates by entering into contract with Governments to provide whatever degree of assistance is required to enable States or Administrations to fulfil the international obligations resting on them under the Chicago Convention on Civil Aviation for the provision and maintenance of ground facilities for civil aviation. By 1952 International Aeradio Ltd. was carrying on functions of various kinds at 60 places in 32 oversea countries, and its network of radio and other facilities was being used by over 200 operating companies.

The *Air-Sea Search and Rescue Service*, operated by the Royal Navy and the Royal Air Force, is available to civil air operators within the United Kingdom area and along the oversea routes wherever there are Royal Navy and RAF stations.

International and Commonwealth Co-operation

The United Kingdom actively supports the two principal agencies of international co-operation in the field of civil aviation—the *International Civil Aviation Organization* (ICAO) and the *International Air Transport Association* (IATA).

The United Kingdom has taken a leading part in drawing up ICAO's standards of air navigation practices and operating conditions and in applying them. It is also a party to the 'joint-support' schemes by which ICAO seeks to ensure the adequacy of air navigation facilities in certain areas. ICAO administers the facilities provided, but their cost is shared between the States whose aircraft use them. Present schemes concern installations in the North Atlantic region, and the United Kingdom contribution includes the maintenance of ocean weather ships to supply meteorological reports, give navigational aid and assist in search and rescue.

IATA is an association of international airlines operating scheduled services for the transport of passengers, mail and cargo. BOAC, BEA and a few United Kingdom independent companies are members. The main functions of IATA are to reach agreement among its members on matters of common interest, to regulate fares and freight rates, to facilitate through bookings, to standardize ticketing, agency agreements, discounts and similar commercial matters. It collaborates with ICAO where necessary.

International exchange of air traffic rights is the subject of agreement between Governments. The United Kingdom Government has negotiated a series of bilateral agreements providing for the reciprocal grant of traffic rights for scheduled services with most of the countries to and through which the United Kingdom airlines operate. So far as charter operations are concerned, the United Kingdom Government requires prior authorization for all flights on which passengers or freight are picked up or set down by foreign aircraft in the United Kingdom. Such authorization may be granted on a reciprocal basis by inter-Governmental agreement or

permission may be given for each flight when application is made to the Ministry by a foreign operator.

The progress and development of Commonwealth civil air communications, and provision for the exchange of views and information between Commonwealth countries and for giving advice to them are among the terms of reference of the *Commonwealth Air Transport Council* (CATC). This is a consultative body, without executive powers, which was set up in January 1945. The South Pacific Air Transport Council (SPATC) and the Southern Africa Air Transport Council (SAATC) are subsidiary organizations of CATC. Their terms of reference so far as their areas are concerned are similar to those of CATC in its wider sphere.

THE POST OFFICE

The Post Office with its staff of over 334,000 is a Government Department. It is also the oldest of Britain's nationalized undertakings. In 1649 a resolution in the House of Commons declared that 'the office of Postmaster is and ought to be in the sole power and disposal of Parliament'.

The ministerial head of the Post Office is the Postmaster-General, who, with the Assistant Postmaster-General, is responsible to Parliament for his Department. He is subject to the overriding authority of Parliament and the Cabinet, and, on many questions, of the Treasury. The Postmaster-General is chairman of the Post Office Board, composed of the principal permanent officials of the Department, which discusses and gives advice on matters of general policy, and he normally presides over meetings of the Post Office Advisory Council, on which the principal users of the Post Office services are represented.

Under the Postmaster-General, the permanent head of the Post Office is the Director General, who is supported by three Deputy Directors General and an Engineer-in-Chief. At the next level there are six Directors responsible respectively for Posts, Inland Telecommunications, Radio and Accommodation, External Telecommunications Executive, Establishments and Organization, and Personnel. A Comptroller and Accountant General is responsible for the whole of the accounting system and advises on financial matters. In addition, responsibility for their several specialist functions rests with the Solicitor, the Public Relations Officer, the Directors of Savings and of Contracts, and the Controllers of Supplies and of Factories. The Post Office Headquarters is in St. Martin's-le-Grand in the City of London.

The six main divisions of work at Headquarters are carried down into the organization of the ten regions—Scotland, Northern Ireland, Wales and the Border Counties, each under the control of a Director of the Post Office, and, in England, the North West, the North East, the Midlands, the South West, the Home Counties, and London (which is divided into two functional regions, Postal and Telecommunications), each under the control of a Regional Director. Each Director and Regional Director is assisted by a deputy and six controllers. Under the regional directors are 57 telephone managers, responsible in their respective areas for all aspects of the telephone service, and 470 head postmasters, responsible in their districts for posts and telegraphs, and (as agents for the telephone managers) for local telephone service questions. Exceptionally, the head postmasters of Birmingham, Glasgow, Liverpool and Manchester are in personal control, in their districts, of all Post Office services: while in London there are 9 district postmasters—with 2 divisional controllers responsible among other things for the City itself—whose principal task it is to manage the postal services in the central

Metropolitan area. Altogether in the United Kingdom there are 472 head post offices, 1,264 post offices, and 22,883 sub-offices, and 6,174 telephone exchanges.

The staff at headquarters and in the regions is divided into two main groups: general civil service grades (administrative, executive and clerical) and special grades recruited directly by the Post Office for its engineering and operational activities.

The work of the Post Office falls into two main categories: (1) direct services—mail services, telecommunications, remittance and savings bank business; (2) agency services—broadcasting services and business undertaken on behalf of other Government Departments.

Mail Services

The development of postal communications in Britain can be traced from the time when horsemen carried dispatches to the Tudor Court up to modern airmail transport. In 1657, under the Protectorate of Cromwell, an Act was passed which declared that 'there shall be one general post-office and one officer, styled the Postmaster-General of England and Comptroller of the Post Office'. The eighteenth century saw a great expansion of the postal services with the introduction of mail-coaches in 1784. Road surfaces were improved and the guards on mail-coaches were postal servants with full responsibilities. In the first half of the nineteenth century the Post Office was quick to take advantage of Britain's vigorous period of engineering and railway development, and the first dispatch of mails by train was made in 1830 between Liverpool and Manchester.

The heavy charges, which were based upon the actual distance a letter was carried, were among the factors which inspired Rowland Hill in his great work of postal reform which led to the establishment of a uniform postage rate. In 1840 a uniform inland rate of postage of one penny per half-ounce payable in advance came into operation—prepayment to be made by means of adhesive postage stamps. Since the business world found cheap postage a boon and since it proved ultimately a great financial success, it was imitated by almost every country in the world. In 1918 the basic penny rate for inland letters in Britain was raised to 1½d. for four ounces, and in 1920 to 2d. for three ounces. In 1922 it was changed to 1½d. for one ounce; in 1923 it was 1½d. for two ounces; and in 1940 it was raised to 2½d. for two ounces, where it now stands.

The inauguration of the penny post was followed by a rapid extension of the scope of the postal services, beginning, in 1841, with the introduction of the registered post to ensure additional safety for valuable mail. In 1854 Rowland Hill became the permanent head of the Post Office, and it was during his term of office that the Post Office Savings Bank was established, in 1861, to meet the needs of the small investor. The money order system which had operated as a private venture from 1792 to 1838 was supplemented in 1881 by the issue of postal orders for fixed amounts. Letter-boxes had been instituted in London in 1855 to facilitate the increased postal traffic, and in 1883 the parcel post was introduced. By the end of the nineteenth century a regular delivery of letters was assured to every house in Britain.

The guiding principles of the postal services—speed, reliability and economy—have motivated all developments in the history of the Post Office. Improvements include the provision of motor mail van services linking rural districts, postal sorting carriages on the railways, special mail trains on certain routes and the ingenious apparatus by which bags of mail are delivered and collected by trains running at express speed. During the second world war many of these facilities had

to be curtailed and some were suspended, manpower shortage created a serious problem and oversea mails were disrupted.

Since 1945 the Post Office has restored and developed most of the pre-war services, and to the heavy task of reconstruction has been added a marked increase in the volume of mail. In the 15 years from 1938-39 to 1953-54 the parcel post increased from 185 million items to nearly 242 million, registered postal traffic from 62 million to 131 million and posted correspondence from 8,240 million to 9,100 million.

The minimum rates for letters sent by surface mails are: inland and Irish Republic, 2½d. for two ounces; British Commonwealth, territories under British Trusteeship, British Post Offices in Morocco and the Persian Gulf, Her Majesty's Forces overseas and Her Majesty's ships in foreign waters, and also Burma, Egypt, Israel, Jordan, United States, 2½d. for one ounce; other foreign countries, 4d. for one ounce. The inland parcel rate is 1s. 1d. for parcels weighing up to 2 lb. ranging to 2s. 4d. for 15 lb. The rates for parcels sent to the Irish Republic range from 1s. 1d. for parcels weighing up to 2 lb. to 2s. 6d. for 15 lb. The oversea parcel rates vary according to the destination.

There are lower rates for second-class mail (unsealed packets containing printed matter, newspapers, periodicals, commercial papers, samples and small consignments of merchandise).

Packages containing literature for the blind can be sent to destinations in the United Kingdom and Irish Republic at a nominal rate ranging from ½d. to 2½d. for the maximum weight of 15 lb. and to oversea destinations, by surface mail, post free.

Airmail Services

Railways and motors as a means of transport for mails are supplemented by steamers and aeroplanes. The figures for the year ended March 1954 show that total oversea civilian correspondence amounted to 384 million items and Forces' mail to 58 million, and that nearly 51 per cent of this traffic now travels by air. First-class mail to all European countries is sent by air or by surface transport, whichever offers the speedier delivery, without payment of any special air fee. The Post Office dispatches nearly 26 tons of letter mail a week to European destinations by this 'all-up' service mainly in aircraft of the British European Airways, whose network of services enables many of the letters posted in London for Europe to be delivered the following day. The air parcel service to Europe, introduced on 2nd April 1949, was operating to 25 destinations¹ by the autumn of that year, and now about six tons of parcel mail are dispatched weekly to Europe by air.

First-class mail and second-class mail are dispatched by air to countries outside Europe upon payment of special airmail rates of postage. The airmail postage rates for letters are 9d., 1s. 3d. and 1s. 6d. per ½ ounce, depending on the destination. Air parcel services are also available to more than 100 countries outside Europe. Light-weight air letters costing 6d. each are popular and some 43 million were posted in the year ended March 1954.

Telegraphs

All private telegraph systems in Britain were transferred to the control of the Postmaster-General in 1870. Teleprinter working for the transmission of inland telegrams was introduced generally in 1928 and conversion to the present

¹ Spain and the Balearic Islands are considered as a single destination.

automatic switching system was completed in mid-1954. It is now one of the most up-to-date systems in the world and gives direct connection between any of the 450 larger telegraph offices. The Post Office accepted 34 million inland telegrams in 1953-54, and the average time between handing in an inland telegram and its receipt at the delivery office was 23 minutes compared with 48 minutes in 1946. In recent years inland telegraph traffic has decreased while the costs of running the service have increased. In 1954 the charges for inland telegrams were raised to 3s. for 12 words and 3d. for each additional word.

Telephones

There are 6,174 telephone exchanges in the United Kingdom, of which 4,500 are automatic exchanges. During the year ended 31st March 1954 approximately 700,000 new telephones were provided for subscribers, bringing the total number of telephones to 6,147,000, of which 74 per cent were connected to automatic exchanges. During the same period the number of people waiting for telephones was reduced to 376,000 from 427,000. In addition, there are over 65,000 telephone kiosks for public use. The net increase in the number of telephones since the war has been about 2.2 million, although during that period over 4.5 million new telephones were installed. This post-war installation work has been achieved in spite of the priority given to the export of telecommunication equipment. The level of telephone traffic continues high. In the year ended 31st March 1939 the total of trunk and toll calls was 112 million, while in the year ended 31st March 1954 the Post Office handled a total of 278 million; 70 million of these were at the cheap night rate, which was instituted in 1934. To meet this increasing traffic, about 11,000 trunk circuits over 25 miles in radial length have been provided since the end of the second world war, making a total of over 20,000 circuits. In the year ended 31st March 1954, 3,370 million local calls were handled, an increase of 63 per cent compared with the year 1938-39. About 400 exchanges now operate the automatic time service, first introduced in 1936, by which callers in 26 cities and towns are able to obtain the correct time automatically by dialling the three-letter code TIM or a figure code which connects to the speaking clock at Holborn Exchange, London, or to a similar clock in Liverpool.

The 999 emergency dialling service is available on over 2,200 of the 4,500 automatic exchanges now in service. Callers using this service are given priority of answer and are connected as quickly as possible to the police, ambulance or fire brigade, and in certain coastal districts to lifeboat and coastguard stations.

Oversea Telecommunications

All the overseas telephone services from the United Kingdom have, for a great many years, been developed and operated by the Post Office. The overseas telegraph services, on the other hand, were shared until 1950 between the Post Office and Cable and Wireless Ltd. This Company, which was brought into public ownership on 1st January 1947, had developed a large and valuable telegraph cable network (some 150,000 nautical miles of submarine cable) of world-wide extent, to which it added considerable radio facilities. It operated not only in the United Kingdom, but in most parts of the Commonwealth as well as in some foreign countries. In 1950 the Governments of the United Kingdom, Canada, Australia, New Zealand, South Africa, India and Southern Rhodesia took over the operation of the overseas telegraph services in their own countries, leaving the Company with its cable network and with the operation of the network in some Colonial and foreign territories. Thus the Post Office operates all overseas telecommunications from the United Kingdom.

The oversea telegraph, telex and telephone services are operated under the general title of *Post Office Cable and Wireless Services* and through five London stations having international circuits:

Telegraphs. Most of the European telegraph services are worked from the Central Telegraph Office in St. Martin's-le-Grand, London, from which there are direct circuits to most European countries. The extra-European services together with some services to Europe are operated from Electra House, Victoria Embankment, London. In all, the Post Office transmitted 19 million telegrams to countries abroad and received a similar number for delivery in Britain in the year ended 31st March 1954.

Telex. The International Telex Exchange, in the Central Telegraph Office, St. Martin's-le-Grand, provides a teleprinter service to 19 countries abroad. In November 1954 the separate international and inland services were amalgamated and the number of subscribers having access to the international service increased from 700 to 1,700. At that time some 16,000 outgoing calls were being made each week and a similar number of calls were being received.

Telephones. Telephone service to European countries is through the Continental Exchange from which direct telephone circuits radiate to 17 continental countries. These circuits, over which calls can be connected to almost every country in Europe, are also used to send and receive pictures and to relay speech and music for broadcast transmissions. In 1953-54 nearly 1 $\frac{3}{4}$ million outgoing calls were made. Extra-European services are connected through the International Radio Exchange over radio circuits which provide service with most countries outside Europe and with many of the larger liners at sea. The number of outgoing radio calls made in 1953-54 was 85,000.

Work has started on the first transatlantic telephone cable. This is jointly undertaken by the Post Office, the American Telephone and Telegraph Company, the Canadian Overseas Telecommunications Corporation and the Eastern Telephone and Telegraph Company of Canada, to improve and expand communications between the United Kingdom, the United States and Canada. It is expected to be completed by the end of 1956. The Post Office cable ship, H.M.T.S. *Monarch*, will lay the cable, most of which is being made in the United Kingdom.

The United Kingdom is a member of the International Telecommunications Union which has its headquarters at Geneva in Switzerland, and which is the co-ordinating body for telecommunications throughout the world.

Ship-Shore Radiocommunications

In addition to the radio stations for oversea telecommunications, the Post Office has 11 coast radio stations situated in the United Kingdom. These stations provide for radiotelegraph and radiotelephone communications with ships at sea at ranges up to 300 miles approximately. There is also a long-distance station at Burnham-on-Sea, which communicates with ships in all parts of the world.

These coast stations play an important part in the services concerned with safety of life at sea. They keep continuous watch on the international radiotelegraph and radiotelephone frequencies for distress calls from ships or aircraft and take immediate action, by radio and by advising the appropriate shore authorities, to obtain assistance for any vessel in distress. During the year ended 31st March 1954 the stations handled 240 cases of casualties to shipping and aircraft.

In addition to the services for safety of life at sea, the stations exchange radiotelegrams with ships, connect radiotelephone calls between telephone subscribers

ashore and suitably equipped ships, broadcast navigational warnings and weather bulletins, and operate direction-finding services for ships. During the year ended 31st March 1954 the stations handled 853,000 radiotelegrams and 48,000 radio-telephone calls; they broadcast 1,700 navigational warnings and over 10,000 weather reports; and they gave 1,200 radio bearings to ships.

The stations also operate a medical advice service whereby the Master of a ship may obtain advice on the treatment to be given in cases of sickness or injury aboard ship. The service is a free one. During 1954 the stations dealt with 148 requests for medical advice.

The Post Office Counter: Agency and Direct Services

Largely as a result of the extension of social legislation and the widening scope of the social services, the volume of work measured on a time basis at post office counters has increased considerably compared with the total for 1938-39. In the 15 years to 1953-54 the cash turnover increased from just over £1,000 million to £3,810 million.

At the post office counter the citizen can draw his pension and his family allowance, buy a licence for his gun, dog, sound radio or television receiving set, renew his car licence, buy stamps for National Insurance (see p. 295) or for National Savings certificates (see p. 257) and bank his savings. In these and many similar transactions the Post Office acts as an agent for other Government Departments and for the BBC. Of the 47 million postal drafts paid out by the Post Office in 1953-54, 34 million were in payment of sickness benefits under the National Insurance Scheme; at the end of November 1954 current broadcast receiving licences in the United Kingdom issued by the Post Office totalled 13,794,195, of which 3,999,624 were for television sets (see also p. 368).

Counter sales include also an increasing volume of direct Post Office business: during the year ended 31st March 1954 about 594 million postal orders were issued by post offices, an increase of over 27 million on the previous year's record figure.

For over ninety years the Post Office Savings Bank (see p. 257) has supported the financial stability of Britain and the well-being of its citizens. Approximately one out of every two persons in Britain has a savings account or other holding with the Post Office, and active savings bank accounts at the end of 1953 numbered over 22 million.

VII. LABOUR AND MANAGEMENT

MANPOWER

The total working population¹ of the United Kingdom at the end of June 1954 was just over 24 million, some 47 per cent of the total population, and included about 70 per cent of persons of normal working age (15 years to 59 years for women, 15 years to 64 years for men). In fact, about 95 per cent of British men of working age are today in or seeking gainful work. The remaining 5 per cent consist mainly of those continuing their education, of the severely disabled and of some persons of private means. The proportion of women of working age in or seeking gainful work is much lower, about 45 per cent, as many housewives have no wish to take employment outside the home, or if they have, are prevented by household duties from doing so. Besides those of normal working age, there are about a million older men and women still at work. The great majority of the working population work for a wage or salary, but about 1½ million are employers or self-employed.

The make-up of the working population has been affected during the century by decreases in both birth and death rates, the result of which has been that the proportion of both the total population and the working population over the age of 35 has increased considerably. Changes in social habits have also had their effect. The minimum working age has been raised to 15 years. The proportion of those over the normal working age who are occupied has declined (though the great increase in the number of older persons has meant that the actual number who are working has increased). The proportion of men aged 20 to 64 who are at work has remained high and fairly uniform. Among women, on the other hand, there has been a steady increase during the century in the proportions employed in the age group 15 to 59, but this has been offset by a decrease in the proportion of women employed above the age of 59 and by the raising of the minimum working age. There has been a considerable increase in the employment of married women during the same period, most noticeably in the last twenty years.

The proportion of women at work is generally higher for single than for married women of the same age and for younger as compared with older women of the same marital status. Thus only 16 per cent of married women aged 55 to 59 are at work compared with 37 per cent of married women aged 20 to 24. The majority of the female labour force is under 35 years of age, though an increasing number of middle-aged women have recently been taking work, including part-time work.

The total working population is now higher than before the war, but probably lower than during the middle of hostilities when housewives, including mothers of young children, manned war factories at great personal inconvenience, while men served in the armed forces. From the end of the war until mid-1947 the size of the working population declined as women left industry. At the same time the expansion of the population of working age, a feature of the British economy for two

¹The total working population represents the estimated total number of persons aged 15 and over who work for pay or gain, or register themselves as available for such work. The total comprises the armed forces, men and women on release leave not yet in employment, all persons—employers and workers on their own account as well as employees—in civil employment (including persons temporarily laid off but still on the employers' pay-rolls) and wholly unemployed persons registered for employment. Part-time workers are counted as full units.

centuries, slowed down, largely as a result of the low birth rates of the 1930s, and in the case of women it actually halted. Further, the raising of the school-leaving age in 1947 removed the 14 age group from the working population. However, after remaining fairly steady from mid-1948 to mid-1949, the total working population rose from mid-1949 to the end of 1951, if allowance is made for seasonal variations. Among the reasons for this rise were the continued increase in the number of men in the working age groups and the return of a number of women to part-time or whole-time work. The working population at the end of 1952 was slightly smaller than at the end of 1951, but during 1953 and the first half of 1954 it resumed its steady rise.

The broad changes in the manpower position in Great Britain between mid-1948 and mid-1954 are shown in Table 34.

TABLE 34
GENERAL MANPOWER POSITION (Great Britain)

(Thousands)

	End June 1948	End June 1953	End June 1954 (provisional)
Total Working Population: (a)			
Men	15,657	15,883	15,921
Women	7,123	7,490	7,610
Total	22,780	23,373	23,531
HM Forces (including Women's Services):			
Men	807	841	818
Women	39	24	23
Total	846	865	841
Ex-Service men and women on re-lease leave who have not yet taken up employment	92	5	6
Registered unemployed:			
Wholly unemployed	273	265	218
Temporarily stopped (b)	9	17	12
Number in civil employment:			
Men	14,549	14,862	14,954
Women	7,020	7,376	7,512
Total	21,569	22,238	22,466

Source: Ministry of Labour and National Service.

(a) See footnote p. 226.

(b) The figures for the 'temporarily stopped' have been excluded from the computation of the total working population, as they are already included in civil employment.

Deployment of Labour

Nearly 45 per cent of those in civil employment are employed in the mining and manufacturing industries and only about 5 per cent in agriculture and fishing. Over half of those in manufacturing are in the metals, engineering, vehicles and chemicals groups of industries, in which the total labour force has approximately doubled in the last 20 years.

Most industries employ women as well as men, but there are jobs, such as underground work in coal mines, which are forbidden to women. The industrial groups in which women are chiefly employed are in the manufacture of textiles, clothing, and food, drink and tobacco, and in the distributive trades and professional and miscellaneous services.

An analysis of the total number in civil employment by broad industrial groups is given in Table 35.

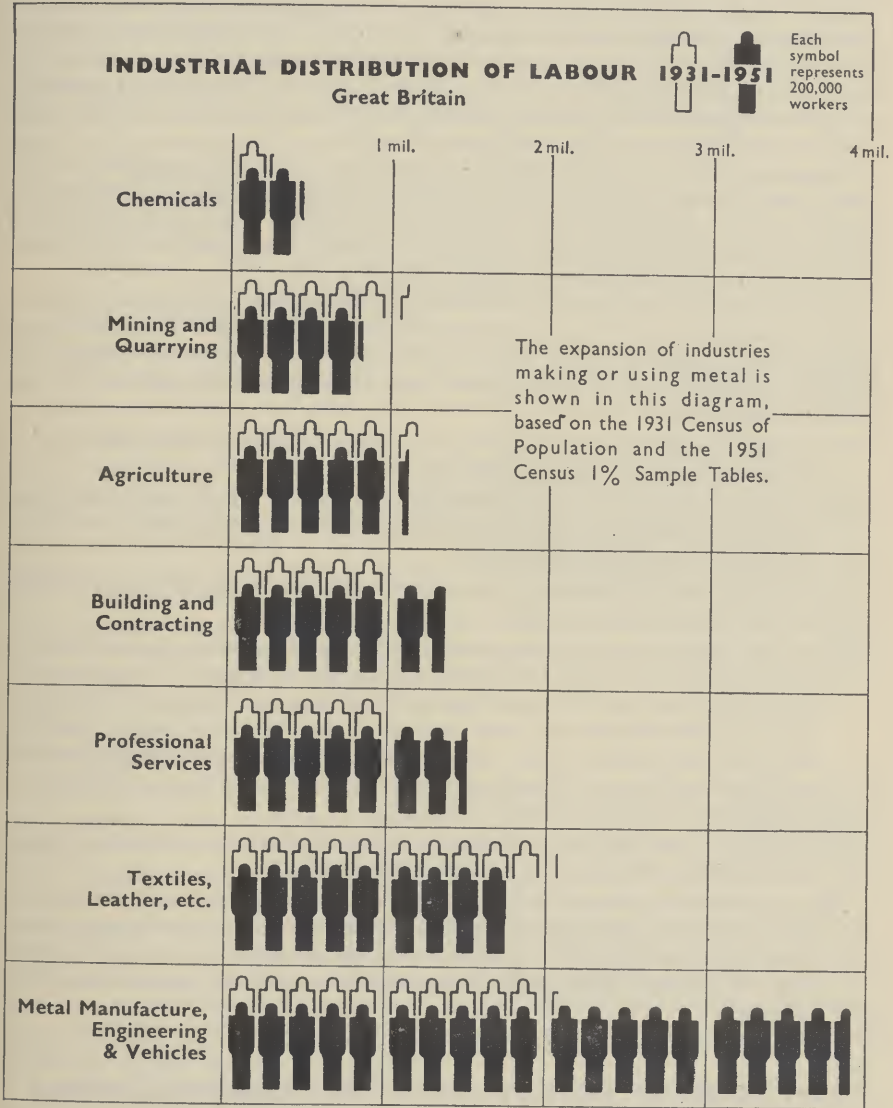
TABLE 35
ANALYSIS OF CIVIL EMPLOYMENT (Great Britain)

(Thousands)

Industry or Service	End June 1948	End June 1953	End June 1954 (provisional)
<i>Basic Industries:</i>			
Coalmining (total manpower) ..	794	794	786
Other mining and quarrying ..	82	83	83
Gas, electricity and water ..	321	372	374
Transport and communications ..	1,787	1,731	1,706
Agriculture and fishing	1,178	1,087	1,069
Total, basic industries	4,162	4,067	4,018
<i>Manufacturing Industries:</i>			
Chemical and allied trades ..	441	489	510
Metals, engineering and vehicles ..	3,944	4,225	4,361
Textiles	931	972	999
Clothing	649	691	694
Food, drink and tobacco	750	869	884
Other manufactures	1,422	1,500	1,561
Total, manufacturing industries	8,137	8,746	9,009
Building and contracting	1,450	1,437	1,423
Distributive trades	2,484	2,664	2,702
Professional, financial and miscellaneous services	3,954	4,004	4,002
<i>Public administration:</i>			
National Government Service ..	682	595	587
Local Government Service ..	700	725	725
Total in civil employment ..	21,569	22,238	22,466

Source: Ministry of Labour and National Service.

The figures in Table 35 for the manufacturing and basic industries include those engaged on administrative and clerical work, etc., so that the numbers engaged on productive processes are smaller than those given for the industries as a whole.



The 1951 Census One Per Cent Sample Tables (see page 5) showed that less than a third of men at work and less than a quarter of women at work were employed in manual occupations in mining or manufacturing industry. On the other hand, there were in Great Britain at the time of the 1951 Census of Population over 1,400,000 women clerical workers (including typists), over 800,000 in retail trade,

over 1,000,000 women domestic workers or charwomen (including those in hotels, institutions and offices), 500,000 women in various other forms of personal service, including catering, nearly a quarter of a million nurses, and 220,000 women teachers.

In June 1954 the unemployed constituted 1.1 per cent of insured employees in Great Britain. Unemployment was mainly short-term. The total number of persons unemployed for more than six months in Great Britain was about 0.3 per cent of the number of insured employees. About one-third of these long-term unemployed were men and women over 40 years of age in certain areas where unemployment had been especially severe between 1921 and 1939.

Unemployment in all areas has been very greatly reduced since the pre-war years, both because of changes in the general economic situation and because of specific measures taken by the Government to promote a balanced distribution of industry in order to prevent the recurrence of severe unemployment in the areas previously most seriously affected (see p. 117).

Considerable changes in the distribution of persons between various industries and occupations have taken place during the twentieth century. Some short-term changes were brought about by the two world wars and by the severe trade recession and unemployment of the inter-war years, but the following appear to be the main long-term trends:

- (1) A continuance at a decreasing rate of the decline in agricultural employment which was rapid at the end of the nineteenth century.
- (2) A general increase in administrative and clerical employment, including public administration, and a very large increase in the employment of women in clerical work, including typing.
- (3) A decline in employment in certain large old-established industries, notably coalmining and cotton textiles.
- (4) A very large increase in employment in the metals, engineering and vehicles group of industries and the chemicals group of industries. Employment in these industries approximately doubled between 1931 and 1951. Expansion has been most marked in those sections of the industries making relatively new types of products, e.g., cars, aircraft, electrical and electronic apparatus and plastics. The rate of increase in certain branches of these industries was accelerated during both world wars.
- (5) A decline in indoor private domestic service in which the number of women employed has fallen by about a million since 1900.
- (6) A considerable increase in the numbers employed in the distributive trades. This trend was reversed during both world wars—e.g., the number in the distributive trades fell by 930,000 during the last war, and although increasing is still below the 1939 level—but appears to be fairly continuous in time of peace.

GOVERNMENT EMPLOYMENT AND TRAINING SERVICES

The provision of employment services has been one of the principal functions of the Ministry of Labour and National Service since its inception in 1916. Their scope has gradually been extended to include the provision of vocational guidance, and, in suitable cases, of vocational training. The Employment and Training Act, 1948, provided a permanent legislative basis for these wider services. The main services are provided through the country-wide network of some 1,200 local

Employment and Branch Employment Offices. A small number of special offices deal wholly or mainly with particular types of workers, e.g., dockers and persons employed in the catering trades. Local Employment Committees, composed of representatives of employers, workers and other local interests, are attached to most Employment Exchanges as advisory bodies to secure for the Department the full benefit of local knowledge and the close co-operation of employers and workers. In addition, an Appointments Service, intended to meet the needs of men and women who are qualified, or who are likely to qualify, for professional, administrative, managerial, senior executive and higher technical and scientific posts at home and overseas, is operated by the following offices in Great Britain staffed by officials of the Ministry of Labour and National Service:

- (1) The Technical and Scientific Register, kept centrally in London, which deals with professionally qualified scientists, engineers, architects and surveyors.
- (2) Regional Nursing Appointments Offices (111) and Nursing Appointments Offices (140), which deal with recruitment for training and employment in nursing, midwifery, radiography, physiotherapy, occupational therapy and medical laboratory technical work.
- (3) Appointments Offices (3) which deal with all other persons qualified for professional and higher technical posts; senior executives; ex-regular officers of the armed forces; and young men suitable for training for management in industry and commerce.

In normal times there is no compulsion on any job-seeker or on any employer requiring labour to use these Government services. Since 25th February 1952, however, a Statutory Order, the Notification of Vacancies Order, 1952, has obliged employers to recruit most types of ordinary labour through local offices of the Ministry of Labour and National Service or through employment agencies registered with the Ministry. The main object of this Order, which is flexible in its application and permits many personal and occupational exceptions, is to give employment officers every chance to persuade job-seekers to undertake work of national importance, e.g., in defence or in the basic industries. This Order does not give the Ministry any power to direct labour.

General Services for Adults

Local offices and offices of the Appointments Service accept on their registers both employed and unemployed persons seeking employment. Their primary function is to introduce suitable persons seeking employment to employers requiring employees, thus providing an efficient service to employers and job-seekers and meeting the needs of the national economy.

The appointments offices also operate a scheme for financing short business courses for suitable ex-regular Service men and women, and provide a Careers Advice Service for suitably qualified men and women of 18 years of age and over on the choice of a career. This service is particularly valuable to young graduates and other suitable young men and women, including those who have just finished a period of service with the armed forces.

A special responsibility of the local offices is recruitment under the Vocational Training Schemes. Two of these schemes—that for the disabled and that for men and women who need this kind of help if they are to obtain suitable employment after a voluntary period of service in the regular armed forces—are directed to the resettlement of the individual and cover a comprehensive range of skilled trades from agriculture to watch and clock repair, from radio servicing to clerical work. Unemployed men and women have also been recruited for this wide range of

trades in some circumstances. The third Vocational Training Scheme is directed to the filling of urgent vacancies in industries which are important to the national economy and which at the same time suffer from shortages of skilled labour. Any suitable man or woman without an employable skill is recruited under this scheme, which includes 20 to 30 skilled courses including agriculture, engineering and draughtsmanship.

Training under all these schemes is given mainly at Government Training Centres, of which there are 16 in different parts of the country, and for some trades in technical colleges or in an employer's establishment. Courses last normally for six months. Maintenance allowances are paid during training, and men and women with dependants receive higher rates. These maintenance allowances are higher than the rate for unemployment benefit. During the period from the beginning of the post-war training scheme on 2nd July 1945 to 5th July 1954 the number of trainees placed in employment was 115,809.

Training schemes for particular groups of crafts have been drawn up in consultation with representatives of employers and workers, who have agreed that trainees should be accepted in industry for work which makes full use of the knowledge acquired during the course. In trades where it is usual for the employee to provide his own tools he is given these free on taking up a job in his training trade. The job itself is found whenever possible by the Employment Exchange (local office).

The Ministry of Labour and National Service sponsors as a free service to industry the Training Within Industry for Supervisors scheme which gives training to supervisors in three essential skills, i.e. in instructing and passing on information, in leading and fostering harmonious working relationships, and in improving working methods. The Ministry is prepared to extend a measure of these services to oversea branches of British firms. It is prepared also to train suitable persons to develop the scheme in their own territories. The arrangements may be made by the Government of the country concerned or (where appropriate) by the International Labour Organization.

Services for Foreigners

Foreigners are admitted to the United Kingdom to take up employment with a particular employer, provided they are in possession of a permit issued to the prospective employer by the Ministry of Labour and National Service (the Ministry of Labour and National Insurance for Northern Ireland if the proposed employment is in Northern Ireland). Employment is limited to a maximum of one year in the first instance but may be extended on application by the employer. If a foreigner already landed in Great Britain, for example as a visitor, seeks to enter employment, his prospective employer must obtain prior approval from the Ministry of Labour and National Service. Approval is subject to the same conditions and requirements as are applied to the grant of permits to foreigners while still abroad.

The general conditions which must be satisfied before a permit is granted are: that the proposed employment of a foreigner is reasonable and necessary in the circumstances; that adequate efforts have been made by the employer to find suitable labour from among British subjects (or foreigners long resident in the United Kingdom); and that the wages and conditions of employment proposed for the foreigners are not less favourable than those commonly accorded to British employees for similar work in the district concerned.

In considering applications for permits, various other factors must be considered according to the nature of the proposed employment. Special arrangements have been applied to the admission of foreigners for nursing, teaching, various forms of entertainment, and in particular industries. In principle, permits for unskilled

workers in industry are only granted in those industries which are particularly important to the national economy and where there is a general shortage of labour. To encourage visits and exchanges of young workers between Britain and other countries, applications from prospective employers for permits for student employees are granted freely under properly sponsored arrangements, organized mostly through unofficial channels.

A foreigner who has been allowed to take employment under a permit, or by the approval of the Ministry of Labour and National Service, may not change his employment, unless his prospective employer has obtained prior approval from the Ministry to employ the foreigner. From May 1946 to the end of 1953, 239,501 permits were granted, of which 150,711 were for resident domestic servants in hospitals, schools, other institutions and private households, and 20,165 for student employees.

The permit system applies to individual aliens. After the second world war, far greater numbers were being admitted under various group schemes organized by the Ministry of Labour and National Service.

There were two main group schemes for the employment of alien labour. The first was the Polish Resettlement Corps, established in 1946 to resettle those members of the Polish Forces who felt themselves unable to return to post-war Poland. Three years later, when the Corps was disbanded, practically all the 114,000 Poles who had been its members were re-settled. Of these, almost 100,000 had chosen to remain in the United Kingdom, many of them to be absorbed into the British building, agricultural and coalmining industries.

The second large-scale project for the introduction of foreign labour to this country was the European Volunteer Workers scheme. Workers came to Britain from the displaced persons camps of the three Western Zones of Germany and Austria, from Denmark, and finally from the towns and villages of Germany and Austria. By the end of 1949, 65,000 male volunteers had been placed in work, mainly in agriculture (35,000) and coalmining (11,000). By that time, those two industries had reached saturation point as far as foreign workers were concerned and no more men were recruited. When the recruitment of women ended in April 1951, 33,950 female volunteers had been settled in employment, mainly as domestic servants (13,300), textile workers (17,200) and nurses (2,200), but difficulties of absorption were being encountered. The most serious of these difficulties was the housing shortage, which had the effect of limiting the field from which the aliens could be selected, since it made it necessary that alien volunteers for work in the United Kingdom should be without dependants.

Youth Employment Service

The Ministry of Labour and National Service is also responsible for two specialized employment services: the Youth Employment Service and the Disablement Resettlement Service.

The purpose of the Youth Employment Service is to help young people leaving school and young workers under 18 to get a good start in their working life.

The service is under the general direction of the Central Youth Employment Executive, staffed by officers of the Ministry of Labour and National Service, the Ministry of Education and the Scottish Education Department. This joint executive is appointed by the Minister of Labour and National Service, who is responsible to Parliament for the Youth Employment Service as a whole. The Minister has appointed a National Youth Employment Council and separate Advisory Committees for Scotland and for Wales to advise him on questions relating to the service.

Locally the service is operated in most areas through Youth Employment Offices established by local education authorities (in Scotland by education authorities) in accordance with the schemes submitted by them to the Minister of Labour and National Service and approved by him. In those areas where such schemes are not in operation, the service is operated by the local office of the Ministry of Labour and National Service.

The main functions of the service are to collect and disseminate careers information, provide talks in schools, give vocational guidance, help to find suitable employment and keep contact with young workers to assist them in settling down. Local Youth Employment Committees, made up of teachers, employers, workers and other appropriate interests, assist the service in an advisory capacity.

Disablement Resettlement Service

The Disabled Persons (Employment) Act, 1944, on which all the Ministry's work for disabled persons is based, declares its purpose to be 'to make further and better provision for enabling persons handicapped by disablement to secure employment or work on their own account', and the Disablement Resettlement Service is designed to help disabled persons to get and keep suitable work. The service is available to all persons over school-leaving age who are substantially handicapped as a result of injury, disease or congenital deformity.

The Ministry of Labour and National Service is responsible for the administration of the service. At each of its 1,200 local offices a Disablement Resettlement Officer, working under the direction of the Manager and in co-operation with other officers, has the special duty of advising and assisting disabled persons in obtaining suitable employment. This officer is in touch with all the hospitals in his area and visits any patient who wishes to discuss the question of his future employment. His work involves close co-operation with doctors, local authorities and voluntary welfare agencies.

There is also a Disablement Resettlement Officer with similar functions at each of the three appointments offices.

The help given by the service falls under four main headings:

1. *Vocational Guidance.* This is given at local offices by Disablement Resettlement Officers in consultation, as necessary, with the local Disablement Advisory Committees or Medical Interviewing Committees, and also by vocational psychologists in the Industrial Rehabilitation Units (see paragraph 3).

2. *Placing in Ordinary Competitive Employment.* On the basis of a disabled person's qualifications and aptitudes and with medical guidance, the Disablement Resettlement Officer endeavours to find work most suitable for the individual, either immediately or after a course of industrial rehabilitation or vocational training. To a limited extent this is facilitated by the main provision of the Disabled Persons Employment Act, 1944, namely, that all employers of more than 20 persons are bound by law to employ a quota (at present 3 per cent for almost all industries) of registered disabled persons. Registration is voluntary. The number of disabled persons registered was 836,290 at 19th July 1954 and of these 36,823 were considered to be capable of ordinary employment but were unemployed. This figure is estimated as about 4.5 per cent of the total number of registered disabled persons capable of ordinary competitive employment.

3. *Industrial Rehabilitation and Vocational Training.* Industrial rehabilitation is provided at residential and non-residential units run by the Ministry of Labour and National Service where physical and mental toning-up is given and, for those who need it, vocational guidance as to the best kind of employment to take up.

There are vocational training facilities for the disabled at Government Training

Centres, educational institutions and employers' establishments (see pp. 231-2). For the more seriously disabled, however, there are special residential training colleges run by voluntary organizations with the financial assistance and technical help of the Ministry of Labour and National Service. There are also arrangements for the training of special categories of disabled persons such as the blind.

4. *Sheltered Employment.* Remploy Ltd., a non-profit-making public company, with no share capital, was established in accordance with the provisions of the Disabled Persons (Employment) Act, 1944. Its objects are to provide training and employment facilities for registered disabled persons who are unlikely to obtain work except under special conditions. Its powers are wide enough to cover the provision of special factories and workshops, hostel accommodation and facilities for home workers. The directors are appointed by the Minister of Labour and National Service; funds for capital development and to meet operational costs are provided by loans and grants under the Ministry of Labour Vote. At the end of June 1954 it operated 90 factories employing about 6,500 severely disabled persons.

Facilities for the employment of blind persons are provided by local authorities directly or through voluntary bodies, with the financial assistance of the Ministry of Labour and National Service. At the end of June 1954 there were 69 workshops for the blind in which there were 4,350 blind persons in training or employment. In addition, where necessary, the Ministry helped to finance the provision of training or employment for 911 severely disabled sighted persons in 41 workshops provided by 32 voluntary undertakings or local authorities.

TERMS OF EMPLOYMENT AND WORKING CONDITIONS

Today, minimum standards have been established by statute or collective agreement for both the terms and conditions of employment and the working conditions of the substantial majority of British workers. The fixing of terms and conditions of employment, however, involves principles, methods and machinery quite different from those for the determination of working conditions. Terms and conditions of employment of the majority of workers are determined by collective agreements between employers' associations and trade unions, and the fixing by statute of minimum wages and terms of employment is confined to those trades or industries where the organization of employers or workers or both is inadequate to negotiate collective agreements and ensure their observance.

Minimum standards for working conditions, on the other hand, are laid down by statute, e.g., the Factories Acts, 1937 and 1948, and it is the duty of Government Inspectors to enforce their provisions. The various Acts of Parliament and statutory regulations made thereunder prescribe minimum standards of safety, health and welfare for a large proportion of workers, and regulate the hours of work for women and young persons. In a few exceptional cases additional health, safety or welfare requirements have been the subject of collective agreement.

Many employers provide working conditions superior to those prescribed by statute or agreement, and various voluntary bodies advise and assist in improving these standards.

LABOUR RELATIONS

The structure of labour relations in Britain is established mainly on a voluntary basis, and rests on the organization of employers and workers into employers' associations and trade unions. These organizations¹ discuss and negotiate terms and

¹ The few monopolist employers—the central Government and the public corporations operating the nationalized industries—negotiate with the trade unions representing their different types of employees.

conditions of employment and other matters affecting the workpeople at their work. In some cases these negotiations are conducted simply by *ad hoc* meetings, which are held when necessary; in other cases voluntary joint machinery has been established on a permanent basis. Normally these arrangements suffice to settle all questions which are raised, but provision is often made for matters not so settled to be referred for settlement to independent arbitration. In certain trades where the voluntary organization of employers and workers is not adequate for the effective regulation of the workers' remuneration, provision has also been made by the State for statutory regulation under the Wages Councils Acts, 1945 to 1948, the Catering Wages Act, 1943, the Agricultural Wages Act, 1948, and the Agricultural Wages (Scotland) Act, 1949.

Employers' Organizations

Many employers in Great Britain are members of employers' associations, some of which have their origins in the nineteenth century. They are generally organized on an 'industry basis'—some being purely local in character and dealing with a section of an industry only, while others have a national scope and concern themselves with the whole of an industry. In some cases the local associations are organized into district or national federations.

The central organ of employers' associations is the *British Employers' Confederation*, to which the majority of employers' associations and federations in the principal industries are affiliated. It deals with matters affecting the interests of organized employers in their relations with their workpeople, and is recognized by the Government as the principal channel of consultation between Government Departments and representatives of organized employers as a whole on all such matters.

The Confederation acts as an advisory and consultative body for its member organizations, providing them with information and statistics, ascertaining and acting upon their collective views and representing these nationally to the Government and to the public, and also internationally, for example, to the International Labour Organization.

While the main function of employers' organizations consists in the safeguarding of the interests of their members, a number consider that this purpose can be furthered by the provision of advice and assistance to member firms and by such special services as the organization of general training courses and special courses on subjects such as work study and its application. Where employers' organizations do not themselves provide such services they make arrangements for putting their members in touch with the appropriate specialist agency.

Trade Unions

In nearly all industries and occupations some workers—and in some industries nearly all workers—are organized into trade unions. These have grown up gradually and independently over a great many years, and consequently their form and organization vary considerably. Trade unions started more than two hundred years ago among the skilled craftsmen and spread later to the general labouring and unskilled classes. More recently trade unionism has increased among clerical, supervisory, technical and administrative workers.

The qualification for membership of some unions is occupational, e.g., they may recruit clerks or fitters wherever employed, while in others the qualification is industrial, i.e. they seek to recruit all persons in an industry, whatever their occupation. In a number of unions recruitment is based on a combination of these principles.

At the end of 1952 the total membership of British trade unions was 9,524,000. There were 690 separate trade unions, but 67 per cent of all trade unionists were in 17 big unions.

The basic unit of organization in most British trade unions is the local branch or lodge. Every member of the union belongs to a branch or lodge. He may attend its meetings, put forward suggestions about terms and conditions of employment, discuss the work and policy of the union, and take part in the election of branch officers. The branch takes action on certain matters considered purely or mainly of local interest but refers wider issues to the union's national or regional bodies.

Many unions also have shop stewards or other representatives at the place of work to enrol members and collect dues, to report any encroachment on agreed or customary conditions of work and in some cases to act as representatives of members at their place of work for the settlement of grievances.

In most large unions the central organization is along the following lines:

Elected officials, including a General Secretary assisted by clerical and specialist staff, are in charge of the work of head office and are responsible to a National Executive Council or Committee which may be part or full time, and which is usually elected by, and responsible to, annual or biennial conferences of delegates from the branches.

Executive committees play an important part in the government of the unions; between conferences they are the highest authorities and carry out policy decisions made by delegates.

Most unions also have some kind of regional, district or area organizations, while in large unions there is usually also a system of regional, district or area committees and councils.

Trade unions may affiliate to one or more federations or confederations whose main purpose in most cases is to represent all or most of the trade unions in an industry in negotiation with employers. The scope and authority of these federations and confederations vary greatly in different circumstances.

All the trade unions of any size or importance except the National Union of Teachers, the National Association of Local Government Officers and certain civil service staff associations are affiliated to the *Trades Union Congress* (TUC), the national centre of the British trade union movement. The objects of the TUC are to promote the interests of all its affiliated organizations and generally to improve the economic and social conditions of the workers. Its membership comprises 183 organizations, a number of which are federations so that in total 330 unions are affiliated. These represent over 8 million workpeople. The TUC deals with all general questions which concern trade unions both nationally and internationally and gives assistance on questions relating to particular trades or industries at the request of the trade union concerned. The congress of delegates, which constitutes the TUC proper, meets for a week every year to discuss matters of general interest to trade unionists and to employees generally. The General Council, elected annually, represents the TUC between congresses. A large part of its work consists of acting as a spokesman for British trade unionists on matters affecting their general interests, of co-ordinating trade union activities and determining disagreements between trade unions, of providing a number of educational and other common services and of preparing a report and agenda for the annual congress.

Both the TUC and a number of affiliated trade unions have in recent years paid increasing attention to the education of their members not only in general economic questions and trade union practice but also in production subjects including work study and costing, which have not hitherto been regarded as coming within their

field. The TUC itself holds regular one-week courses on production and management subjects and on industrial relations, as well as a two-weeks' course on trade union subjects. It also organizes week-end schools and summer schools. These are open to members of any affiliated union, usually by nomination from the union. A number of the larger unions hold similar courses. In addition, arrangements are made for union officials to attend courses on production questions at technical colleges. Some unions also make use of industrial consultants for this purpose.

The Trades Union Congress is recognized by the Government as the principal channel of consultation between the Government Departments and representatives of organized workers on matters affecting the interests of employees generally.

There is also a separate Scottish Trades Union Congress, to which trade unions may affiliate in respect of their membership in Scotland.

Branches of various trade unions in a locality often voluntarily affiliate to a local trades council. This acts as a forum for the discussion of matters of common interest and as local agent of the Trades Union Congress, by which it is annually registered. There are about 500 trades councils in England and Wales alone, grouped together in 23 federations.

Voluntary Joint Negotiating Machinery

At National Level. While in some industries all matters affecting terms and conditions of employment are discussed on an *ad hoc* basis between the employers' organizations and the trade unions concerned, in other industries there are standard procedures for dealing with such matters by joint discussion at a national level. In many industries there are, for this purpose, bodies composed of representatives of both sides of the industry with, in some cases, an independent chairman. Some are known as Joint Industrial Councils, of which there are about 130, while the corresponding bodies in central and local Government service are known as Whitley Councils¹ (see pp. 58 and 64). The functions of all these bodies vary considerably, some being merely wage-negotiating bodies, while others deal with a wide range of subjects affecting the interests of the industry concerned. Provision is sometimes made in the constitution of such bodies that, where it is not found possible to reach agreed terms of settlement in a particular dispute, the matter should be referred to some form of conciliation or arbitration by independent persons, including the methods provided under the Conciliation Act, 1896, or the Industrial Courts Act, 1919 (see p. 239).

At District and Factory Level. Similar arrangements exist at district and factory level in many industries, where matters are discussed either between the appropriate representatives of the two sides on an *ad hoc* basis, or through regular machinery provided by District Joint Industrial Councils or similar bodies and Works Councils (see p. 240). Such bodies discuss how agreements reached at a national level may be applied to their district or factory, but as a rule have no power to alter the terms of such national agreements. They also discuss new problems which may arise, and if no solution can be found at factory or district level the matter may be referred to the national body.

Statutory Wage-Regulating Machinery

In certain industries in which, owing to the lack of organization among employers and workers, voluntary negotiating arrangements do not exist for the effective settlement of terms and conditions of employment or are inadequate to secure their observance by voluntary methods throughout the industry, statutory bodies known

¹ Named after Mr. J. H. Whitley, former Speaker of the House of Commons and chairman of a committee which investigated industrial unrest from 1916 to 1919.

as Wages Councils, Catering Wages Boards and Agricultural Wages Boards have been set up. These are composed of equal numbers of representatives of employers and workers in the respective industries, with the addition of certain independent members. Wages Councils and Catering Wages Boards are empowered to submit proposals for the fixing of minimum remuneration and holidays with pay to the Minister of Labour and National Service, who is then required by the Acts concerned to make Orders giving statutory force to such proposals, subject only to his right to return them to the Board or Council for further consideration.

Orders relative to employment in agriculture are made by the appropriate Agricultural Wages Board (England and Wales or Scotland) and are effective only in the County Agricultural Wages Committee area in respect of which such Orders have been made.

State Provision for Conciliation, Arbitration and Investigation

Matters which prove difficult to settle by negotiation are sometimes referred by agreement to independent conciliators or arbitrators. Under authority derived from the Conciliation Act, 1896, and the Industrial Courts Act, 1919, the Minister of Labour and National Service has certain powers to assist industry to settle disputes which it is not found possible to resolve through an industry's own machinery and procedure. These powers are all intended to supplement and not to supersede the industry's own machinery.

To assist conciliation in industry a staff of conciliation officers forms part of the Ministry of Labour and National Service. The duties of these officers are to keep in touch with the course of relations between employers and workers at national, district, and, in some cases, factory level, and to assist them, if requested, to settle their problems by joint discussion and negotiation.

Disputes which cannot be settled in this way may, at the request of both parties, be referred to voluntary arbitration, either by a single arbitrator, or an *ad hoc* Board of Arbitration, or by the *Industrial Court*, a permanent tribunal established under the Industrial Courts Act. The Court is normally constituted of three members—the President, one member representing employers and one representing workpeople. At present, provision is also made by an order under emergency legislation for disputes and 'issues'¹ about terms and conditions of employment, to be reported to the Minister in certain circumstances by one of the parties, and to be referred, if all other means of settlement have been exhausted, to an *Industrial Disputes Tribunal*, whose award can be legally enforced. This tribunal consists of a chairman and two other independent members appointed by the Minister of Labour and National Service together with one member representing employers and one representing workpeople. These representatives are drawn from panels appointed by the Minister after consultation with the British Employers' Confederation and the Trades Union Congress respectively.

The Minister is also empowered to appoint a Court of Inquiry or Committee of Investigation into a dispute, whether existing or apprehended. These are primarily means of informing public opinion of the facts of a dispute and not means of arbitration. The report of a Court of Inquiry has to be laid before Parliament. Although the recommendations contained in the reports of such bodies are not binding on the parties, they usually provide the basis of a settlement of the difference.

¹ A dispute concerns the terms of employment or conditions of labour of workmen. An issue concerns the observance by an employer of the terms of an agreement or other 'recognized terms and conditions' in his trade or industry.

The machinery for negotiation and conciliation of disputes has reduced the need for direct industrial action, i.e. strikes and lock-outs. Time lost by stoppages of work caused by industrial disputes has been substantially less in the last twenty years than formerly. The average time lost in the five years 1949-53 was 1.8 million man days or less than a twelfth of a day per worker per year. The reduction has been in the size and duration of strikes and not in their number. Small local strikes without the backing of a trade union headquarters have been relatively frequent.

Liaison between the Government and Industry

As will be seen from the foregoing paragraphs, the Government is in contact with representatives of employers and workers at all levels on matters affecting their common interests. At local and district level the conciliation officers of the Ministry of Labour and National Service keep in touch with the representatives of both sides of industry, while at national level officers of the Department attend the meetings of many Joint Industrial Councils as liaison officers. Standing arrangements also exist for consultation between the Government and the British Employers' Confederation and Trades Union Congress through the *National Joint Advisory Council*, which was set up in 1939 to advise the Government on matters in which employers and workers have a common interest. It meets quarterly under the chairmanship of the Minister of Labour and National Service. Its membership consists of representatives of the British Employers' Confederation and the Trades Union Congress, together with representatives of the managements of nationalized industries. Among the subjects which it has considered in recent years are the machinery for settling industrial disputes, joint consultation in industry, industrial training and recruitment, double day shiftworking, and the economic situation with special reference to production, wages and prices.

Joint Consultation in Industry at Factory Level

In addition to the arrangements already described, the purpose of which is mainly but not exclusively for discussion and settlement of terms and conditions of employment, there are, in many industries, national agreements which recommend the establishment, in firms of sufficient size, of machinery for joint consultation between management and workers on problems of common interest. In some industries the constitution and functions of Works Councils are laid down in the agreement, while in others model constitutions are made available. In other industries where no national agreement on the subject has been reached the practice of joint consultation in the factory is becoming increasingly widespread.

The range of subjects which Works Councils can fruitfully discuss is wide and includes hours of work (within the framework of agreements), safety, efficiency of production, absenteeism, labour turnover, training, education, recreation and employees' services generally. The constitution and functions of these committees vary widely from one firm to another. It is the general practice, however, to exclude from their scope all questions relating to wages and conditions of employment, and other matters covered by negotiation between organizations of employers and workers. It is the policy of the Government to foster the development of voluntary joint consultation throughout industry, not only because of its effect on production but also as a most important means of maintaining good relationships between management and employees.

At individual factory level, Personnel Management Advisers of the Ministry of Labour and National Service are often approached by firms seeking advice on the establishment of Works Councils or on ways in which their activities can be made more effective.

WORKING CONDITIONS : THE LEGISLATIVE BACKGROUND

Protective legislation in mines and quarries, factories, building and civil engineering, docks, wharves, and industrial workplaces generally is detailed and comprehensive and its enforcement strict, and a certain amount of protective legislation also exists in respect of non-industrial occupations.

The Government has accepted in principle recommendations made in 1949 by a committee under the chairmanship of Sir Ernest Gowers for extending to non-industrial occupations safety, health and welfare requirements similar to those for factories; and has started consultations with the various interested organizations with a view to introducing the necessary legislation at a later date.

Local authorities have power to regulate the provision of suitable sanitary conveniences in houses and at places of work and to treat workplaces which are dirty or dangerously ill-ventilated or overcrowded as nuisances whose abatement can be enforced. They have also wide powers to regulate hours and conditions of employment of children in their areas within the limits laid down by national legislation. The general effect of the national legislation is to forbid the employment of children under 13 years of age, to forbid the employment of children between the ages of 13 and 15 during school hours on school days, or between 8 p.m. and 6 a.m. on any day, or for more than two hours on school days or Sundays. The employment of children in any industrial undertaking before they reach the age of 15 is prohibited.

The Shops Act, 1950, consolidating earlier Shops Acts, empowers local authorities to ensure that all shops in their area have proper ventilation, temperature, lighting, sanitary and washing facilities, and that they observe the requirements of the Act with regard to closing hours, meal intervals and holidays.

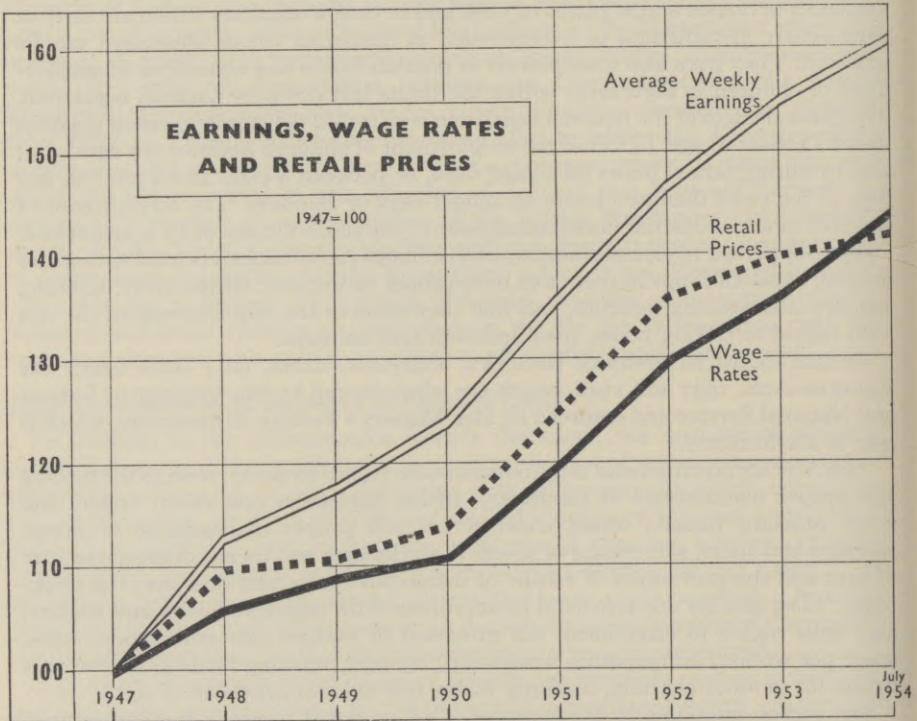
Certain industrial premises (factories, shipyards, docks, etc.) come under the Factories Acts, 1937 and 1948, which are administered by the Ministry of Labour and National Service and enforced by Her Majesty's Factory Inspectorate, which is part of the Ministry.

The Acts lay down general requirements with regard to safety, such as the fencing and proper maintenance of machinery, lifting appliances and steam boilers and other pressure vessels; sound construction and proper maintenance of floors, passages and stairs, safe means of access to workplaces and means of escape in case of fire; and the prevention of escape of dangerous fumes and dust into the work-room. They also lay down general requirements with regard to health and welfare, e.g., with regard to cleanliness, the provision of sanitary accommodation, cubic space per worker, temperature, ventilation, lighting, washing facilities, accommodation for outdoor clothing, drinking water, first aid and provision of seats.

Any person intending to use premises as a factory has to notify the Inspector of Factories of his intention not less than one month before he begins to occupy them. All young persons under 18 years of age must be medically examined by doctors appointed by the Chief Inspector of Factories on entry to employment in factories, docks, or on building operations, and must be re-examined annually. The hours permissible to be worked by women and young persons between the ages of 16 and 18 are limited to 48 in a week and 9 in a day, although some overtime is allowed (up to six hours a week for not more than 100 hours a year nor in more than 25 weeks in a year). Young persons under 16 years of age are limited to 44 hours a week. Adequate intervals for meals must be arranged for women and young persons and the employment of women and girls by night is, in general, prohibited.

These general requirements for safety, health and welfare are supplemented or modified by regulations providing safeguards against special risks or conditions in particular industries, processes, establishments or machines.

For mines and quarries, provision is made for dealing with such matters as ventilation, dust suppression, rescue work, first aid and the initial medical examination of certain new entrants by official doctors. There are many detailed requirements for the safe conduct of operations, and restrictions on the employment of women and young persons, including the prohibition of the employment of women below ground in mines, which has been forbidden since 1842. These requirements are incorporated in the Mines and Quarries Act, 1954 (which consolidated and extended the provisions of previous legislation) and in Regulations and Orders, etc., made thereunder. The Ministry of Fuel and Power is generally responsible for the administration of these enactments, while the Mines and Quarries Inspectorate, which is part of that Ministry, is directly responsible for their enforcement.



In agriculture, special attention has been paid to the protection of workers against risks of poisoning, due to the use of toxic chemicals, and recent legislation—the Agricultural (Poisonous Substances) Act, 1952—imposes necessary safeguards.

The Young Persons (Employment) Act, 1938, extended the restrictions on the hours of work of young persons to certain occupations not covered by the Factories Acts or Shops Acts. The proportion of young workers whose hours were subject to statutory limitation was estimated in 1947 to be about 65 per cent.

WORKING CONDITIONS IN PRACTICE

Earnings

Standard minimum time rates for British manual workers vary mainly between 2s. 7d. and 3s. 7d. an hour for men, and between 1s. 9d. and 2s. 6d. for women. These basic time rates are not, however, an accurate guide to average earnings.

Higher time rates are sometimes paid, and piece rates, shift rates and overtime rates raise the level of average earnings. The Ministry of Labour and National Service conducts a six-monthly survey of earnings and hours of work in some of the principal British industries. The survey for April 1954 covered about 6½ million workers and showed the average hourly earnings in all the industries covered to be as follows:

Men 21 years and over	..	..	..	..	..	4s. 1.1d.
Youths and boys under 21 years	..	..	..	..	..	1s. 10d.
Women 18 years and over	..	..	..	..	..	2s. 4.1d.
Girls under 18 years	..	..	..	..	..	1s. 6.5d.
All workers	..	..	..	..	..	3s. 7d.

Average weekly earnings were:

Men	..	..	..	..	..	..	197s. 8d.
Youths	..	..	..	..	..	..	82s. 0d.
Women	..	..	..	..	..	..	105s. 3d.
Girls	..	..	..	..	..	..	65s. 10d.
All workers	..	..	..	..	..	..	166s. 6d.

The principal industries not covered by this survey were agriculture, where the average weekly earnings for regular adult male workers were 142s. 6d. in the year April 1953 to March 1954; coalmining, where, according to information collected by the National Coal Board, the average weekly cash earnings for men were 257s. 2d. plus 12s. 1d. in kind, in May 1954; railway services, in which average weekly earnings in March 1954 of men in the wages grades were 188s. 2d. and those of women were 115s. 7d.; and dock labour, in which average weekly earnings of dock workers employed by the National Dock Labour Board for April to June 1954 were 217s. 6d.

Hours of Work

While, as already stated, the hours of work in factories of women and young persons between the ages of 16 and 18 are limited by law to 48 a week and those of young persons under 16 to 44 a week, normal hours of work for all ages and sexes are usually shorter. Agreed weekly hours mainly vary between 42 and 46, averaging between 44 and 45, and may be worked as either a five- or a five-and-a-half-day week according to the industry and the rule of the particular establishment. Hours actually worked are somewhat longer owing to overtime working. The survey conducted by the Ministry of Labour and National Service in April 1954 into earnings and hours showed that average weekly hours actually worked were as follows:

Men	..	..	..	..	..	..	48.3 hours
Youths and boys	..	..	..	..	..	..	44.7 "
Women	..	..	..	..	..	..	42.0 "
Girls	..	..	..	..	..	..	42.7 "
All workers	..	..	..	..	..	..	46.5 "

Holidays with Pay

In addition to six statutory public holidays nearly all employees have at least one week's holiday with pay each year, and the majority have at least two weeks. The statutory holidays are as follows: in addition to Good Friday and Christmas Day, there are Bank Holidays in England, Wales, Northern Ireland and the Channel Islands on Easter Monday, Whit-Monday, the first Monday in August and the

first weekday after Christmas (Boxing Day), and in Scotland on New Year's Day, the first Monday in May, and the first Monday in August.

Safety

Safety depends in practice at least as much on the education of the worker as upon safety regulations. The Accident Prevention Movement, a voluntary educational campaign, is strongly supported by the Factory Inspectorate and the Mines and Quarries Inspectorate. Inspectors inquire into safety problems, and advise makers on safety aspects of machine design and specification, circulate expert advice by personal exhortation, lectures and literature, and encourage the appointment of Safety Officers and the formation of Accident Prevention Committees. A Safety, Health and Welfare Museum in London is maintained by the Ministry of Labour and National Service.

In road, rail and air transport most of the work is outside the jurisdiction of the Factory Inspectorate, but elaborate safety codes are laid down by the various transport authorities. The Royal Society for the Prevention of Accidents helps the Accident Prevention Movement by providing posters and pamphlets and by organizing training courses for safety officers.

Fatal industrial accidents have tended to diminish during the twentieth century in spite of the increase in the number of persons employed. Such accidents rose somewhat in factories during the early years of the second world war. Since then, however, there has been a further decline. Fatal industrial accidents in 1953 numbered 1,630; of these 446 were in mines and quarries, 744 in establishments under the Factories Acts, 203 in railway service, 221 on ships registered in the United Kingdom and 16 in commercial aviation.

Health and Welfare

Many employers achieve health and welfare standards higher than those prescribed by law. An increasing number of firms in Britain provide a whole-time or part-time doctor, an industrial nurse, and a canteen with hot meals, and operate retirement and sickness insurance schemes supplementing National Insurance benefits. Some have their own rehabilitation centres or support convalescent homes.

Health and welfare standards vary from one factory to another. Between a third and a half of the factory workers of the country are employed by small firms employing less than 250 workers, and many of these find it hard to spare the management time and the funds needed to improve employee services.

The amenities provided by large factories depend partly on the employees' needs and desires. The requirements of a factory, where the work is safe and easy and many employees are women or young persons, are different from those of engineering or steel works, where work is arduous, dirty and dangerous and undertaken mainly by men.

Progressive firms are careful to find out what their employees want, and welfare policy is often decided in consultation with the workers, whether through regular consultative machinery or by other means.

In the coalmining industry, the National Coal Board has continued to strengthen the medical services which existed before nationalization. Chief Divisional and Area Medical Officers have been appointed, and doctors have been appointed to the larger collieries and to groups of collieries. Medical centres with proper accommodation and the services of doctors and registered nurses are being set up at the pithead.

A number of official and voluntary bodies help to supply the research, advice and assistance necessary for developing higher standards of industrial health and welfare. These bodies include, besides the Factory and the Mines and Quarries

Inspectorates, such Government agencies as the Medical Research Council (see pp. 345-6), the Department of Scientific and Industrial Research, including the National Physical Laboratory (see pp. 344-5), and the Government Chemist; the Departments of Industrial Health and Social Medicine of the Universities; such voluntary bodies as the Central Council for Health Education, and the Industrial Welfare Society; and the research and personnel departments of various large industrial concerns. Co-ordination is provided by a number of general and special committees.

Human Relations in Industry

There has been a considerable growth in recent years of interest in 'human relations' in industry, i.e. relations between management and their workers as individuals, as distinct from relations between organizations of employers and organizations of workers. This has led to more widespread attention being given to all aspects of personnel management and to the establishment of more personnel departments. Between 1939 and 1944 the number of whole-time personnel managers and welfare officers increased from about 1,500 to 6,000, and this increase seems to have continued since, though perhaps more slowly. While the form of organization of personnel departments varies, the personnel officer is generally responsible for advising all levels of management on the development of good industrial relations. This officer also has particular duties with regard to recruitment, selection, education and training, transfer of labour, the application of wage agreements, the promotion of joint consultation and the supervision of working conditions and employee services.

Both voluntary and official organizations have been concerned with the promotion of better human relationships in industry.

The voluntary organizations include bodies which deal with management problems and provide a service to subscribing firms, professional associations linking individuals who have a common interest in particular functions of management and administration, and bodies which provide specialist services usually on a fee-paying basis.

In 1945 the Ministry of Labour and National Service established a Personnel Management Advisory Service which has done much to promote good personnel management and to assist firms by discussing problems of personnel policy. The service is staffed by a team of experienced Personnel Management Advisers recruited from industry.

In March 1953 the Department of Scientific and Industrial Research and the Medical Research Council set up two committees which are concerned with research into the human factor in industry. They are known respectively as the Committee on Human Relations in Industry and the Committee on Individual Efficiency in Industry.

The Committee on Human Relations has approved a number of projects for research into factors influencing the effectiveness of incentive payment schemes, factors facilitating and restricting the introduction of new techniques and methods in industry, characteristics of management organization affecting productivity, industrial education, training and promotion, and the problems of the effective employment in industry of special groups such as older persons and married women.

The Committee on Individual Efficiency has concerned itself with research into such matters as the influence of equipment and tool design on operator efficiency, factors affecting the efficient utilization of industrial engineering techniques, and training methods in industry.

VIII. FINANCE

PUBLIC FINANCE

Public finance is concerned with the way public authorities finance their activities—how their expenditure is decided upon and how their revenue is obtained.

Moneys administered by public authorities can be roughly divided into two categories:

1. **Exchequer:** the moneys of the central Government, raised and disbursed in accordance with the proposals of the Government, as approved by Parliament (principally the House of Commons). There are also funds administered for special purposes by Government Departments and wholly or partially maintained by receipts which do not come from the Exchequer. The only important one at present is the National Insurance Fund, administered by the Minister of Pensions and National Insurance, used for the payment of benefits under the National Insurance Scheme (see pp. 295–6) and for a small part of the cost of the National Health Service (see p. 303).
2. **Local Government:** the moneys of local authorities, obtained partly from rates (local taxes on dwelling houses and other real estate) and income from property, and partly from grants and loans from the Exchequer. Local authorities may also raise loans in the open market.

The following broad account of Government finance will be concerned mainly with the Exchequer and only incidentally with local government¹ and other public funds.

Financial control, as exercised by the House of Commons, is based on law, parliamentary rights and custom.

As the power of Parliament grew in late medieval and Tudor times, the principle that taxation by the Crown required parliamentary consent was gradually evolved. The principle was established, at the end of the constitutional struggles of the Stuart period, by the Bill of Rights, 1689.

In medieval, Tudor and Stuart times, it is broadly true to say that once the King was granted the right to raise a given sum by taxation, he was free to spend it as he chose. In the eighteenth and nineteenth centuries, the House of Commons gradually developed the modern system of controlling expenditure through the device of Appropriation, which was embodied in its final form in the Exchequer and Audit Departments Act, 1866.

Since the very early days of Parliament it had been established that such financial control as Parliament possessed should be exercised by the House of Commons. This control became effective, as regards taxation, in the seventeenth century, but as regards expenditure it was not effective until the nineteenth century. The controlling power of the House of Commons is acknowledged today in the Speech from the Throne at the opening of a new session of Parliament, which is addressed to both Houses but contains a special paragraph addressed to the Commons alone.

The Commons have traditionally claimed that the Lords have no power to modify financial provisions, though they may reject such provisions. It was indeed to minimize the chance of rejection that the practice was started in 1861 of embodying the main financial provisions for the ensuing year in a single Bill. Since

¹ For further information on local government finance see p. 64.

the passing of the Parliament Act, 1911, however, the assent of the House of Lords is no longer necessary for a Bill certified by the Speaker to be a Money Bill (see p. 29).

Today, the authority of the House of Commons has to be obtained for all expenditure by the central Government itself and for the raising of revenue by taxation or borrowing. All Government revenue is paid into the Government account with the Bank of England—known as the Exchequer Account or the Consolidated Fund. With certain exceptions (the main one being National Insurance benefits), all payments by the Government come out of this account.

The following section outlines the machinery by which expenditure and revenue are authorized and controlled, the purposes on which public money is spent and the sources from which revenue is obtained.

ESTIMATES AND EXPENDITURE

Classification of Expenditure

Central Government expenditure falls into two main groups:

1. Expenditure which is specifically authorized by Act of Parliament without limitation to any particular year. This expenditure includes the interest, sinking fund and cost of management of the National Debt, the income of members of the Royal Family, and salaries and pensions of judges and certain high officers whose independence of the Government is thought to be better guaranteed by permanent grant than by annual vote. These Consolidated Fund Services represent a permanent charge on the Consolidated fund.
2. All other Government expenditure, which is authorized from year to year and which includes all expenditure on defence, on the social services and on the general administration of the country. These are called Supply Services because the House of Commons, when voting money, is granting to the Crown 'such aids or supplies as are required to satisfy . . . the pecuniary necessities of the Government'. It should be noted that some of this expenditure may also depend on legislation, such as the National Health Service Acts, relating to a specific object of expenditure.

Authorizing Expenditure

The Estimates for these Supply Services are considered by the House of Commons in Committee of Supply (that is, in Committee of the whole House with the Chairman of Committees, instead of the Speaker, in the Chair). The Committee usually discusses public policy relevant to the Estimates, though any Estimate could be examined in detail if members wished and if time allowed (see also p. 32).

Estimates for Supply Services in the financial year beginning on 1st April are submitted to the Treasury by each Department in the preceding November and December. Estimated expenditure is grouped under main headings called 'Votes' which are further broken down into subheads and items. If the House of Commons approves the Estimates, the sums asked for are voted and later confirmed in the Appropriation Act; this Act appropriates the moneys to specific Votes. Inside each Vote, the spending of money on one subhead instead of on another, or 'virement', is permissible so far as Parliament is concerned, but only with Treasury consent. Departments are free to distribute expenditure within subheads as they please subject to Treasury approval of the type of expenditure involved.

An excess of expenditure, or new services not covered by the Vote, or virement

of a magnitude or character which the Treasury considers should be brought to the attention of Parliament, requires a Supplementary Estimate. The Treasury exercises the same power of scrutiny over this as over the ordinary Estimates.

Scrutiny of Expenditure

Control of expenditure is maintained by the Treasury, by the Comptroller and Auditor General, by the Select Committee on Public Accounts of the House of Commons and by the Select Committee on Estimates.

The Treasury

The power of the Treasury to control expenditure is part of the responsibility of the Chancellor of the Exchequer for the financial policy of the Government.

A central function of the Treasury is to present the Civil Estimates to the House of Commons. In considering the Estimates submitted by Departments, the Treasury has to weigh the advantages of administrative proposals against the monetary and economic cost, taking into account current Government policy, to decide the relative merits of expenditure proposed by different Departments and to eliminate any overlapping, uneconomic or wasteful expenditure where this has escaped the net of departmental financial control. Quite apart from the scrutiny of Estimates, throughout the year the Treasury keeps a close control over such matters as rates of pay and the aggregate size of the staff in all Government Departments in addition to exercising a general supervision over all departmental expenditure. The Treasury also lays down general rules of financial and accounting procedure for Departments and prescribes the principles on which departmental contracts shall be made and the limits within which losses may be written off.

The Comptroller and Auditor General

Control over issues of money to Departments and the audit of accounts is exercised by the Comptroller and Auditor General, who holds a permanent appointment as an officer of Parliament. Since 1866 he has had two functions: as Comptroller of the Exchequer he controls entries and issues of public money to and from the Exchequer Account, and as Auditor he audits departmental accounts and submits the Appropriation Accounts to Parliament. His statutory function is to ensure that all expenditure is properly incurred, e.g., that no payments are made which go beyond any relevant statutory authority, and that Treasury sanction has been obtained wherever necessary. In addition, however, he has been encouraged by successive Committees on Public Accounts (see next paragraph) to examine departmental expenditure with a view to drawing the attention of that Committee to any cases of apparent waste or extravagance.

The Select Committee on Public Accounts

The accounts of each Department and the reports of the Comptroller and Auditor General thereon are considered by the Select Committee on Public Accounts—the 'PAC'. This was set up in 1861, by Mr. Gladstone, for the purpose of ensuring that expenditure was properly incurred in accordance with the Estimates and with any relevant Acts of Parliament, but it has since developed much wider powers. Nowadays it may consider whether full value has been obtained for the sums spent by Departments and it examines cases in which the administration appears to have been faulty or negligent. The Committee has therefore become a powerful instrument for the exposure of waste and inefficiency. It embodies its findings in Reports which may be discussed in the House of Commons. Its recommendations are considered by the Treasury in consultation with Departments and

put into effect, so far as they are accepted, according to Treasury instructions. If the recommendations are not acceptable a reasoned reply has to be submitted to the Committee, which may either accept the objections or return to the charge in subsequent reports.

Select Committee on Estimates

This Committee was originally set up in 1912 but was re-formed in 1929 with wider terms of reference. Under these terms it has been re-appointed annually except during the war years. The Committee's functions are to examine the Estimates, to suggest the form in which they should be presented, and to report whether there are any economies which could be made without altering the policy implied in the Estimates. In practice the Estimates for the current year are not affected, but the Committee's recommendations may reinforce Treasury control and influence the nature of expenditure in succeeding years.

REVENUE AND THE BUDGET

Sources of Revenue

Money to meet the needs of the central Government is in normal years derived mainly from taxation. The revenue from loans and investments is small, and other sources of revenue, e.g., trading surpluses of Government Departments, are not important.

Taxes can be divided into two groups, direct and indirect, which correspond roughly to the duties collected by the Board of Inland Revenue and by the Customs and Excise Department. The most important Inland Revenue duties—income tax (including surtax), profits tax and estate duties (death duties)—are levied directly on the income or property of those who, in general, have to bear them. Income tax on individual (though not on corporate) incomes and death duties are progressive taxes, that is, larger incomes and estates bear a proportionately higher rate of tax. Stamp duties, although not a direct tax, are also collected by the Board of Inland Revenue. Taxes on motor vehicles are collected by local taxation authorities, which are the County or County Borough Councils in England and Wales and the corresponding Councils in Scotland; the proceeds are paid direct to the Exchequer.

Most indirect or outlay taxes are Customs and Excise duties and are levied on commodities or services. They are called indirect because the importer, manufacturer or wholesaler pays them first and then passes them on to the individual consumer in the form of higher retail prices.

Customs duties are levied on imported goods, and Excise duties on goods produced, and services provided, at home. The Purchase Tax is, for all practical purposes, an Excise duty, although it is also levied on the appropriate imported goods.

Budget Procedure

'Budget' is an ancient name for a bag containing papers or accounts. The origin of the term lies in the phrase "The Chancellor of the Exchequer opened his budget", which was applied in Parliament to the annual speech of the Chancellor of the Exchequer explaining his proposals for making revenue and expenditure balance. By the time the Budget is introduced, the Estimates will have been presented to Parliament and published, and the expected total of Government expenditure for the year will be known.

The Budget speech is the main occasion of the year for reviewing the financial state of the nation. But its formal basis is the Chancellor of the Exchequer's proposals for raising money by taxation: he estimates the yield of the revenue on the basis of existing taxation and proposes such changes as will provide whatever surplus or deficit he considers desirable on general economic grounds. These proposals are embodied in Budget resolutions which are subsequently examined by the House of Commons' Committee of Ways and Means, and later embodied in detail in a Finance Bill.

Budget Policy

The original purpose of the Budget was purely financial—to provide money for Government expenditure. From an early stage, however, it was appreciated that taxation would affect the distribution of income and property and the level of the expenditure on particular goods and services. Later on it was gradually realized that taxation also affected the nation's total expenditure and therefore the general level of economic activity. Since the war, Budgets have been consciously designed in greater or lesser degree to bring the total of personal and governmental demand for goods and services into balance with the supplies which could be made available.

Direct taxation on income and property affects the distribution of wealth because the rates vary according to the size of income and property, the proportion of a high income going in tax being much greater than the proportion of a small one; at the same time, the services provided by the Government (whether in cash or kind) are generally available to all irrespective of wealth, but in some cases they are specially designed to benefit people with lower incomes. Indirect taxes do not affect the distribution of income; their main purpose has always been the raising of revenue, but by discouraging or encouraging consumption of particular goods they can be used to influence the allocation of resources and the pattern of trade.

The Budget affects the general level of expenditure (personal and governmental), and therefore the total demand for goods and services, in the following way: if there is an increase in Government expenditure without an increase in taxation then total demand for goods and services will tend to rise; the same thing will happen if there is a decrease in taxation without a decrease in Government spending. In this way the Budget can be used to counter unemployment. On the other hand if there is an increase in taxation without an increase in Government expenditure or a decrease in Government expenditure without a decrease in taxation then the total demand for goods and services will tend to fall. In this way the Budget can be used to counter inflation.

For some years after the war, budgetary policy was mainly designed to avoid inflation by holding down consumer demand for goods and services so that it would not hamper exports, investment or (since 1950) the defence programme. The Budgets of 1951 and 1952 aimed also to hold down investment in the interests of exports and defence. By 1953, however, as total demand had fallen while productive capacity had increased, some unused resources became available; in consequence there was a reduction of taxation in the 1953 Budget, which aimed particularly at encouraging higher investment and production. These aims were continued in the 1954 Budget, when, however, changes in taxation were much smaller than in 1953.

The principal taxation changes in the Budget of 1954 were as follows:

Income Tax and Profits Tax, introduction of investment allowance instead of initial allowance; *Estate Duty* (Death Duty), increase from £2,000 to £10,000 in limit for non-aggregation of free and settled estate, and relief of 45 per cent of duty payable in respect of certain fixed assets; *Customs and Excise*, reduction in

entertainment duty. The net effect of these changes will be to reduce revenue by £4 million in 1954-55 and £6 million in a full year. (These figures exclude the cost of the investment allowance, which is put at £4 million in 1955-56 and which will increase thereafter.)

THE EXCHEQUER ACCOUNTS

In the Budget of April 1954, total current expenditure for the financial year ending 31st March 1955 was estimated to reach £4,523 million, while the estimate for total current revenue (after allowing for taxation changes) was £4,533 million, making a surplus of £10 million. These figures exclude self-balancing revenue and expenditure (almost entirely post office trading), for which the estimate was £240 million. On capital account, total expenditure was estimated at £598 million, while total receipts were estimated at £191 million leaving a deficit, to be met by borrowing, of £407 million. Comparable figures for previous years are given in Table 6, p. 92.

Budget and Expenditure

Total 'ordinary' expenditure for 1954-55 falls under four main heads: defence preparations £1,668 million (37 per cent of the total), National Debt service £606 million (13.5 per cent), social services and subsidies £1,737 million (38 per cent) and general services, which make up the remaining £511 million (11.5 per cent).

The total for defence preparations, £1,668 million, is made up of £1,640 million voted for Service Departments for the defence programme less American Aid receipts (expected to amount to £85.4 million), plus £113.5 million for defence preparations under civil votes, mainly civil defence and strategic reserves.

The second heading, National Debt service, comprises £570 million for interest and management charges on War Loans, Savings Certificates and other forms of national debt, and £36 million for sinking funds.

The main items under the third heading, social services and subsidies (£1,737 million) can be subdivided as follows: education (£307 million); health services (£430 million); Government contributions to National Insurance Fund, family allowances, war pensions, etc. (£391 million); assistance to local authorities for housing, police, roads, etc. (£272 million); and agricultural and food subsidies (£337 million).

The main items under the fourth heading, general services (£511 million) are: Commonwealth and foreign services £90 million; works, buildings, stationery and information services £62 million; Irish Services¹ £59 million; supply and trading services £57 million; tax collection £47 million; agriculture and fisheries £37 million; broadcasting £19 million; research and development £19 million²; employment services £19 million; civil aviation £17 million; and Colonial development and welfare £17 million.

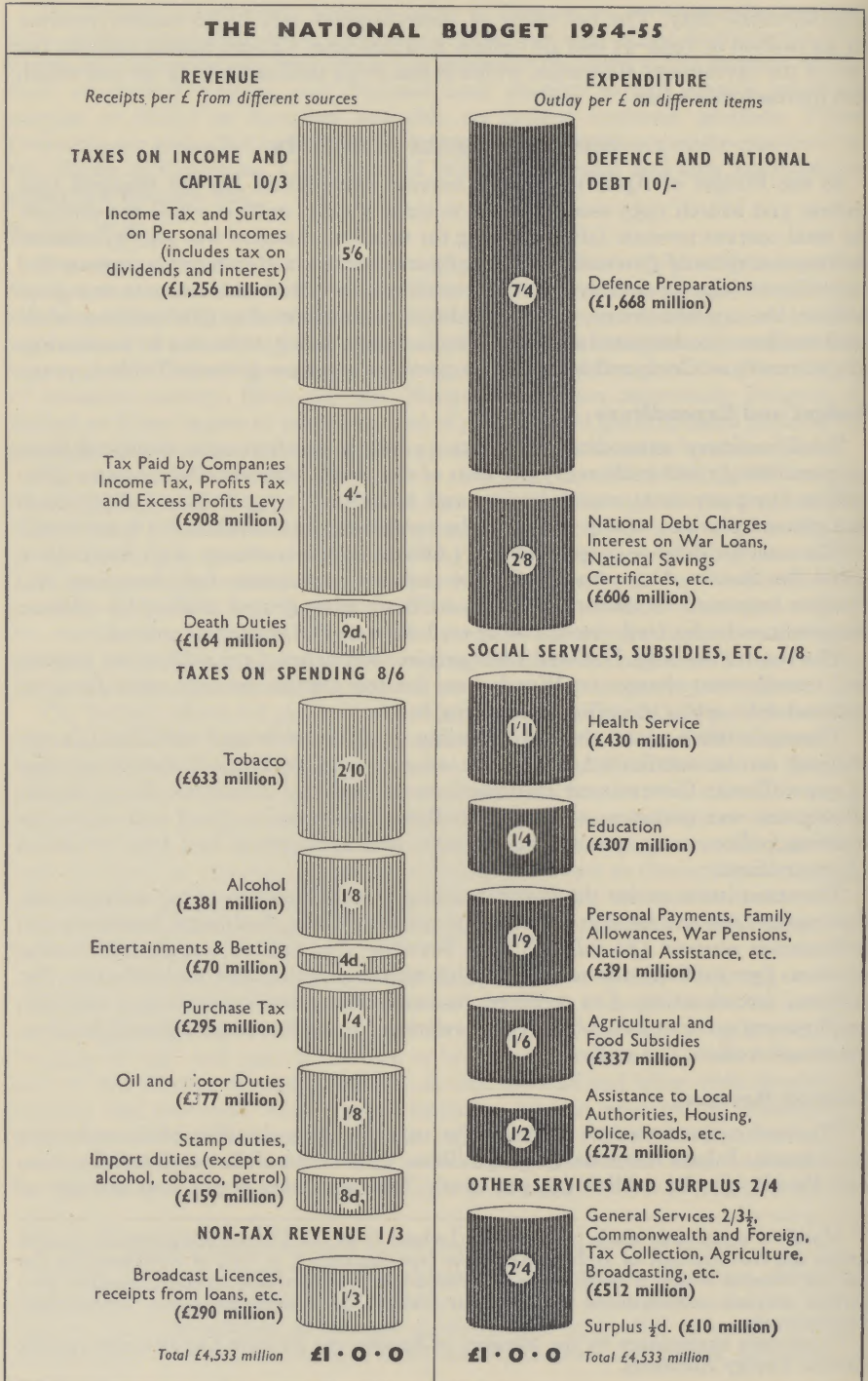
Current Revenue

The total current revenue estimated for 1954-55 (£4,533 million) falls under two main heads: Inland Revenue, £2,384 million (53 per cent of the total) and Customs and Excise, £1,782 million (39 per cent). The remaining 8 per cent consists of

¹ Mainly the payment made to Northern Ireland from the United Kingdom Exchequer under the Government of Ireland Act, 1920 (see footnote ², p. 23), in compensation for the tax revenue which is remitted to the Exchequer by Northern Ireland; together with certain services administered in Northern Ireland by United Kingdom Government Departments.

² Excluding expenditure by the Ministry of Supply, the Defence Departments and the Atomic Energy Authority.

THE NATIONAL BUDGET 1954-55



receipts from motor vehicle duties (£77 million), from broadcast receiving licences (£21 million), from sundry loans (£24 million) and from miscellaneous sources (£245 million—including proceeds of the expected liquidation of trading stocks by the Ministry of Food).

The yields from the different sources of Inland Revenue in 1954-55 are expected to be as follows:

<i>Inland Revenue</i>				<i>£ million</i>
Income Tax	..	..	..	1,800
Surtax	..	..	..	132
Death Duties	..	..	..	164
Stamp Duties	..	..	..	55
Profits Tax and Excess Profits Tax	..	..	..	172
Excess Profits Levy	..	..	..	60
Other Duties	..	..	..	1
Total				2,384

Income tax is imposed at a standard rate for the year of assessment beginning on 6th April. For 1954-55 the standard rate is 9s. in the £. The tax imposed on an individual is graduated by means of personal allowances, by reduced rates of tax on the first sections of taxable income, and by the surtax. In the case of a married couple the incomes of husband and wife are aggregated and are treated as one income, but a higher personal allowance is given than for a single person. Companies are liable at the standard rate on their total income, irrespective of the amount of that income. Companies are also subject to Profits Tax.

TABLE 36

INCOME TAX AND SURTAX PAID BY PERSONS WITH DIFFERING INCOMES
AND FAMILY RESPONSIBILITIES 1954-55

Income before tax	Single persons		Married couples without children		Married couples with two children	
	Income all earned income	Income all investment income*	Income all earned income	Income all investment income*	Income all earned income	Income all investment income*
	£	£ s.	£	£ s.	£	£ s.
200	4 9	4 9	—	—	—	—
300	15 17	29 6	2 18	11 5	—	—
400	35 6	60 10	12 16	35 0	—	2 10
500	56 12	95 10	32 4	64 0	1 2	17 10
1,000	218 10	318 10	178 0	278 0	101 14	201 10
2,000	568 10	768 10	528 0	728 0	451 10	651 10
5,000	2,428 10	2,631 0	2,388 0	2,590 10	2,311 10	2,514 0
10,000	6,353 10	6,556 0	6,313 0	6,515 10	6,236 10	6,439 0

Source: *Financial Statement, 1953-54.*

* Some relief is given when the taxpayer (or his wife) is over 65 years of age: investment incomes not exceeding £600 are charged on the same scale as earned incomes.

The amount of income tax paid yearly by people with different incomes is shown in Table 36. Since 1943 most wage and salary earners have paid their income tax under a PAYE ('Pay-as-you-earn') Scheme which enables them to keep up to date in their tax payments week by week (or month by month if they are paid monthly).

In general, the income of a visitor to the United Kingdom arising from sources within the United Kingdom is subject to United Kingdom income tax, except in the case of certain United Kingdom Government securities. Where the income arises from sources outside the United Kingdom tax is not chargeable unless the visitor becomes chargeable as a resident. The United Kingdom has entered into agreements with many countries providing for relief from double taxation; where such agreements are not in force the United Kingdom allows unilateral relief.¹

The scale of death duties is illustrated in Table 37. In 1946 estates of a net capital value of less than £2,000 were exempted from payment of death duty and a new scale for values over £2,000 was introduced. The scale was altered again in 1949, when legacy and succession duties were consolidated with death duties.

TABLE 37
DEATH DUTIES PAID ON ESTATES OF DIFFERENT VALUES 1954-55

Net capital value of total estate £	Duty £	Net capital value of total estate £	Duty £
2,000	Nil	30,000	5,400
3,000	30	40,000	9,600
5,000	100	50,000	15,500
10,000	400	100,000	45,000
15,000	1,200	500,000	325,000
20,000	2,400	1,000,000	750,000

Source: *Ninety-sixth Report of the Commissioners of Inland Revenue.*

The main items in estimated Customs receipts (£1,063 million) and Excise receipts (£719 million) in 1954-55 are as follows:

	£ million	
	Customs	Excise
Spirits	25	80
Beer	13	242
Wine	18	3
Sugar	9	4
Tobacco	633	—
Matches	3	9
Oil	290	10
Entertainments	—	41
Duties under Import Duties Act, 1932 ..	56	—
Purchase Tax	—	295
Betting	—	30

¹ The information in this paragraph is not legally authoritative. For this purpose reference should be made to the relevant Statutory Rules and Orders. Inquiries in the United Kingdom should be addressed to the Secretary, Board of Inland Revenue, Somerset House, London, W.C.2.

Capital Payments and Receipts

The Government also receives funds and makes payments of a capital nature for which it has statutory power to borrow and which are therefore excluded from the Budget expenditure met from revenue. In the last few years the main items of capital expenditure have been loans to local authorities for housing and other investment (for which purposes about £400 million is budgeted in 1954-55); loans for the development of new towns; and working capital for the National Coal Board. Capital receipts have come mainly from the repayment of these loans. If, on balance, there is a deficit, it is met from the proceeds of Government borrowing, while if there is a surplus it goes to reduce the National Debt.

The National Debt

So far, borrowing on a large scale has been undertaken only to finance deficits during or immediately after a war. The National Debt rose from £651 million in 1914 to £7,435 million at the end of the first world war, and from £7,131 million in 1939 to £23,637 million in 1946. On the 31st March 1954 the total National Debt was £26,583 million, of which £2,115 million was held externally, mainly by the United States and Canadian Governments. Of the £24,468 million of internal debt, about £4,819 million was short-term or floating debt, mainly in the form of 91-day bills on the Treasury, while the long-term loans included a variety of stocks, bonds, loans, and certificates carrying fixed rates of interest (varying from 1½ to 4 per cent) and with fixed or indeterminate dates of repayment.

Since the war new lending by the Government has exceeded loan repayment, as the main borrowers, the local authorities, repay over a long term. From 1945 to the end of 1952 local authorities relied on the Exchequer for virtually all their loans. As from 1st January 1953 they were given permission to borrow on the open market (see p. 65).

BANKING AND PRIVATE FINANCE

The British banking system is long established and well integrated. It consists of a Central Bank; of Commercial Banks which carry on the usual main banking services; of the United Kingdom offices of various banks whose main business is in other countries; and of various specialized banks and similar financial institutions.

The Bank of England

The Bank of England is the Central Bank and its principal business is to act as banker to the Government and to the other banks, as the agent of the Government for important financial operations and as the central note-issuing authority; it maintains relations with central banks overseas. It was established in 1694 by Act of Parliament as a corporate body and its entire capital stock was acquired by the Government under the Bank of England Act, 1946.

As the central bank, the Bank of England acts in conjunction with other banks and financial institutions in co-ordinating the application of the Government's monetary policy. One of the main instruments for this purpose is the Bank Rate—the rate at which the Bank of England will discount approved bills of exchange. The Bank Rate was raised from 2 to 2½ per cent in November 1951 and to 4 per cent in March 1952; it was reduced to 3½ per cent in September 1953, and to 3 per cent in May 1954.

As banker to the Government the Bank of England holds the main Government accounts and it acts as the Government's agent for the issue and registration of Government loans. It also operates, for the Treasury, the administration of exchange control which has been in force since 1939 (see pp. 282-4).

The commercial banks maintain large balances with the Bank of England and these balances form part of the bankers' cash reserves.

The Bank of England has the sole right in England and Wales of issuing bank notes, which are, of course, legal tender throughout the United Kingdom. Notes thus issued need a 100 per cent cover in gold and securities, the part covered by the latter being the 'Fiduciary Issue', the level of which is subject to parliamentary control. In practice very little gold is now held by the Issue Department of the Bank of England, the bulk of the United Kingdom gold (and foreign exchange) reserves being in a separate account, known as the Exchange Equalization Account, originally established in 1932 for the purpose of checking undue fluctuation in the exchange value of sterling. The provision of coin for circulation is the responsibility of a Government Department, the Royal Mint.

The Commercial Banks

The banks handling the major part of the domestic banking business in the United Kingdom are, in the main, limited liability companies which are subject to the ordinary law relating to such companies.

Some of the main distinguishing features of the United Kingdom commercial banks are:

1. A relatively small number of banks control a large number of branches. Domestic banking members of the British Bankers' Association number 27, including 7 in Scotland, and 3 in Northern Ireland; these banks control nearly 12,500 branches and have total assets of over £8,000 million.
2. The volume of cheques handled is very large and, in spite of a stamp duty of 2d. on each cheque, many payments—and even relatively small payments—are made by cheque. The average daily value of cheques, drafts, bills and bankers' effects cleared in 1954 through the London and Provincial Clearing Houses was £478 million; and many cheques do not, for various reasons, pass through Clearing Houses.
3. It is the practice of the chief United Kingdom banks to maintain a ratio of about 8 per cent between cash reserves and total deposits (of which about two-thirds are repayable on demand, the remainder being deposits at interest and subject to notice).

In September 1954 about 35 per cent of the banks' deposits were covered by cash and short-term securities while longer-term securities amounted to about 34 per cent, and advances to customers to about 28 per cent of total deposits. It is not the practice of British banks to participate directly in industry, the financing of which is, as far as they are concerned, normally limited to short-term advances.

4. Certain banks in Scotland and Northern Ireland have retained limited rights to issue notes; these issues must, apart from an amount for each bank which is specified by legislation, be fully covered by Bank of England notes and by coin.

United Kingdom Offices of Banks Operating Mainly Overseas

The importance of London as a financial and trading centre and as the largest city of the British Commonwealth has encouraged many banks whose main business is in the Commonwealth and other countries to have London offices; in some cases, indeed, the institutions concerned are United Kingdom companies and the London office is the head office. These London offices form part of the complex structure engaged in the financing of trade not only between the United Kingdom and other countries but also in goods which are shipped direct between other countries.

Savings Banks and the National Savings Movement

The function of Trustee and Post Office Savings Banks is to provide facilities for the investment of voluntary savings and particularly of the small savings of persons with small incomes. Both these types of banks were well established during the nineteenth century. The growth of their business was, however, encouraged in the first world war when the War Savings Committee was set up under Government auspices to promote an official savings drive. A new type of long-term security for the small investor was inaugurated at that time. This was the National Savings Certificate, with interest payable only on encashment, but free of income tax. From this war-time drive originated the present National Savings Movement devoted to the encouragement of the widespread investment of savings in Trustee and Post Office Savings Banks and in National Savings Certificates and Defence Bonds. The policy of the movement is determined by the National Savings Committee for England and Wales and similar committees for Scotland and Northern Ireland. The committees are bodies of independent persons representing regional savings organizations and various national institutions connected with such matters as finance, industry and education. They are assisted by a salaried staff of civil servants. Voluntary local savings committees, often assisted or promoted by local authorities, co-ordinate the work of voluntary local savings groups.

Trustee Savings Banks are managed by boards of honorary trustees and managers, and most of the funds deposited with them are ordinary deposits which are withdrawable on demand or at short notice. These deposits are invested with the National Debt Commissioners, and the Government is responsible to the trustees for the repayment of the money so invested with accrued interest as and when required. Trustee Savings Banks also accept, in certain circumstances, deposits for special investment. These deposits, which may receive a slightly higher rate of interest than ordinary deposits, are invested under the supervision of the National Debt Commissioners, but the Government is not responsible to the trustees for the repayment of these investments. Trustee Savings Banks are particularly flourishing in small towns. At the end of 1953 there were about 1,280 Trustee Offices controlled by 84 independent banks.

The Post Office Savings Bank is the largest organization of its kind in the world. It has over 22 million active accounts; in October 1954 total balances, which carry a Government guarantee, amounted to £1,742 million, about £80 per depositor. Through a centralized system of accounting, a depositor can pay in money or make a withdrawal at any one of some 19,000 post offices throughout the country.

To ensure that Savings Banks are used primarily by the small investor there is a limit of £500 on the amount which may be deposited by any individual in one year, and of £3,000 on the total balance which may be held by one individual. The maximum amount of National Savings Certificates which may be held by any one person is £750 worth of the current (ninth) issue and about £1,875 worth of all issues. The limit on individual holdings of 3½ per cent Defence Bonds (Subscription Issue) is £2,000.

Co-operative Banks

The Co-operative Wholesale Society (see footnote, p. 288) formed a deposit and loan department about the year 1870, and the right of a co-operative society to engage in banking was legally defined in the Industrial and Provident Societies Act in 1876. The primary purpose of the Co-operative Wholesale Society Bank was to serve the Co-operative movement, whose financial centre it has become, but the bank has also come to include among its clients trade unions and other mutual societies, local authorities and individual depositors.

OTHER FINANCIAL INSTITUTIONS

It has been the policy of the commercial banks to leave the provision of many special financial facilities to other financial institutions. These facilities, which are supplementary to the credit facilities of the banking system, are mainly provided through the Discount Market, Finance Corporations, the Stock Exchange, Investment Trusts, Building Societies and the Insurance Market. New issues, except for certain small operations, are controlled by the Treasury with the advice of the Capital Issues Committee (see p. 260).

The firms engaged in this business are in the main highly specialized, e.g., discount houses, accepting houses, stockbrokers, insurers, insurance underwriters and brokers. In addition to these specialist firms, however, there is a class of bank, the merchant bank, which has been of great importance in the finance of trade and commodity dealings and in the flotation of major issues of bonds, particularly for overseas concerns and governments.

The merchant banks helped to give London an international reputation as the main world centre for short-term and long-term borrowing. Long-term loans for development purposes created a continuing claim for interest and attracted to Britain a steady flow of orders for machinery, textiles and coal. This increasing trade was usually financed by bills of exchange, which were traded on the discount market and provided an easy method of transferring debts and claims.

The Discount Market

The main business of the Discount Market consists of trading in and holding commercial bills of exchange, United Kingdom Government Treasury Bills and other short-term securities.

To the extent to which the various firms which compose the Discount Market have insufficient funds of their own to finance the bills and securities which they wish to hold, they obtain loans from the banks and, to a lesser extent, deposits from the public. In the main these loans and deposits may be called in at any time.

The commercial banks do not, in the ordinary way, buy Treasury Bills at the weekly tenders except on behalf of customers, but purchase, from the Discount Market, bills which have been taken up by the market and held until they become of a currency required by the banks.

If the banks call in loans which they have made to the Discount Market and the latter is unable to cover its needs elsewhere, it will be forced to borrow from the Bank of England. It is not the practice of the commercial banks themselves to obtain direct loans from the Bank of England to augment their cash resources if the need arises.

Finance Corporations

Two corporations, the Finance Corporation for Industry Limited and the Industrial and Commercial Finance Corporation Limited, were set up in 1945 in order to assist in dealing with the problems of post-war reconstruction and development. Although the Government displayed considerable interest in their formation, the Corporations themselves are ordinary limited companies with no official representation on the boards and having no recourse to public funds. Another finance corporation, the Commonwealth Development Finance Company Limited, was incorporated in 1953 for the purpose of assisting development projects within the Commonwealth. Among other financial corporations of note are Air Finance Limited and the National Film Finance Corporation.

Finance Corporation for Industry Limited

The FCI was formed to assist in the provision of capital (in amounts of £200,000 and upwards) for the re-equipment and development of industry with a view to promoting efficiency and thereby assisting in the maintenance and increase of employment.

The Corporation has an authorized and issued capital of £25 million and may borrow up to four times this amount, making a possible total of resources of £125 million. The share capital is held as follows: 40 per cent by insurance companies, 30 per cent by trust companies and 30 per cent by the Bank of England. As at the 31st March 1954 the capital had been paid up to the extent of 2 per cent (£500,000), the liability of the shareholders in respect of the uncalled capital representing security to the banks who provide the capital out of which the Corporation makes its advances.

The enterprises assisted by the FCI are concerned with a variety of products, e.g., diesel engines, permanent prefabricated houses, shipping, electrical components, steel, oil, chemicals, etc.

Industrial and Commercial Finance Corporation Limited

The ICFC is smaller than the FCI and has as its main object the provision of credit and finance by means of loan capital and share capital for industrial and commercial concerns in Great Britain, particularly in cases where the existing facilities provided by banking institutions and the Stock Exchange are not readily or easily available.

The authorized and issued share capital of the Corporation is £15 million which is paid up as required; the Corporation can borrow up to a further £30 million and can thus have a maximum of £45 million available. Although the Bank of England has a token participation, the principal shareholders are the London Clearing Banks and the Scottish Banks in proportion to their size; the loan capital is provided by all the shareholders in the same ratio as their shareholdings.

The nature of the Corporation's business is to provide finance in sums ranging between £5,000 and £200,000 for small and medium-sized concerns. It has a large number of customers and has established branches in Birmingham, Manchester and Edinburgh.

Commonwealth Development Finance Company Limited

This Company was established early in 1953. It originated from the Conference of Commonwealth Prime Ministers in December 1952 and its purpose is to finance development schemes in the British Commonwealth. The authorized capital of this company is £15 million but to begin with only £2.9 million has been called up; the Company is empowered to borrow up to twice its issued capital.

Air Finance Limited

This Company was formed by a group of bankers and the FCI late in 1953 for the purpose of financing aircraft exports. Its initial resources were £11 million.

The National Film Finance Corporation¹

The Corporation is a statutory body established under the Cinematograph Film Production (Special Loans) Act, 1949. Its function is to make loans to film producers and distributors in order to help to finance the production of films.

¹ For further information on the National Film Finance Corporation see p. 358.

The Stock Exchanges

Although there are several Stock Exchanges in the United Kingdom, the London Stock Exchange is by far the most important.

The Stock Exchanges provide a means by which a holder of quoted stock or shares (all important securities are quoted) can, if he wishes, find a buyer for his securities; they are also a most important element in the raising of new capital by Government and commercial borrowers.

The Stock Exchanges do not fix dealing prices; the terms on which bargains are made between members reflect the interaction of supply of and demand for the securities concerned.

All the Stock Exchanges operate under strict rules of conduct which they make themselves.

The Capital Issues Committee

Since 1932 there has been control to a greater or lesser degree over capital issues in the United Kingdom. The 1932 controls, and such modifications as were made up to 1939, were without a statutory basis but resulted from public requests by the Chancellor which the various markets observed. At the outbreak of war in 1939 the Foreign Transactions (Advisory) Committee, which had been set up in 1936 to advise the Treasury on issues involving remittances to countries outside the Commonwealth, was renamed the Capital Issues Committee and was given the wider task of advising the Treasury on the administration of the statutory control of capital issues (and analogous transactions) for which provision was made in Regulation 6 of the Defence (Finance) Regulations, 1939.

The end of the war in 1945 saw the retention of the Capital Issues Committee with its primary function unchanged; permanent provision for capital issues control was made the following year with the passing of the Borrowing (Control and Guarantees) Act, 1946.

The Committee is entirely independent of Government Departments and consists of seven men of experience in commerce, industry or finance, who consider applications to raise loans or issue capital (except those not involving more than £50,000 in any one year for the borrower concerned) and tender their advice to the Treasury upon them.

Investment Trusts

Investment trusts cater for the investor who does not wish or has not sufficient resources to hold a large number of investments in his own name but who desires to have an interest in several securities as a means of spreading his risk.

The ordinary type of investment trust is a public company, limited in liability and registered under the Companies Acts; investment trusts in this form have been established in the United Kingdom for about a century. They invest their share and loan capital over a range of securities, the precise choice depending in part on the objects of the particular company concerned.

Since 1931 there have also been 'unit trusts' in the United Kingdom; a trust of this type is normally limited by its trust deed to a specified range of securities. The original conception of the unit trust was that securities could be grouped in fixed proportions to form units, and these units could be divided into sub-units which could be sold to the public. In practice, while retaining this unit basis of investment, many unit trusts have considerable flexibility in their choice of the underlying securities.

The Insurance Market

The British insurance market is in the main divided into two parts, the insurance companies and Lloyd's. The company market is the larger, but Lloyd's is older and has a greater claim on the popular imagination. The company market consists of about 300 British insurance offices, chiefly incorporated under the Companies Acts, of which some two-thirds are small or of local or specialized significance, whereas the remainder transact a general business. Most of the latter are controlled by about 30 very large companies of international repute. In addition, some 200 over-sea companies are represented, emphasizing the international nature of the insurance market. The natural focus of the market is in London, although some of the largest offices have their administrative centres elsewhere. In addition, there are some 150 Friendly and Collecting Societies devoted solely to 'industrial' life assurance¹ throughout the country, but these are not part of the insurance market proper.

Lloyd's

Lloyd's is an association of individual underwriters who group themselves into syndicates. The conduct of insurance business at Lloyd's is regulated by the Committee of Lloyd's, and the affairs of the Society of Lloyd's in its corporate capacity are administered by the Committee under an Act of Parliament. In addition to its insurance activities Lloyd's maintains a world-wide organization for the collection and diffusion of shipping intelligence (see p. 189). Although in its earlier history the activities of Lloyd's were confined to the conduct of marine insurance business, during the last fifty years there has been built up at Lloyd's a very considerable world-wide market for the transaction of other classes of insurance.

The market is completed by the insurance brokers, acting on behalf of the insured, who are an essential part of the Lloyd's market and a valuable part of the company market. Many brokers specialize in reinsurance business, acting as intermediaries in the exchange of contracts between both British and over-sea companies, and often acting as London representatives of the latter.

Volume of Business

The volume of premium income business transacted by the insurance market during the year 1953 was about £1,000 million.

Over two-thirds of the fire, accident and marine business comes from abroad, partly by direct placing in London and partly from branch and agency offices established in over 100 countries. The profits on this business, together with interest earned on funds maintained locally, have produced in recent years a substantial sum in foreign exchange, of which a large part was represented by dollars. The basic principle of international business is that resources capable of meeting any potential loss are instantly available for application wherever necessary.

Behind this large and international volume of business stand the assets of the companies, aggregating over £3,000 million in addition to substantial reserves of uncalled capital and the whole of the deposits, underwriting trust funds and personal fortunes of Lloyd's underwriters. British insurers hold over £1,200 million in British Government and other public stocks, while about £900 million is invested in ordinary shares, preference shares and debentures in industry, mostly in the United Kingdom.

¹ Life insurance for which the contributions are collected by house-to-house visits at intervals of less than two months (a system convenient to weekly wage earners).

Building Societies

The principal function of building societies is to supply long-term loans on the security of private dwelling houses purchased for owner-occupation, though loans are occasionally made on the security of commercial and industrial premises and farms. The funds of building societies are derived mainly from the general public who invest in shares or deposits. The amount of share capital is not fixed but may be regulated in accordance with the amount of mortgage business; shares are not dealt with on the Stock Exchange but may be withdrawn in cash if notice is given. The rapid expansion of building society activity in the twentieth century has been accompanied by a concentration of most of the business in the hands of a few very large societies. At the end of 1953 there were in operation a total of 782 societies, whose total assets were £1,642 million. The amount advanced on mortgage in 1953 was £298 million.

IX. TRADE

EXTERNAL TRADE

British overseas markets and sources of supply are world-wide. The wealth and very existence of the British people has, for over a century, depended on overseas trade. British imports consist mainly of food and of the various materials, raw and processed, required by British industries, though finished capital and consumer goods are also imported. British exports are preponderantly of manufactured goods, but coal and raw wool are also important exports.

For over one hundred years the value of goods imported into Britain has exceeded that of goods exported, the balance of imports being more than paid for in normal years by net invisible exports—i.e. the net receipts of interest, dividends and profits on previous investment abroad and net income from shipping, insurance and a variety of financial services; and the net overall surplus has been invested overseas. This is the broad picture: it has been modified in detail over the course of time.

TRENDS SINCE 1938

The post-war years have witnessed a rapid expansion in the volume of exports, to a level considerably higher than in 1938. This has been a consequence of rising production and restricted home consumption in combination with a vigorous export drive. Imports, on the other hand, have been less in volume and re-exports have shown a declining trend. Apart from these changes in quantity, prices of both imports and exports are much higher than before the war and there have also been important changes in commodity composition and area distribution.

Some indication of the increased importance of exports in the national economy is shown by the rise in the proportion of total national income derived from export earnings—from 10·4 per cent in 1938 to 13 per cent in 1947 and 18·3 per cent in 1953. Over the same period the rise in the proportion of expenditure on imports to total national expenditure was smaller—from 18 per cent in 1938 to 19·4 per cent in 1947 and 22·8 per cent in 1953.

Changes in the value and volume of external trade as a whole are shown in Table 38. Imports rose in value from £919 million in 1938 to £1,794 million in 1947 and £3,345 million in 1953. The rise in value of exports was from £471 million in 1938 to £1,139 million in 1947 and £2,582 million in 1953.

Calculations of changes in the quantity of external trade compared with pre-war cannot be made with precision as the relative values of different classes of goods on which the volume figures are based have changed considerably since 1938. Broadly speaking, however, the volume of imports in 1947 was a quarter less than before the war; by 1953 it had nearly regained the pre-war level. The volume of exports in 1953 was about 70 per cent higher than in 1938.

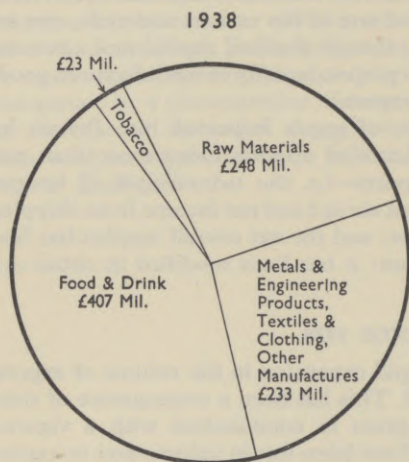
Commodity Composition

As compared with pre-war, exports of motor vehicles, aircraft, machinery, chemicals and electrical goods have greatly increased in importance, while the older staples, such as cotton and wool textiles, though still considerable, have taken a declining share in the export total. Before the war Britain's coal exports averaged about 35-40 million tons a year and imports were negligible; between 1951 and 1953 the average export figure was about 11 million tons, while imports averaged about 5 million tons.

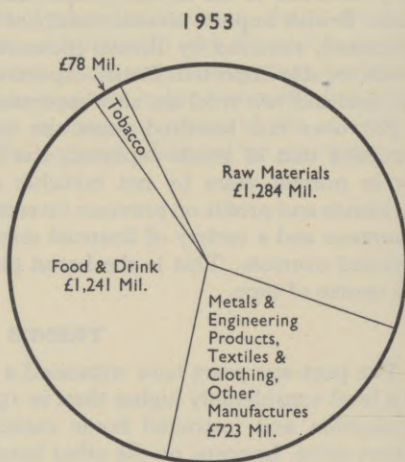
IMPORTS AND EXPORTS

Composition by main groups of commodities

IMPORTS

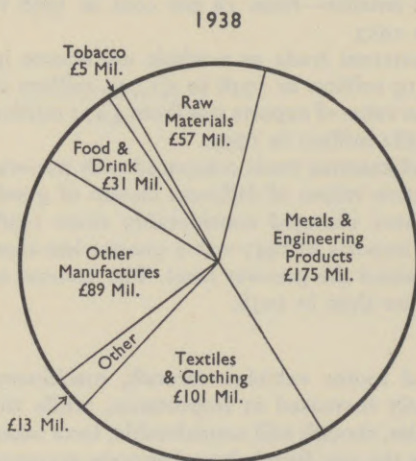


TOTAL £919 Million

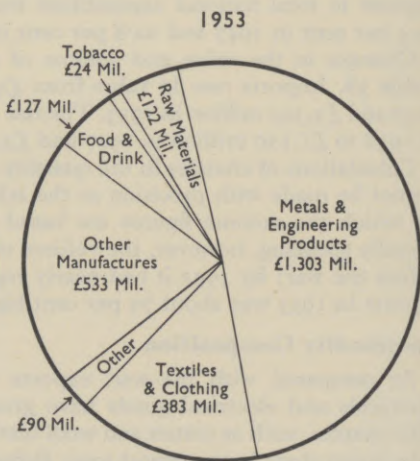


TOTAL £3,345 Million

EXPORTS



TOTAL £471 Million



TOTAL £2,582 Million

TABLE 38
IMPORTS AND EXPORTS: ANNUAL FIGURES

	1938	1947	1948	1949	1950	1951	1952	1953
<i>Value (£ million)</i>								
Total imports								
c.i.f. (a) ..	919	1,794	2,074	2,275	2,608	3,904	3,479	3,345
Exports of UK goods, f.o.b. (b)	471	1,139	1,583	1,786	2,171	2,580	2,582	2,582
Re-exports f.o.b. (b) ..	61	59	61	58	85	127	144	105
<i>Volume Index Nos.</i>								
Total imports								
1938 = 100 ..	100	76						
1950 = 100 ..		89	92(c)	100(c)	100	113	103	112
Exports of UK goods								
1938 = 100 ..	100	109						
1950 = 100 ..		62	79	87	100	101	95	98
<i>Terms of Trade (d)</i>								
1950 = 100 ..	79	92	94	93	100	113	105	96

Source: Statistics Division, Board of Trade.

(a) 'Cost-insurance-freight', i.e. including shipping, insurance and other expenses incurred in the delivery of goods as far as their place of importation in the United Kingdom. Most of these expenses represented earnings by United Kingdom firms.

(b) 'Free-on-board', i.e. the cost of the goods to the purchaser abroad, all costs and charges accruing up to the time of placing the goods on board the exporting vessel having been paid by the seller.

(c) Approximate.

(d) The ratio of import to export average value index numbers: a rise indicates an adverse movement.

As a result of the substantial rise in industrial production since 1947, imports of raw materials have increased much more rapidly than have imports of food, drink and tobacco.

Table 39 analyses the commodity composition of imports and exports in 1938, 1947 and 1953 by main industrial groups. Table 40 shows the amounts of some of the principal commodities imported into the United Kingdom in 1938, 1947 and 1951-53, while Table 41 shows the amounts (quantities or values) of some of the main United Kingdom exports for the same years.

TABLE 39
COMMODITY COMPOSITION OF UNITED KINGDOM EXTERNAL TRADE

£ million

	Food and Drink	Tobacco	Raw Materials	Metals and Engineering Products	Textiles and Clothing	Other Manufactures	Total*
Total imports c.i.f.				}			
1938	407	23	248				919
%	44	2.5	27				100
1947	756	47	564				1,794
%	42	2.6	32				100
1953	1,241	78	1,284				3,345
%	37	2.3	38				100
Exports of UK goods f.o.b.							
1938	31	5	57	175	101	89	471
%	7	1.0	12	37	21	19	100
1947	46	19	34	549	226	225	1,139
%	4	1.6	3	48	20	20	100
1953	127	24	122	1,303	383	533	2,582
%	5	0.9	5	51	15	20	100

Source: *Annual Abstract of Statistics*.

* Including small amounts for animals (not for food) and parcel post transactions.

TABLE 40
TOTAL IMPORTS OF CERTAIN GOODS INTO THE UNITED KINGDOM

Commodity	Unit	1938	1947	1951	1952	1953
Wheat	m. tons	5.1	4.2	4.1	3.9	4.0
Beef	th. tons	613.3	532.0	176.5	153.0	335.6
Mutton	"	82.5	120.4	} 256.8	363.7	363.9
Lamb	"	274.4	320.3			
Bacon and ham	"	376.6	131.8	221.3	252.3	312.4
Butter	"	475.9	216.2	308.2	259.2	282.0
Tea	"	235.1	173.8	207.2	221.8	220.0
Sugar, unrefined	m. tons	2.4	1.9	2.2	2.0	3.0
Tobacco, unmanufactured ..	m. lb.	344.9	295.6	354.9	223.7	315.8
Iron ore (except manganiferous)	m. tons	5.2	6.8	8.7	9.7	11.0
Raw cotton (except linters)	th. tons	538.7	318.9	451.3	265.5	333.8
Raw wool ..	m. lb.	881.3	620.6	505.9	694.9	827.7
Crude petroleum	m. galls.	568.0	615.8	4,309.0	5,926.0	6,677.5
Refined petroleum	"	2,635.6	2,843.9	2,672.4	1,616.8	1,674.4
Raw rubber ..	th. tons	168.2	218.0	357.6	330.2	257.8

Source: *Annual Abstract of Statistics.*

TABLE 41
EXPORTS OF CERTAIN UNITED KINGDOM GOODS

Commodity	Unit	1938	1947	1951	1952	1953
Coal	m. tons	35.9	1.1	7.8	11.8	14.0
Finished steel ..	th. tons	1,323.7	1,198.7	1,827.9	1,780.5	1,908.6
Electrical goods and apparatus	£ million	13.6	49.4	96.6	109.6	103.8
Machinery and parts	"	57.2	175.1	363.2	421.8	404.6
Cotton yarns and manufactures ..	"	49.7	78.0	209.4	148.0	133.4
Woollen and worsted yarns and manufactures	"	26.8	58.6	178.6	123.9	139.8
Chemicals, drugs, dyes and colours	"	22.2	67.4	142.7	138.1	130.0
Refined petroleum	"	2.9	5.2	30.1	52.3	71.1
Aircraft and parts	"	5.4	25.1	42.1	44.0	65.0
Motor cars, new	thousand	44.1	125.6	309.0	275.8	264.5

Source: *Annual Abstract of Statistics.*

Area Distribution

The area distribution of external trade in 1938 and 1947 in comparison with that of 1953 is shown in the two parts of Table 42. Imports from North America, which were 22 per cent of the total value of imports in 1938, rose to 30 per cent in 1947 but declined to 17 per cent in 1953. Imports from the sterling area, on the other hand, rose from 31 per cent in 1947 to 45 per cent in 1953. Total exports to North America showed a small percentage increase in 1953 as compared with 1947 and 1938. Exports and re-exports to the sterling area rose from 45 per cent in 1938 to 49 per cent in 1947 but decreased to 47 per cent in 1953. Imports from non-sterling member countries of the Organization for European Economic Co-operation (OEEC) and their overseas territories showed an appreciable rise between 1947 and 1953—from 17 per cent to 23 per cent of the total.

TABLE 42
AREA DISTRIBUTION OF EXTERNAL TRADE
Value of Total Imports: Analysis by Source

	1938		1947		1953	
	Value £ million	%	Value £ million	%	Value £ million	%
North America	199.3	22	536.2	30	558.0	17
<i>of which:</i> USA ..	118.0	13	297.1	17	253.8	8
Canada	81.3	9	239.1	13	304.2	9
Other American Account Countries (a)	15.7	2	67.6	4	76.6	2
Other Western Hemi- sphere Countries ..	61.6	7	175.7	10	174.5	5
Sterling Area (a) ..	286.9	31	558.3	31	1,503.3	45
Non-sterling OEEC Countries and their overseas territories ..	220.3	24	307.8	17	769.7	23
Eastern Europe ..	74.3	8	49.1	3	133.7	4
Rest of the world ...	61.4	7	99.8	5	129.1	4
TOTAL	919.5	100	1,794.5	100	3,344.9	100

Source: Statistics Division, Board of Trade.

(a) For list of these countries see chart p. 283.

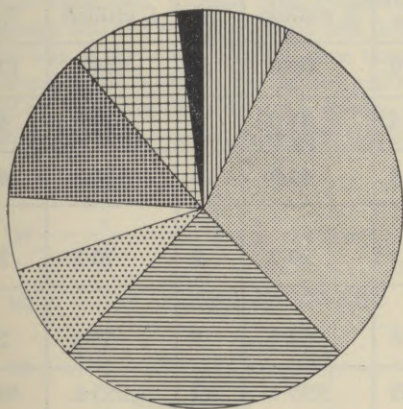
AREA DISTRIBUTION OF EXTERNAL TRADE

Value of Total Imports: Analysis by Source

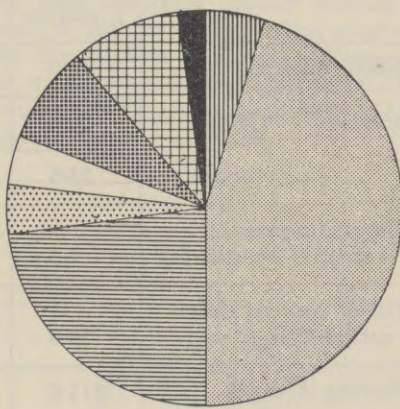
1938

IMPORTS

1953



TOTAL £919.5 Million



TOTAL £3,344.9 Million



U.S.A.



Other American Account Countries



Sterling Area



Eastern Europe



Canada



Other Western Hemisphere



Non-sterling OEEC and possessions



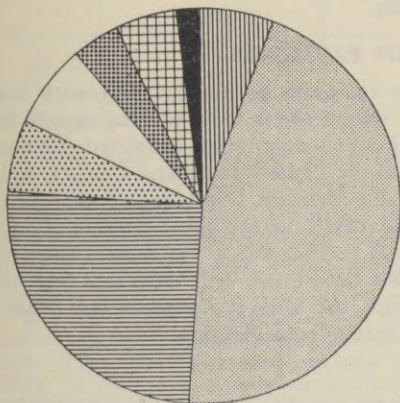
Rest of the World

Value of Total Exports: Analysis by Destination

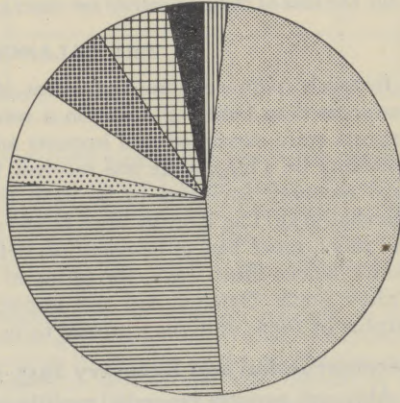
1938

EXPORTS

1953



TOTAL £471.4 Million



TOTAL £2,582 Million

TABLE 42 (contd.)

Value of Total U.K. Exports: Analysis by Destination

	1938		1947		1953	
	Value £ million	%	Value £ million	%	Value £ million	%
North America ..	44.0	9	92.9	8	315.6	12
<i>of which:</i> USA ..	20.5	4	48.0	4	158.8	6
Canada	23.5	5	44.9	4	156.8	6
Other American Account Countries (a)	7.5	2	20.7	2	70.2	3
Other Western Hemi- sphere Countries	29.5	6	62.4	5	53.9	2
Sterling Area (a) ..	211.8	45	555.1	49	1,253.6	48
Non-sterling OEEC Countries and their oversea territories ..	118.3	25	265.7	23	694.7	27
Eastern Europe ..	27.9	6	44.5	4	44.7	2
Rest of the world ..	32.4	7	97.6	9	149.3	6
TOTAL	471.4	100	1,138.9	100	2,582.0	100

Source: Statistics Division, Board of Trade.

(a) For lists of these countries see chart p. 283.

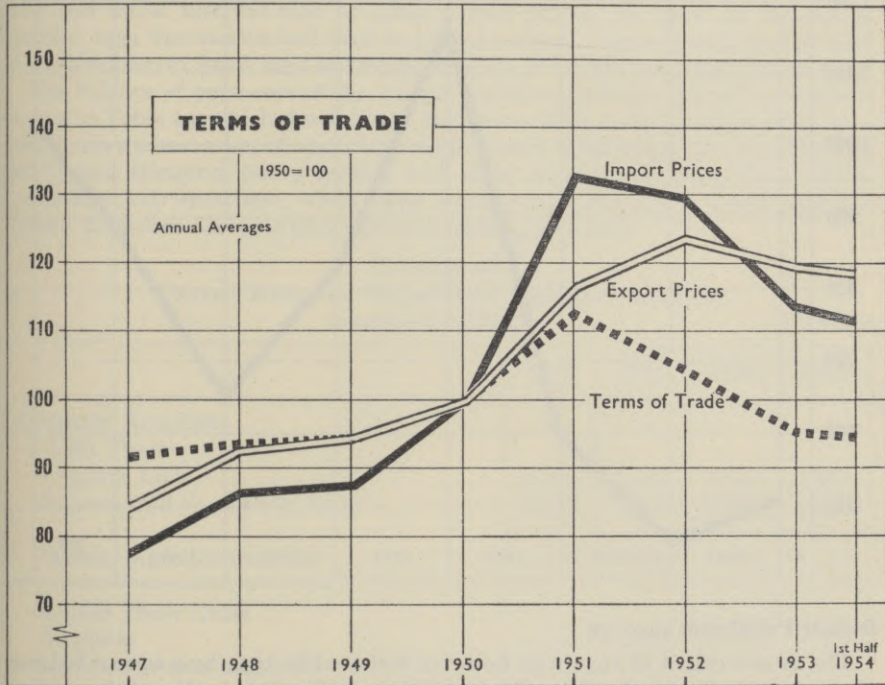
THE BALANCE OF PAYMENTS

Britain's main economic problem after 1945 was to pay her way with fewer resources than before the war in a world where prices were turning against her. Exports were expanded and imports and home consumption restricted. Financial assistance on a large scale was received from the United States and Canada, and in 1950 recovery appeared to be such that the decision was taken to discontinue Marshall Aid. The Korean War, however, started a further adverse swing of prices, and much more had to be spent on defence. In 1951 there was again a large payments deficit. Since 1951, the terms of trade have improved. With this help, plus United States Defence Aid and import cuts, the United Kingdom was again in surplus in 1952; and 1953 proved to be a year of consolidation.

Reconstruction and Recovery 1945-50

Although exports expanded rapidly after the war Britain was able to maintain an adequate level of imports between 1945 and 1947 only by drawing heavily on the gold and dollar reserves and on the lines of credit granted by the United States

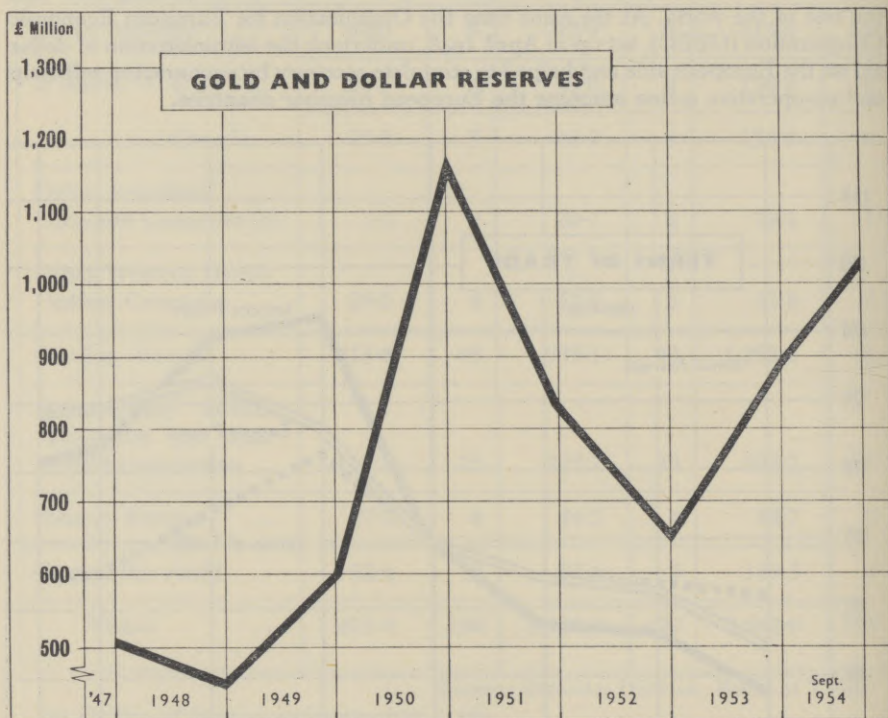
in December 1945, and by Canada in March 1946. Between the beginning of 1946 and the middle of 1948 the whole of the United States credit of \$3,750 million was drawn, but drawings upon the Canadian credit of \$1,250 million continued until the middle of 1950 by which time \$1,185 million had been taken up. From 1948 onwards, United States dollars, made available under the European Recovery Programme (ERP), and subsequently under the United States Mutual Defence Assistance and Mutual Aid Programmes, gave economic support directly to Britain and the rest of Europe and indirectly to the rest of the sterling area¹ and the rest of the world. At the same time the Organization for European Economic Co-operation (OEEC), set up in April 1948, undertook the administration of dollar aid on the European side and helped to stimulate recovery by encouraging self-help and co-operative action amongst the European member countries.



In 1949 there was a serious drain on the sterling area's gold and dollar reserves, partly as a result of a recession in business activity in the United States. To protect these reserves the United Kingdom Government reduced the exchange value of sterling, on 18th September 1949, from \$4.03 to \$2.80. This, followed by industrial recovery in America and elsewhere arising from the trade boom following the

¹ The essence of the sterling area is the readiness of its members generally to keep most of their monetary reserves in the form of sterling in London and to use London as their banker. They satisfy their needs for other currencies by drawing on the sterling area pool, paying for them out of their sterling holdings. The sterling area now consists of the British Commonwealth (except Canada), British Trust Territories, British Protectorates and Protected States, together with the Irish Republic, Burma, Iceland, Iraq, Jordan and Libya. Iceland does not draw on the sterling area pool but meets her dollar needs independently. The sterling area as a whole accounts for about a third of world trade.

outbreak of the Korean war, helped to bring about a marked improvement in the sterling area's dollar position in 1950. By December of that year the improvement in the sterling area's gold and dollar reserves was such that allocations of dollar aid to Britain under the European Recovery Programme were suspended. The total amount of ERP aid allotted to the United Kingdom up to this date was \$2,694 million in grants and loans, of which a small part was not received until 1951.



Deficit Problems 1950-52

The improvement of 1950 was, however, followed in 1951 by a serious balance of payments crisis which affected both the United Kingdom itself and the sterling area as a whole. This was due in part to the steep falls in the prices of sterling area raw materials from the peak levels of early 1951, and in part to substantial increases in imports by the sterling area from the non-sterling world. It resulted in a loss of gold and dollar reserves of £550 million in the second half of 1951.

For the United Kingdom, and for the whole sterling area, the year 1952 was dominated by the need to check this crisis. Immediate stop-gap measures, including steps to curtail internal demand and measures to limit imports, were taken by the United Kingdom in November 1951. In January 1952, at a meeting of Commonwealth Finance Ministers, action was agreed upon to bring the sterling area into balance with the rest of the world in the second half of 1952, to stop the drain on the gold and dollar reserves and to eliminate inflation.

These immediate aims were accomplished. Even without taking United States Defence Aid into account the sterling area had a substantial surplus with the

non-sterling world in the second half of 1952, and the United Kingdom was also in current surplus with the non-sterling world during the same period. The drain of gold and dollars was stopped and the reserves rose a little during the second half of the year. An important factor in the strengthening of the reserves was United States Defence Aid, receipts of which totalled £121 million in 1952. On the other hand, the United Kingdom paid out nearly £75 million during the year in interest and amortization on the United States and Canadian loans.

Consolidation in 1953

In 1953 the improvement in the sterling area's external position was consolidated. Although exports to the dollar area declined as a result of a trade recession in the United States, imports from the dollar area fell even more, and the dollar balance showed an improvement. At the same time, there was a marked improvement in the sterling area's balance with non-dollar countries. In consequence, the gold and dollar reserves rose by £240 million during the year. At the end of October 1954 the reserves had risen to £1,049 million compared with the low level of £594 million in April 1952 and the peak of £1,381 million reached in June 1951.

The balance of payments of the United Kingdom with the rest of the world is set out in Table 43, which shows how a deficit on visible trade has been offset since 1950 (with the exception of 1951) by a surplus on invisible trade. In 1952 and 1953 the United Kingdom had a surplus with other sterling countries, and a deficit (excluding Aid) elsewhere, while other sterling countries had a deficit with the United Kingdom and a surplus with non-sterling countries.

TABLE 43
UNITED KINGDOM BALANCE OF PAYMENTS 1950-53
(continued overleaf)

£ million

	1950	1951	1952	1953
CURRENT ACCOUNT				
<i>Visible Trade</i> ¹				
Imports, f.o.b.	2,383	3,481	2,950	2,879
Exports and re-exports, f.o.b.	2,250	2,748	2,825	2,668
Deficit on visible trade (a)	-133	-733	-125	-211
<i>Invisible Trade (Net)</i>				
Shipping	+141	+132	+103	+120
Interest, profits, dividends	+154	+127	+78	+47
Travel	-24	-29	-2	—
Government transactions	-136	-154	-172	-154
Everything else	+298	+253	+239	+307
Surplus on invisible trade (b)	+433	+329	+246	+320
Defence Aid (c)	—	+4	+121	+102
Balance of current transactions (i.e. (b) + (c) - (a))	+300	-400	+242	+211

¹ Owing to differences in timing, coverage, etc., import and export statistics used in balance of payments calculations are not comparable with those used in previous tables in this chapter.

TABLE 43 (*contd.*)

£ million

	1950	1951	1952	1953
INVESTMENT AND FINANCING ACCOUNT				
Grants to UK	+140	+ 43	—	—
Net oversea investment by UK ..	- 86	-325	- 71	-193
Change in sterling liabilities (increase +)	+221	+338	-346	+222
Drawings on (+) or additions to (-) gold and dollar reserves	-575	+344	+175	-240
Total	-300	+400	-242	-211

Source: *United Kingdom Balance of Payments 1946-1954*, Cmd. 9291.

The principal changes in the United Kingdom balance of payments from 1952 to 1953 are shown in Table 44.

TABLE 44

CHANGES IN THE UK BALANCE OF PAYMENTS FROM 1952 TO 1953

£ million

Visible:

Imports	Down	71
Exports and re-exports	Down	157
Deficit	Up	86

Invisible:

Shipping (net credit)	Up	17
Interest, profits and dividends (net credit) ..	Down	31
Travel (change from net debit to even balance) ..	Better by	2
Migrants, etc. (net debit)	Down by	11
Government oversea expenditure (net)	Down	18
Other (net credit)	Up	68
Surplus	Up	74
Current surplus, excluding Defence Aid (net) ..	Down	12
Defence Aid (net)	Down	19
Current surplus, including Defence Aid (net) ..	Down	31

*Visible Account.*¹ The trade figures indicate that in 1953 Britain bought 9 per cent more imports, by volume, than in 1952, but because of the fall in import prices paid 4 per cent less for them. Britain exported 3 per cent more goods than in 1952, but because of the fall in export prices earned about the same as in the previous year. Import prices, however, fell much more than export prices; and this improved the balance of payments by some £200-250 million.

Invisibles. Oil transactions made a large contribution to the improvement of invisible earnings; shipping expenditure was sharply reduced and earnings less so; Government receipts rose. On the other hand receipts on account of interest, profits and dividends (chiefly from the Rest of the Sterling Area) fell off.

Regional Balance. Table 45 summarizes the changes in the United Kingdom regional balance on current account.

¹ This paragraph uses trade figures, since volume and price calculations are made from them, not from payments figures.

TABLE 45
CHANGES IN UNITED KINGDOM REGIONAL BALANCE 1952-53

£ million

	Visible	Invisible	Total
Dollar Area, excluding Defence Aid ..	+118	+63	+181
Dollar Area, including Defence Aid	+118	+44	+162
OEEC countries	+ 89	+45	+134
Other non-sterling areas	-107	-24	-131
All non-sterling areas	+100	+65	+165
Rest of Sterling Area	-186	-10	-196
All areas	- 86	+55	- 31

The reduction in the import bill contributed £141 million to the improvement in the current balance with the non-sterling areas, and higher net invisible earnings £91 million. Exports and re-exports were £41 million and Defence Aid £19 million less in 1953 than 1952. Higher imports were responsible for £70 million and lower exports and re-exports for £116 million of the deterioration *vis-à-vis* the sterling countries. Export earnings had reached a peak in the first half of 1952, falling rapidly in the second half of that year, largely as a result of the restrictions many sterling countries had to impose for balance of payments reasons. Exports have recovered from the low level of that period, and were expanding towards the end of 1953, when some of the countries concerned, in particular Australia, had found it possible to relax their restrictions again. But the peak of early 1952 was not regained.

Improvement in the First Half of 1954

In the first half of 1954, the United Kingdom had a balance of payments surplus on current account of £178 million including £24 million of Defence Aid from the United States. Table 46 shows how this compares with results in the two preceding half years.

TABLE 46

SUMMARY OF BALANCE OF PAYMENTS IN 1953 AND 1954 (FIRST HALF)

£ million

	1953 January-June	1953 July-December	1954 January-June
Current balance	+57	+154	+178
Including Defence Aid of	+55	+ 47	+ 24
<i>With Dollar Area</i> ..	+28	- 40	+ 16
<i>With OEEC countries</i> ..	+54	+ 52	+ 52
<i>With Rest of Sterling Area</i>	+15	+156	+108
<i>With other countries</i> ..	-40	- 14	+ 2

The reasons for the improvement in the first half of 1954 compared with the average of the two halves of 1953 were:

- (1) visible exports were £91 million greater, a 7 per cent increase;
- (2) imports rose only by £32 million, or 2 per cent;
- (3) net invisible earnings were £40 million more although half this improvement was accounted for by the fact that in the first half of the year there are no large interest payments on the United States and Canadian loans respectively.

Short-Term Capital Position

Since 1951 there has also been an improvement in Britain's short-term capital position, which is important for assessing the strength of sterling. This improvement is indicated by the changes in the relationship of assets (gold and dollar reserves) to sterling liabilities given in Table 47.

TABLE 47
UNITED KINGDOM SHORT-TERM CAPITAL POSITION

	1951	1952	1953	1954 (January-June)
Assets (+ rise - fall) ..	-344	-175	+240	+179
Liabilities (+ fall - rise)	-338	+346	-222	- 89
Change in short-term capital position (improvement + deterioration -) ..	-682	+171	+ 18	+ 90

For the sterling area as a whole the relationship of assets to non-sterling liabilities deteriorated by £623 million in 1951 and then improved by £60 million in 1952, £271 million in 1953 and £208 million in the first half of 1954.

United Kingdom Post-War Aid to Other Countries

As against the aid received from external sources after the war, the United Kingdom made available considerable sums to other countries. Between 1st January 1946 and 31st December 1952 the amount spent by the United Kingdom Government on assistance in the form of loans and grants to other countries, including United Kingdom dependencies, and to international organizations was £1,504 million. Loans and grants received by the United Kingdom in the same period amounted to £2,556 million.

Overseas Investment

With the progress of post-war recovery, Britain has been able to resume its role as a source of funds for investment in development overseas, particularly in the Commonwealth. Thus, between 1947 and 1953, the Governments of Member Countries of the sterling area Commonwealth raised loans in London totalling about £67 million while Governments of United Kingdom Dependencies raised loans totalling over £100 million. Development in the sterling area Commonwealth is also being assisted through the Commonwealth Development Finance Company Ltd., (see p. 259), with a share capital of £15 million contributed by the Bank of England and 91 industrial, mining, shipping and banking companies. For the same

purpose, the United Kingdom Government has agreed to allow £10 million a year for six years to be available for Commonwealth investment from its contribution to the International Bank, and in 1953 it granted a credit of £10 million to Pakistan through the Export Credits Guarantee Department (see p. 280). Private capital from Britain going into private oversea enterprises has, of course, always represented an important element in Commonwealth development, although it is not possible to measure its extent with any accuracy since only those investments which involve raising new money are subject to any control. The total flow of private capital into private oversea enterprises has been at a substantial rate since the war, although with some variations between different years and in distribution as between different countries. In the case of Canada—a dollar country—participation by United Kingdom investors in that country's economic development has been facilitated in various ways, and in 1953 private investment in Canada was authorized to the extent of £38 million. In addition, the investment of smaller amounts in the United States and other foreign countries was authorized.

It has recently been estimated that the average figures for United Kingdom long-term investment overseas (excluding inter-Government lending, but including United Kingdom Government loans for commercial projects and borrowing by oversea Governments in the London Market) are:

	<i>Annual averages in £ million rounded to 10</i>	
	1946-53	1951-53
UK gross investment overseas	210	220
<i>Less:</i>		
UK disinvestment overseas; and oversea net investment in the United Kingdom	90	40
UK net investment overseas	120	180

Current Policies

The current policy of the United Kingdom and the sterling area Commonwealth countries was discussed in the communiqué issued at the close of the Conference of Commonwealth Finance Ministers in January 1954. Three objectives were listed: (1) the maintenance of a strong balance of payments position and the strengthening of the reserves; (2) sound internal policies on which 'depend the purchasing power of money, the cost of living and the ability to sell exports in increasingly competitive markets'; and (3) the development of resources, with particular emphasis 'on the development of those resources which directly or indirectly contribute on an economic basis towards improving the balance of payments of the sterling area'. In the matter of financing development, the United Kingdom has undertaken to make a special effort in the knowledge that this, added to other oversea commitments on account of military expenditure, debt repayments, etc., requires an increase in current account earnings.

These objectives are to be pursued in the context of proposals designed 'to bring about the widest possible system of multilateral trade and payments, the reduction and progressive elimination of import restrictions, and the convertibility of sterling and other important currencies'. These proposals, known as the 'collective approach', are based on the need for 'collective action by debtor and creditor countries to bring about a balance in the world economy on the basis of "trade, not aid"'. Considerable progress has been made towards freer trade and payments; in facilitating these objectives convertibility of currencies will be a

major instrument and not an end in itself. Necessary conditions for further decisive action have been stated to be: (1) progress in Europe in moving from the present European Payments Union to a system in which some countries' currencies will be convertible but not those of others; (2) consolidating and furthering the real progress of the sterling area towards useful development, internal balance and adequate foreign exchange resources; (3) carrying forward the United States Administration's trade liberalization policies, so that the dollar-earning opportunities of other countries can be increased; (4) developing more elastic methods of co-operation between the International Monetary Fund and its members; and (5) revising, confirming and carrying forward the trade rules of the General Agreement on Tariffs and Trade.

CONDUCT OF EXTERNAL TRADE

The export trade and most of the import trade of the United Kingdom is conducted by private firms.

Methods of export trading vary considerably, according to the firm, the industry the product and the market. A good deal of United Kingdom export trade, especially of the smaller manufacturing firms, is conducted through export merchants in the United Kingdom; many firms, however, sell to importers and consumers abroad through their own agents or resident representatives in the countries concerned; in other cases, sales are made through a firm's own branch office, distributing organization or subsidiary sales company established in overseas markets.

Similarly, in import trade, many large firms engaged in manufacture or domestic trade buy directly from overseas suppliers, while smaller firms may find it more convenient to buy through intermediaries such as import/export houses, commission agents, and the representatives of overseas firms.

Commodity Markets

Britain is the traditional centre for marketing many of the world's basic commodities. These markets were largely closed during the war but they have gradually been re-opened and are rapidly regaining their previous position. Amongst the more important are the London Rubber Market, the London Wool Exchange, the London Metal Exchange and the Liverpool Cotton Exchange. Apart from the import of goods for home consumption, many transactions are arranged between buyers and sellers from other countries and the British markets play an important part in merchandising and distributing commodities throughout the world.

Re-export Trade

Re-exports are goods which are exported (*a*) in the condition in which they are imported or (*b*) after having undergone minor operations—e.g., simple blending, husking, repacking—which leave them essentially unchanged. For some hundreds of years Britain has been an important centre of re-export trade though, over the past forty years, its importance relative to total United Kingdom export trade has declined. The greater part of united Kingdom re-export trade has always been in raw materials and foodstuffs, e.g., wool, rubber, tea, non-ferrous metals and furskins. Traditionally, re-export commodities are imported from Commonwealth countries and re-exported to countries in Europe.

London's Part in the Finance of International Trade

In the financing of international trade, both visible and invisible, the part played by the City of London is of outstanding importance. By a process of evolution

through the centuries 'the City' has developed an efficient and adaptable organization of trade and financial services capable of meeting the needs, not only of Britain, but of the world in general. The supremacy of London in this respect derives from a number of factors—historical, geographical and economic—as well as the technical efficiency and low cost of its services. In the nineteenth century the rapid growth of British industry, commerce and shipping under the stimulus of the industrial revolution made Britain the market as well as the workshop of the world. It became the site for the chief world markets in raw materials, freight, insurance, and precious metals. At the same time British capital was invested in oversea countries to assist their development, increase their output and exports, and provide markets for manufactured goods. London became the chief supplier of capital for many Commonwealth and foreign governments and a centre for entrepôt trade proceeding to and from the growing industrial areas on the continent of Europe and in North America. In course of time the pound sterling and the sterling bill of exchange developed into the principal form of money for transactions between one country and another in all parts of the world. Britain is now the banker for the sterling area and sterling is used in the finance of nearly half the world's international transactions.

Side by side with these developments a sound commercial banking system and a flexible system of central bank control have been built up, while specialized institutions such as discount houses, merchant banks, accepting houses, the Stock Exchange, investment trusts and finance corporations have evolved to satisfy particular needs of short- or long-term finance (see pp. 258–60). The facilities provided by merchant banks and accepting houses, for example, have long been used to finance shipments of goods not only to and from Britain, but between any two outside countries.

Despite the dislocations of two world wars and the growth of economic nationalism in the twentieth century, London has retained its supremacy as an international centre for the provision of financial and trade services. Its reputation has been enhanced in recent years by the recovery in the sterling area's gold and dollar reserves, the improvement in Britain's balance of payments and the removal of restrictions on trade and financial operations.

Government Assistance to Oversea Trade

The United Kingdom Government provides a service of information and advice to merchants and manufacturers in the export trade. The Government Department most concerned is the Board of Trade, which calls upon the assistance of oversea representatives. At each Embassy or Legation there is always an officer of high rank, a Minister, Counsellor or First Secretary (Commercial), who specializes in commercial matters. These officers direct the commercial activities of Consular officers in their respective territories.

In the Commonwealth there is at every important centre an officer of the Trade Commissioner Service, who is directly responsible to the Board of Trade.

Oversea officers regularly report on local economic and commercial conditions, pay special attention to local demand for particular commodities, and generally assist the exporter to overcome the difficulties he encounters in trade with the country in question, particularly those arising out of governmental regulations. These officers indicate potential demand for United Kingdom products, advise about methods of trading with particular areas, and seek out and pass on all opportunities for export business and inquiries for United Kingdom goods. Assistance is also given to United Kingdom exporters in finding agents and likely importers. From the records the Department keeps in London, brought up to date

by reports from its oversea officers, it can provide information concerning any country on:

- (1) prospects for United Kingdom exports and requirements of particular markets;
- (2) government regulations affecting trade, including import restrictions and tariffs and duties on particular commodities;
- (3) methods of trading;
- (4) goods most likely to sell;
- (5) local tastes and preferences in design;
- (6) probity and influence of firms with which an exporter contemplates entering into business relations.

Export Credit Insurance

The Export Credits Guarantee Department is a Government agency run on commercial lines to provide insurance for United Kingdom exporters and merchants against the main risks of financial loss incurred in oversea trading. These facilities have been developed over a period of more than thirty years, and there are now over 3,500 policy holders on the Department's books. The Department underwrites some £500 million worth of insurance a year.

The risks covered range over a wide field, and include events such as insolvency or prolonged default on the part of the buyer; exchange restrictions preventing the transfer of sterling to the United Kingdom; war; civil war in the buyer's country; and any other cause of loss occurring outside the United Kingdom which is beyond the control of the exporter or the buyer. The risk of cancellation or non-renewal of an export licence in the United Kingdom, or the imposition of restrictions on the export of goods not previously subject to licence, is also covered.

Broadly speaking, the types of guarantee issued are divided into three main categories:

- (1) *Short-term Policies*, which cover mainly consumer goods sold on credit terms of up to six months; these are normally given on a whole turnover basis. In addition to direct United Kingdom exports, cover may be given for goods of foreign origin sold by a United Kingdom merchant to third countries, provided this trade does not conflict with direct United Kingdom exports. Cover may commence either from the date of the contract or from the date of shipment.
- (2) *Medium-term Policies*, which cover capital and other goods sold on credit terms of over six months. These are specific guarantees covering individual contracts.
- (3) *Dollar-Drive Policies*, which have been specially devised to assist exports to Canada, the United States and the Latin American dollar account countries. In addition to the standard types of policies included under (1) and (2), special policies have been written to assist exporters to enter or increase their business in these markets by means of market surveys, advertising and other forms of sales promotion, and stockholding. This special cover can be offered from the time of purchase of raw materials to the point of sale, and if desired on a 'joint venture' basis. The Department is ready to consider any reasonable and soundly based proposition which may be put forward by an exporter with a view to increasing United Kingdom sales to these markets.

In the case of all the Department's policies, the exporter or merchant is required to retain an interest in the debt or risk involved, and consequently guarantees

are given up to a maximum of 90 per cent. Premium rates are assessed separately for each country, and vary according to the risks and terms of payment. These are very moderate in relation to the magnitude of the risks which the Department is now covering, and to the payments made by way of claims.

Trade Fairs

The British Industries Fair (BIF) is the largest national trade fair held regularly in any country. It was first held in 1915, and brought together 591 exhibitors who occupied 88,000 square feet. The Fair has since been an annual event except for a break in 1925 and again from 1940 to 1947. Since 1947 it has consisted of exhibits by manufacturers within the United Kingdom and representative displays by the Governments of Commonwealth countries.

Part of the BIF is held at Olympia, London; and part is held simultaneously at Castle Bromwich, Birmingham.

Under the British Industries Fair (Guarantees and Grants) Act, 1954, the responsibility for the BIF has been transferred as from 1955 from the Board of Trade to a non-profit-making company (British Industries Fair, Ltd.) whose board is nominated by trustees representative of industry. The initial working capital for this company has been guaranteed by the Government for a period of five years. Management of the Birmingham section of the fair is to remain with the Birmingham Chamber of Commerce.

Apart from United Kingdom buyers, 125,392 buyers from countries overseas have attended the BIF in the eight years since its revival in 1947. The 1954 Fair attracted nearly 2,270 manufacturers, who exhibited the products of more than 90 industries. The exhibits were grouped in sections of closely allied trades, and occupied nearly 712,000 square feet.

In addition to the British Industries Fair, which serves industry generally, there are many specialized trade fairs held in the United Kingdom. The most important of these, such as the Motor Show, the Mechanical Handling Exhibition and the Radio and Television Show, attract large numbers of the public as well as many trade buyers from home and overseas. These specialized fairs provide an important means of advertising and selling British goods.

United Kingdom manufacturers show their goods at most of the large international trade fairs throughout the world. For example, more than 300 United Kingdom firms were represented at the 1954 Milan Fair and also at the 1954 Brussels Fair. At the more important of these international trade fairs there is an official United Kingdom export promotion stand to deal with trade inquiries. In addition to taking part in these international events, there are specially organized displays of British goods: a successful trade fair of this sort was organized in Zurich in 1953 by the British Chamber of Commerce for Switzerland, and the Federation of British Industries organized a British Trade Fair in Baghdad in 1954.

Tourist Trade

The general task of fostering and developing the tourist trade or tourist services is undertaken by the British Travel and Holidays Association (BTHA) which was established in 1950. The BTHA was formed by merging two organizations, the British Tourist and Holiday Board and the Travel Association.

Control over the Association's affairs is vested in a Board of which the Chairman and eight members are appointed by the Board of Trade, while other members represent various tourist interests.¹

¹ For visitors from overseas the main Tourist Information Centre, to which all correspondence should be addressed, is at 64/65 St. James's Street, London, S.W.1.

There are no restrictions on the amounts of sterling that United Kingdom tourists visiting sterling area countries may take with them. For visits to non-sterling countries outside the dollar area United Kingdom tourists are entitled to take a basic foreign currency allowance of £100 per twelve-month period. Special arrangements apply to Norway, Sweden, Denmark, Greenland, and the Faroe Islands: United Kingdom tourists visiting these countries are allowed all reasonable amounts of currency.

In past years United Kingdom travel expenditure in other countries has usually exceeded United Kingdom earnings from visitors to the United Kingdom. In 1953, however, expenditure roughly balanced with earnings. The number of visitors to the United Kingdom in that year was 819,000—more than twice the 1947 figure and two-thirds more than the number in 1937, the pre-war peak year. In 1953 these visitors spent about £88 million, of which £31 million (\$88 million) was in dollar currency.

Changeover from State Trading to Private Trading

In the immediate post-war years nearly all the principal imported foods and raw materials and some other goods were bought wholly or mainly on Government account, and the Government was also the sole purchaser of nearly all domestically produced food and certain raw materials such as flax and timber. By 1951 a considerable number of major commodities including wool, rubber, tin, wood pulp, hardwoods, hides and skins, flax and leather, had been restored to private trade. Since 1951 the changeover from state trading to private trading has proceeded rapidly. Government monopoly oversea purchasing, which was responsible for about half the United Kingdom's total imports in 1951 (about two-thirds of food imports and about one-quarter of raw materials) will by the end of 1954 be confined to two foodstuffs—sugar and bacon—and one industrial commodity—jute goods. These three items accounted for only about 6 per cent of total imports in 1953.

Concurrently with the process of reversion from public to private trading, import licensing restrictions have been substantially eased, so that for most of the principal foodstuffs and raw materials no limit is now imposed on the quantity or value of imports from any country or, in some instances, from a wide range of countries.

The principal quantitative controls still in operation on external trade are (1) currency exchange control; and (2) import and export licensing.

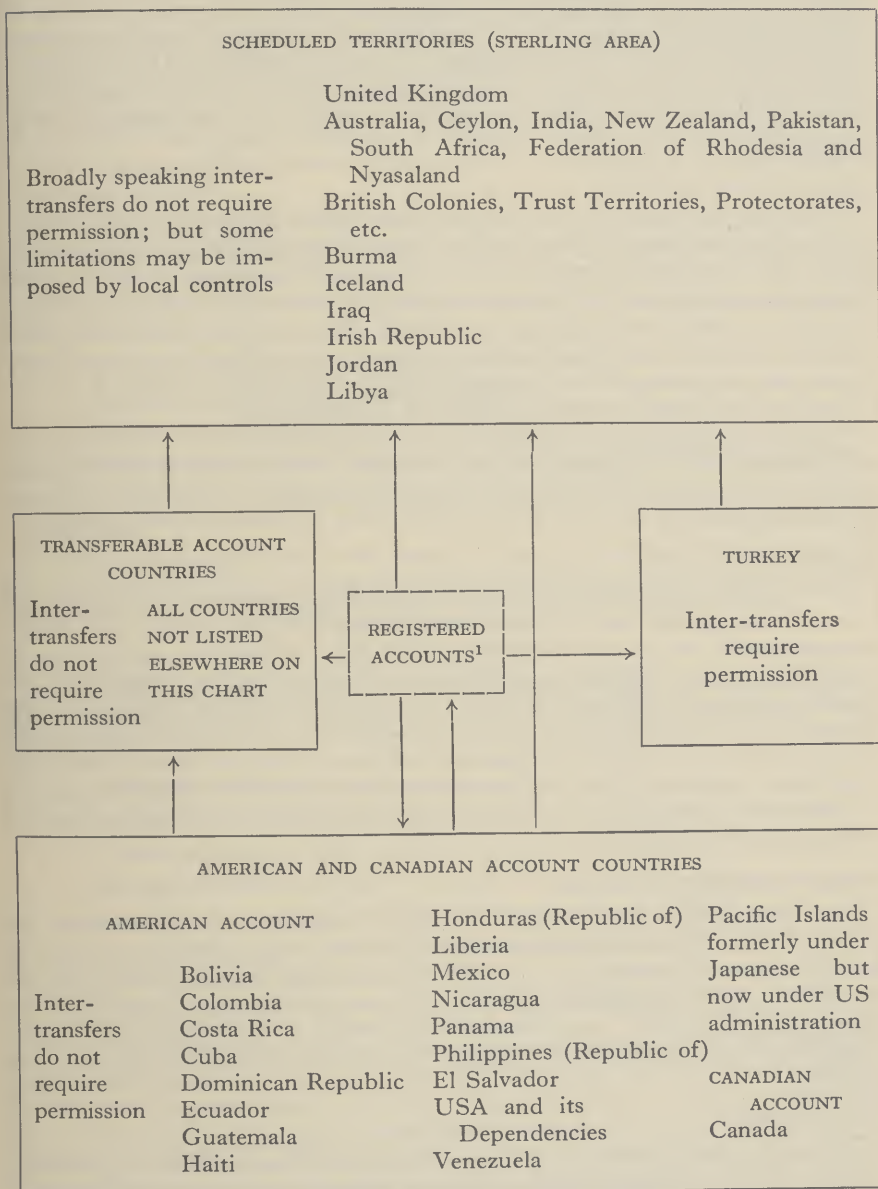
Exchange Control

Exchange control, i.e. control over the purchase and sale of gold and foreign currencies, was introduced at the outbreak of war in September 1939. The legal basis was at first the Defence (Finance) Regulations issued under the Emergency Powers (Defence) Acts, but in 1947 most of these temporary war-time powers were embodied in permanent legislation in the Exchange Control Act, 1947.

Exchange control does not affect transactions wholly within the sterling area. It is imposed only on: (a) transactions between residents within the sterling area and residents outside; and (b) transactions conducted in sterling between persons resident outside the sterling area. Although the main structure of exchange control has continued intact since 1939, certain relaxations in its operation have been made in recent years.

Exchange control policy is the responsibility of the Treasury, but most of the administration is in practice carried out by the Bank of England as agent of the Treasury—and in turn the Bank of England has delegated to the commercial banks a wide variety of powers to deal with applications.

UNITED KINGDOM EXCHANGE CONTROL REGULATIONS: OUTLINE OF
PERMISSIBLE TRANSFERS BETWEEN DIFFERENT CATEGORIES OF STERLING
ACCOUNTS AS AT 1ST NOVEMBER 1954



¹ Registered Accounts are available to residents of the Transferable Accounts Area and Turkey and are usable in connection with transactions on the London gold market, and the sale and purchase of United States and Canadian dollars, as well as for inter-transfers and indicated.

With acknowledgments to *Midland Bank Review*.

The chart given on p. 283 shows the main groups of sterling, the channels along which it is allowed to flow and the degree of freedom permitted within the various groups themselves. The arrows indicate the direction of transfers permitted without requiring individual approval by the Exchange Control authorities, between the different classes of sterling accounts; the number of such permitted transfers was considerably increased by the extension of the Transferable Account Area in March 1954. All other transfers require separate approval, which is usually given if the transaction concerned is not likely to harm the United Kingdom or the sterling area.

Foreign Exchange Market

From the beginning of the war until December 1951 the purchase and sale (both spot and forward) of the more important foreign currencies by residents of the United Kingdom for authorized transactions, was permitted only at official buying and selling rates which were maintained at a narrow margin either side of the parity of those currencies against sterling. From 17th December 1951 wider spreads, between which spot exchange transactions could take place, were introduced and forward rates were entirely freed from restrictions, making it possible to reopen the Foreign Exchange Market on a limited scale.

In May 1953 there was a resumption of arbitrage transactions (i.e. the purchase of a currency in one market and its sale in another, taking advantage of a difference in rates between the two markets) between London and the principal European exchange markets in the more important European Payments Union currencies.

London Gold Market

The London Gold Market, which had also been closed since the beginning of the war, was reopened on a restricted basis as from 22nd March 1954. The Market operates under the general supervision of the Bank of England.

Dealings in the Market are conducted in sterling, but the reopening of the Market does not make sterling more convertible into other currencies. Gold transactions in the Market on account of non-residents are settled in sterling which is the equivalent of dollars, i.e. payments are made into American, Canadian or Registered Accounts¹ all of which are exchangeable for dollars. Purchases of gold for residents of the sterling area require prior permission of the Bank of England and are strictly limited.

Import and Export Control

The Import, Export and Customs Powers (Defence) Act, 1939, empowers the Board of Trade to make Orders prohibiting or regulating the import or export of goods. The most important of the current Orders made by virtue of this Act are the Import of Goods (Control) Order, 1954, and the Export of Goods (Control) (Consolidation) Order, 1954. Although the powers of both import and export control derive from the same legislation, the purpose and mechanism are quite distinct.

Import Controls

Although, under the Import of Goods (Control) Order, goods can be imported into the United Kingdom only under licences issued by the Board of Trade, an importer does not have to apply for a licence every time he wants to import

¹ Registered Accounts may be opened by any non-resident (other than American or Canadian). They may only be credited with the proceeds of sales of gold or dollars or with transfers from American or Canadian Accounts.

anything. A large number of goods can be imported under the Open General Licence, which authorizes any person in the United Kingdom to import a number of specified commodities without any limits of quantity or value, either from anywhere in the world or from specified countries or groups of countries. Similarly, for a wide range of goods, individual traders are granted Open Individual Licences which allow them to import unlimited amounts of the goods from any country or from specified countries or groups of countries. Nearly all the United Kingdom's imports from the sterling area, a very large part of its imports from the rest of the non-dollar world, and a smaller, but still substantial, part of its imports from the dollar area are admitted under Open General Licence or Open Individual Licences.

When an importer wishes to bring in goods not covered by the unrestrictive Open Licensing arrangements, the Board of Trade decides whether he should be granted a licence to import a limited value of the goods in accordance with one of three basic methods of determining who should be allowed to import goods and in what quantities:

- (1) *ad hoc* consideration of applications for licences;
- (2) apportionment of quotas among importers;
- (3) apportionment of quotas among exporters to the United Kingdom by arrangement with the Governments of the exporting countries concerned.

The choice of method depends on the circumstances of the particular trade under consideration.

Import and exchange control are closely linked. All holders of import licences and anybody who wishes to import goods admissible under the Open General Licence are granted the currency required to pay for their imports.

Export Controls

For the most part, United Kingdom exports are not subject to any Government control or direction. Such controls as are in operation are imposed for the following reasons:

- (1) to control goods of strategic importance;
- (2) to conserve or regulate the distribution of scarce materials;
- (3) to assist exchange control operations in preventing exports of capital in the form of valuable goods (e.g., diamonds);
- (4) to control the re-export of materials purchased with dollars;
- (5) to control the export of goods the prices of which have been subsidized for consumption in the home market;
- (6) to prevent the export of works of art, etc., of national importance.

The operation of export licensing control is such that goods are freely exportable to all destinations unless there is a specific ban on their export without licence, as detailed in the current Export of Goods (Control) Orders. Normally, individual licences are required for specific consignments of goods subject to export licensing control, but in a few cases Open General Licences are issued. In other cases bulk licences are issued to permit exports of specified quantities of controlled goods within a given period.

In recent years export controls have been greatly reduced and now cover only a small proportion of total shipments. The position is continually under review and relaxations in control are made whenever circumstances permit. Following

improvements in the supply position the majority of goods now subject to control are of strategic importance. Certain of these strategic goods may be exported without licence to the Commonwealth (other than Hong Kong), the Irish Republic and the United States of America, but exports of such goods to other destinations are subject to export licensing control. Since 1951 all exports to China and Hong Kong have been subject to export licensing control.

INTERNAL TRADE

The internal trade of the United Kingdom can be divided into two broad categories: trade in raw materials and intermediate products (such as steel plates) which do not reach the hands of the public; and trade in consumer goods. An account of the supply and distribution of consumer goods is given below.

Methods of distribution are varied and complex. On the basis of some pre-war researches¹, however, it would appear that 10 to 15 per cent of sales (by value) are made to consumers through producers' own selling organizations, including their own retail shops, and in about half the rest the producers sell direct to retailers. Where wholesale channels exist, they take a number of forms. Fish, for example, is auctioned at ports mainly to port wholesalers to sell to inland wholesalers at certain main distributive centres, who in turn sell to retailers, although a significant number of retailers buy direct from port wholesalers. Most producers of fresh fruit and vegetables (many of whom are small growers) market their products through a wholesale market where most of it is handled by selling agents on a commission basis. Wholesale distribution of consumer goods is not, however, generally centralized.

WHOLESALE TRADE

The Board of Trade has published some preliminary figures of wholesale trading in Great Britain, derived from the returns made by 55,472 wholesale establishments, in the *Census of Distribution and Other Services 1950*. These returns show that 773,369 persons were engaged in wholesale trade, and that the wages bill, excluding the incomes of proprietors, was £291 million. Table 48 summarizes wholesale establishments by method of trading.

The greatest numbers of wholesale establishments are found in the clothing, footwear and textiles trade (7,019), and the groceries, confectionery and drinks trade (6,946).

RETAIL TRADE

Retail outlets of the United Kingdom can be classified into four types: (a) the independent shop, (b) the departmental store, (c) the multiple shop and the variety chain store, and (d) the co-operative society. There are as yet few self-service shops in the United Kingdom, and street, market and yard traders (in coal and other yards), though relatively numerous, are not believed to do a large volume of business.

Types of Shops

One-half of the retail trade of the United Kingdom is handled by independent shopkeepers in ordinary small retail businesses consisting of a single shop or a few shops.

¹ An indication of the general pattern of distribution before the war is given in some pioneer unofficial studies, including *The Distribution of Consumer Goods*, by James B. Jefferys, published in 1950.

TABLE 48
WHOLESALE ESTABLISHMENTS IN GREAT BRITAIN IN 1950
METHODS OF TRADING

Method of trading (a)	Establishments	Sales (b)	Persons engaged (c)	Wages and salaries
	<i>Number</i>	<i>£'000</i>	<i>Number</i>	<i>£'000</i>
TOTAL	55,472	13,049,091	773,369	291,009
Wholesale merchants (d) ..	43,065	5,205,545	595,459	215,747
Export merchants (d) ..	1,676	874,893	21,642	11,682
Import merchants	2,091	789,483	26,947	13,956
Invoicing agents	3,367	2,626,540	46,166	19,628
Non-invoicing agents ..	3,260	1,077,198	15,151	6,898
Government departments ..	58	1,717,702	6,404	2,658
Marketing boards	229	458,614	4,389	1,449
Purchasing branches of over-sea firms	166	101,790	1,664	908
Wholesaler-producers (e) ..	1,560	197,326	55,547	18,083

Source: *Census of Distribution and Other Services 1950*.

(a) Classified according to the main aspect of each business.

(b) Higher than the total value of the physical goods concerned in the trade recorded : i.e. including goods sold more than once at wholesale.

(c) Including 43,266 working proprietors.

(d) Includes some selling establishments operated by manufacturers. Full information about manufacturers' distributive activities can be found only by using the Census of Distribution Report in conjunction with the Census of Production Report for 1950.

(e) Engaged in trades where firms undertake processing as well as merchanting : e.g., fish curing, tea blending, coffee roasting and perfumery manufacture.

Such retailers usually serve customers in the immediate neighbourhood, often supplying a great variety of commodities. Some specialist shops, however, have a widespread and even an international clientèle.

A departmental store is a shop having a number of departments for different types of goods, while a multiple shop is a branch of a firm which owns or controls a considerable number of similar retail outlets. Some shops are multiple departmental stores, i.e. they belong to a firm running several departmental stores. Similar to these in their wide range of goods are the variety chain stores, which are multiple shops of a special kind. Their main features are the sale of a wide variety of goods under one roof, usually with low price limits, and the standardization of layout and general appearance.

Co-operative Societies

Retail co-operative societies are voluntary, non-profit-making associations engaged in retail trade and controlled by their members, who are also their customers. Any operating surplus is returned annually to members as a dividend. Dividends are proportionate to the value of purchases made in the year and not to investment in the society.

Retail co-operative societies sell to the general public as well as to their own members, but membership is open to anyone willing to pay a small deposit on a

minimum share and entitles the member not only to a dividend but to an equal voice with other members in deciding the society's policy. Investment of individual members is limited to £500 and the rules of some societies may fix lower limits. Only a low fixed interest is paid.

Retail co-operative societies are free to buy where they will or produce their own goods, but, in order to secure the advantages of large-scale production and trade, they have collectively established wholesale and production societies.¹

At the end of 1953 there were 1,101 retail co-operative societies registered under the Industrial and Provident Societies Acts, but nearly a quarter of the entire co-operative membership (over 11 million) was provided by the eight largest societies, each of which had a membership of over 115,000. The total sales of the retail societies in 1953 were £743 million, about 7 per cent of the total national expenditure on consumer goods and services. Analysis of the 1950 sales shows that in particular categories of goods the proportion of co-operative to total national sales is very much higher, e.g., about 17 per cent for food and over 8 per cent for clothing.

The 1950 Census of Distribution

The reports of the Census of Distribution for 1950, published in 1953 and 1954, gave details of retail trade and certain allied service trades in Great Britain in 1950.

The reports cover 684,764 establishments and 542,299 organizations (an organization is an undertaking operating one or more establishments) whose chief activity is selling goods or providing certain services to the general public. Included in this total are 531,143 retail establishments employing 2,265,291 persons (including working proprietors and unpaid family workers) with a turnover of nearly £4,923 million and a wages bill of over £392 million. The other trades covered include catering (turnover £277 million), hairdressing (£34 million), repairing for the general public (£25½ million), and the motor and cycle trades (£546 million). Catering as part of the business of a hotel or public house is not included. Table 49 classifies establishments by kind of business, and shows figures for the main retail and service trades. In addition there were over 3,500 central offices and warehouses belonging to the larger organizations, employing 132,000 persons, with a wages bill of £47 million. Owing to some non-response in the census these figures are not complete, but the results for the retail trade, apart from the service trades, are estimated to represent about 91 per cent of the total number of retail establishments and about 95 per cent of the total turnover.

Forty-eight per cent of the retail trade was done by organizations consisting of a single establishment. On the other hand 30 per cent was done by 534 large organizations with annual sales of over £1 million.

The retail businesses are not all shops. The census found 531,143 retail (excluding service and motor trade) establishments of which 467,700 were fixed shops, but the total also includes 22,800 market traders, 6,600 street traders, 13,800 traders at coal yards and other yards making retail sales, and smaller but still considerable numbers selling by other methods. The retail shops included 483 self-service shops with the high average turnover of £35,000; 478 of these establishments are classified in the grocery group.

The businesses of market traders, street traders and house-to-house sellers were usually very small. The takings averaged between £1,000 and £2,000 a year and most of these businesses only occupied one person full-time. The market and street

¹ The two major wholesale societies are the Co-operative Wholesale Society Limited and the Scottish Co-operative Wholesale Society Limited.

traders in greengrocery and fruit had an average turnover of just over £2,000, and nearly half the street traders included in the census were greengrocers and fruiterers.

It is not claimed that all street traders were included. The census gives no more than a rough approximation of their numbers; but it shows that their businesses were small, and that for instance in greengrocery and fruit, though street and market traders and house-to-house sellers were numerous, they were responsible for only a small proportion of the total sales.

TABLE 49
RETAIL ESTABLISHMENTS BY KIND OF BUSINESS IN 1950

Kind of business	Number	Sales	Persons engaged	Wages and salaries
<i>Retail Trade</i>		£'000		£'000
TOTAL	531,143	4,922,931	2,265,291	392,081
Grocery group	129,345	1,170,723	478,398	68,102
Other food retailers ..	126,701	917,016	480,473	82,887
Confectioners, tobacconists, newsagents	66,312	455,085	224,941	14,931
Clothing group	89,046	885,178	384,425	74,330
Hardware group	30,223	218,341	111,008	20,960
Booksellers, stationers ..	9,528	68,328	51,838	7,904
Chemists' goods, photographic goods group ..	16,733	158,606	82,232	18,936
Furniture group	16,086	259,006	90,453	23,144
Jewellery, leather and sports goods group	13,944	79,766	42,972	7,927
General group:	1,665	471,343	198,659	48,878
<i>including:</i>				
<i>Departmental stores</i> ..	529	308,339	129,304	33,787
<i>Variety stores</i>	913	106,431	52,498	10,316
Coal, builders' materials, corn group	20,137	186,342	82,128	17,382
Other non-food retailers ..	11,423	53,196	37,764	6,700
<i>Service Trades</i>				
TOTAL	147,897	883,053	718,310	123,200
Catering group	66,562	277,070	399,073	58,189
Hairdressers	29,827	34,333	75,760	9,112
Repairers group	22,527	25,547	44,175	4,558
Motor vehicles, cycles and accessories group ..	10,578	228,711	55,618	14,485
Motor vehicle repairers, garages group	18,403	317,392	143,684	36,856

Source: *Census of Distribution and Other Services 1950.*

CONTROLS ON CONSUMER GOODS

In recent years most of the controls on consumer goods surviving after the war have been swept away. The last remnant of the war-time food rationing system—the rationing of meat and bacon—was ended in July 1954. The dismantling of rationing schemes has been accompanied, as a rule, by the removal of retail price controls. The proportion of consumer outlays subject to price control diminished from about 70 per cent in 1951 to about 40 per cent at the beginning of 1954; by the end of the year it was a considerably lower proportion. The price of bread, milk and potatoes continues to be controlled. In the case of bread and milk this is because of the continuation of the consumer subsidy; in the case of potatoes it is because of the existing fixed price and guarantee system (see p. 134).

The most important price control directly affecting the consumer and still in force is that on rents (see p. 325).

Domestic Fuel

With certain exceptions,¹ the supply of solid fuel for domestic use is restricted under the Coal Distribution Order, 1943, by the imposition of 'maximum permitted quantities'. These are not rations and provide no assurance that supplies will be sufficient for everyone to purchase the maximum amount allowed. For the purposes of control, solid fuel is usually divided into two groups: house coal and boiler fuel (largely anthracite). It is usual, in defining the maximum permitted quantities under each of these two headings, to give a total figure for the year from May to April inclusive, and separate figures for the summer months, May to October, and the winter months, November to April. Maximum permitted quantities vary also between the northern and southern halves of the country, the northern regions being allowed more coal than the southern regions.

Households which use solid fuel for cooking or have other special needs can obtain fuel additional to the maximum permitted quantity on grant of a licence from the local fuel office of the Ministry of Fuel and Power.

¹ The following fuels are free from restriction: coke, wood, anthracite duff, washery slurry, uncarbonized ovoids and briquettes, certain classes of coal not classified as 'house coal' because of unsuitable size or quality, and the carbonized smokeless fuels 'Coalite' and 'Rexco'.

X. SOCIAL WELFARE

STATE AND VOLUNTARY SERVICES

In Britain the State is now directly responsible, through either central or local government authorities, for a range of services covering subsistence for the needy, education and health services for all, housing, employment or maintenance, the care of the aged and the handicapped, and the nutrition of mothers and children, besides sickness and industrial injury benefits, widow's and retirement pensions and family allowances. Public authorities in the United Kingdom are spending over £2,000 million a year on social services; and Exchequer expenditure on social services amounts to over a quarter of total central government expenditure.

Voluntary organizations, especially the Churches, were the pioneers of nearly all the social services. They provided schools, hospitals, clinics, dispensaries, and social and recreational clubs before these were provided by the State. They made themselves responsible for the welfare of the very young and the very old, the homeless and the handicapped, before it was generally accepted that the whole community had a responsibility towards these people. Where the services and the facilities they provided were adequate, they have been encouraged to continue. The State now supplements these voluntary services and provides financial assistance, sees that essential services are brought within the reach of every citizen, and ensures that the necessary standards are maintained.

Many voluntary social services still surround and supplement the State services. The two types are not competitive but complementary and merge into each other. The State services often work through voluntary agencies specially adapted to serve individual or special needs. The welfare work of the National Assistance Board is supplemented by the work of many voluntary social service societies with whose workers the Board's officers co-operate, while State institutional provision for the chronic sick and aged is supplemented by voluntary homes of various types for the care of the sick and elderly, most of whom receive State pensions or benefit, or are directly maintained by public authorities.

Voluntary Bodies

The number of voluntary charitable societies and institutions in Britain runs into thousands. Some of them are large and some are small and local in character. Some have general aims and others, such as the Royal National Institute for the Blind, have been established for a particular purpose. The societies co-operate with each other and with local authorities engaged on the same work.

Foremost among societies providing general social service are the National Council of Social Service, the Scottish Council of Social Service, and the Family Welfare Association. The National Council of Social Service was established in 1919 to create a closer link between the machinery of government and the voluntary activities of the ordinary citizen. The Family Welfare Association, formerly the Charity Organization Society, founded in 1869, works on personal lines to help any individual or family in need or difficulty. It has a number of District Committees in London and, affiliated to it, about 60 family casework agencies in the provinces.

There is a Central Council for the Care of Cripples, and the major societies caring for homeless children, such as Doctor Barnardo's Homes and the Church of England Children's Society, are represented on the National Council of Associated Children's Homes. Other examples of co-ordination in a specialized field are the National Association for Mental Health, the Women's Group on Public Welfare and the National Marriage Guidance Council.

Societies working on a national scale whose social work is definitely religious in inspiration include the Salvation Army, the Church Army, the Social Service of the Church of Scotland, the Church of England Children's Society, the Church of England Moral Welfare Council, the Young Men's Christian Association, the Young Women's Christian Association, the Society of St. Vincent de Paul, the Crusade of Rescue, the Jewish Board of Guardians and the Catholic Marriage Advisory Council.

War-time organizations such as the Women's Voluntary Services and the Citizens' Advice Bureaux (there are still about 475 of these bureaux) continue, with official support, to find scope for their activities. The Citizens' Advice Bureaux act as interpreters between the Government Departments and the ordinary citizen, and though the inquiries are somewhat fewer now than during the war more skill and time are often needed for their solution. WVS activities are many and various. They include welfare work for children, the aged and the sick, and for certain foreign workers, as well as relief work in emergencies.

The old-established British Red Cross Society not only aids the sick and wounded in time of war but works in peace time for 'the improvement of health, the prevention of disease, and the mitigation of suffering'. It is, in particular, developing its welfare services for civilian disabled, invalid and crippled children and the aged. The members of the St. John Ambulance Brigade and, in Scotland, the St. Andrew's Ambulance Association likewise render voluntary auxiliary medical services and undertake welfare work for the sick and the infirm.

Old People's Welfare

Voluntary bodies also take a large share in the work for old people that has been steadily expanding since the war brought into prominence the problems of old people's welfare that social and population changes had already begun to accentuate.

Hostels for bombed-out or evacuated old people have been followed by permanent homes where old people can live together in happiness and comfort however small their means. Voluntary homes of this kind now number over 700. More than 2,500 social clubs for elderly people have been started in recent years in all parts of Britain. The regular visiting of lonely old people and the delivery of cooked meals to their homes ('meals-on-wheels') are other welfare services that are being developed by voluntary effort with State support with the object of enabling old people to continue to live in their own homes wherever possible.

Local Old People's Welfare Committees are formed by those concerned in this work, and are aided by the National Old People's Welfare Committee, an associated group of the National Council of Social Service widely representative of voluntary and statutory bodies having direct contact with old people, or by the Scottish Old People's Welfare Committee, a committee of the Scottish Council of Social Service. A National Corporation for the Care of Old People was established in 1947 by the Nuffield Foundation (see p. 339) and the Lord Mayor's Air Raid Distress Fund to stimulate and to give financial support to schemes for the welfare of the aged, to establish and demand desirable standards for old people's homes, to maintain an expert technical advisory service, and to encourage and to undertake research and experiment for the welfare of old people. The Corporation is now concentrating its main effort on home services for old people. About £500,000 from the King George VI Memorial Fund is to be spent by the King George VI Foundation on schemes for the benefit of old people.

The Social Worker

While the voluntary worker giving full- or part-time service has done pioneer work in many of Britain's social services and continues to play an essential part in

probably every service, social services of all kinds increasingly depend for their operation primarily on the professional social worker, that is the full-time salaried worker trained in the principles and technique of social service. Training for many forms of social work consists of a basic university diploma or certificate course in social science followed by a specialized training for a particular service. The latter is usually organized by the profession concerned. An attempt is being made to lessen specialization in social work.

Voluntary organizations have been pioneers in the employment and training of social workers, but it is a significant fact that central Government Departments and local authorities are employing trained social workers in greater numbers and in more services. Such workers include regional and local welfare officers, children's care organizers, children's officers for work under the Children Act, 1948, neighbourhood workers, youth leaders, almoners, mental health workers, psychiatric social workers, tuberculosis care workers, housing managers, personnel managers and probation officers; in fact, representatives of most branches of social work.

NATIONAL INSURANCE AND RELATED SERVICES

National Insurance, Industrial Injuries Insurance, Family Allowances and National Assistance together constitute a system of social security in the United Kingdom which ensures that in no circumstances need anyone fall below a minimum standard of life. The Ministry of Pensions and National Insurance administers the first three of these measures in Great Britain; in Northern Ireland they are administered by the Ministry of Labour and National Insurance. National Assistance is administered by the National Assistance Board in Great Britain, and in Northern Ireland by the National Assistance Board of Northern Ireland. Pensions and welfare services for war pensioners and their dependants (see p. 299) are the responsibility of the Ministry of Pensions and National Insurance throughout the United Kingdom.

The Poor Relief Act of 1601 can be regarded as the starting-point of public provision for social security in England and Wales. From the beginning of the present century, and particularly after the Royal Commission on the Poor Laws and Relief of Distress had issued its report, with the influential Minority Report, in 1909, a strong movement arose against the form and spirit of the poor law as it had been administered under the Poor Law Amendment Act of 1834. The first departure from the poor law as the sole means of relief given from public funds had been the introduction in 1908 of non-contributory old age pensions granted on a test of means. The poor law was finally superseded by the National Assistance Act, 1948. In the same period there was a development of compulsory insurance administered on a national basis. In 1912 came the National Health Insurance scheme and with it the introduction of the contributory principle on which all later measures have been based. In return for a small weekly contribution it provided a small cash payment and medical treatment without charge during sickness. It applied only to a limited number of the lower-paid workers. In 1912 also a limited scheme of unemployment insurance was started. This was extended in 1920 to cover the great majority of employed persons, a very necessary provision in view of the large-scale unemployment of the inter-war years. In 1926 contributory pensions for old people, widows and orphans were introduced.

By the beginning of the second world war the social services in Britain were among the best in the world, but they lacked co-ordination by the very fact of their piecemeal development, and they were not universal. A comprehensive, co-ordinated and unified plan for social security was needed.

Under the stimulus of war, when plans for post-war reconstruction were being formulated, Lord (then Sir William) Beveridge was invited by the National Government to investigate the country's existing social insurance system. In 1942 the Beveridge Report was published and recommended the creation of a comprehensive and unified system of social insurance. The report aroused intense interest and was accepted in general by the Government as the basis on which the future social security structure should be built.

In the immediate post-war years a series of Acts introduced a new comprehensive system which became fully operative on 5th July 1948. Adjustments have been made in a number of subsequent Acts.

Reciprocity

The national insurance, industrial injuries and family allowances schemes of Great Britain and those of Northern Ireland and the Isle of Man operate as a single system. Reciprocal agreements on family allowances are in operation with Guernsey and New Zealand. An agreement with Australia to cover sickness and unemployment benefits, widow's and retirement pensions and family allowances came into force in January 1954. An agreement with the Republic of Ireland covers sickness, unemployment and maternity benefits and the insurance of seamen. There are also agreements covering various aspects of social security operating with France (since November 1949), with Italy (since June 1953), with Switzerland (since June 1954), and with Jersey (since July and August 1954), while an agreement with Luxembourg was signed in October 1953 and will come into operation after it has been ratified. An agreement with Denmark on industrial injuries insurance came into force in May 1954. Similar agreements with other Commonwealth and European countries are under negotiation.

A multilateral agreement on social security, signed by the five Brussels Treaty Powers, was ratified by the United Kingdom in May 1950, and was implemented a year later for limited purposes. It will come into full operation when the complete network of bilateral agreements between the five participating countries has been completed.

FAMILY ALLOWANCES

The Family Allowances scheme was the first part of the new system to be introduced. It started on 6th August 1946 and provided initially an allowance of 5s. a week for every child in the family after the first under the age limit, i.e. up to the end of compulsory school age (normally 15) and for any further period before the 1st August following the sixteenth birthday while the child is receiving full-time instruction in a school (or would still be receiving such instruction but for ill health), or is an apprentice. The rate was raised to 8s. a week in September 1952, under the Family Allowances and National Insurance Act, 1952. Family allowances are paid from the Exchequer and their object is to benefit the family as a whole; these allowances are paid to the mother.

At the beginning of 1954 nearly five million family allowances were being paid to nearly three and a quarter million families in Great Britain. In Northern Ireland over 100,000 families were receiving between them more than 210,000 allowances.

NATIONAL INSURANCE

The National Insurance Act, 1946, came into full operation on the 5th July 1948. It has been amended by the National Insurance Acts, 1949 and 1951, the Family Allowances and National Insurance Act, 1952, and the National Insurance Acts,

1953 and 1954. The Acts apply, in general, to everyone over school-leaving age living in Great Britain. There are similar schemes in Northern Ireland and the Isle of Man.

Contributors are divided into three classes:

Class 1—Employed persons. Those who work for an employer under a contract of service or are paid apprentices—about 21½ million.

Class 2—Self-employed persons. Those in business on their own account and others who are working for gain but do not work under the control of an employer—about 1½ million.

Class 3—Non-employed persons. All insured persons who are not in Class 1 or 2—about half a million.

This general classification is subject to certain modifications, made by regulations, to meet special circumstances. Married women engaged only in their own household duties are, in general, provided for by their husbands' insurance and cannot become insured in their own right unless they were insured under the old scheme on the 5th July 1948 and continued to pay contributions as non-employed persons, or have since taken up paid work. Students undergoing full-time education and unpaid apprentices need not pay contributions. Up to the age of 18, contributions are credited to them. Over that age they may, if they wish, pay as non-employed persons (Class 3). Self-employed and non-employed persons whose income is not more than £104 a year can apply for exception from liability to pay contributions under the scheme.

Contributions

The main weekly rates of contribution from June 1955 are shown in Table 50.

TABLE 50

	Men over 18	Boys under 18	Women over 18	Girls under 18
CLASS 1 (Employed persons)*	s. d.	s. d.	s. d.	s. d.
Paid by employee	6 9	3 11	5 6	3 3
Paid by employer	6 0	3 6	4 11	2 10
<i>Total</i>	12 9	7 5	10 5	6 1
CLASS 2 (Self-employed persons)	8 5	4 10	7 2	4 3
CLASS 3 (Non-employed persons)	6 6	3 9	5 2	3 1

* Includes Industrial Injuries Insurance contributions.

These contributions, which the Exchequer supplements from general taxation, are normally paid on a single contribution card by National Insurance stamps bought from a post office. It is the employer's responsibility in the first place to see that the Class 1 contributions are paid, but he can deduct the employee's share from his or her wages. The self-employed and non-employed must stamp their own cards. Contributions are usually credited for weeks of unemployment, sickness or injury, or if widow's benefit is being paid.

Benefits

The scheme provides sickness, unemployment, maternity and widow's benefit, guardian's allowance, retirement pension and death grant. Industrial injuries benefits (see p. 298) are paid under the National Insurance (Industrial Injuries) Acts, 1946 to 1953 as amended by the National Insurance Act, 1954.

Persons in Class 1 are covered for all benefits; those in Class 2 for benefits other than unemployment and industrial injuries benefits; and those in Class 3 for benefits other than sickness, unemployment and industrial injuries benefits, and maternity allowance.

For most of the benefits there are two contribution conditions. First, before any benefit can be paid, a minimum number of contributions must actually have been paid since entry into insurance; secondly, the full rate of benefit cannot be paid unless a certain number of contributions have been paid or credited over a specified period. For guardian's allowance and industrial injuries benefits there are no contribution conditions.

The rates quoted below are those which will be paid from April or May 1955.

Sickness Benefit

The standard weekly rate of sickness benefit for a man or woman over 18 (except a married woman) is 40s., with an increase of 25s. for an adult dependant and 11s. 6d. a week for the first or only child under the age limits (see p. 294), with 3s. 6d., in addition to any family allowance payable, for each subsequent child. The weekly rate for a married woman is 25s., but she is paid at the 40s. rate if she is maintaining an invalid husband or is separated from her husband and cannot get financial support from him.

Unless 156 Class 1 or Class 2 contributions have been paid since the last entry into insurance, sickness benefit can be drawn only for a year, but in general it continues for as long as sickness lasts, once 156 contributions have been paid.

Unemployment Benefit

The rates of unemployment benefit are the same as for sickness benefit except that the standard rate for insured married women is 30s. instead of 25s.

Unemployment benefit is paid in the first place for 180 working days, but it may be continued for up to a maximum of 19 months in all if the insured person has a good record of contributions paid as against unemployment benefit drawn in recent years.

Maternity Benefit

The National Insurance Acts, 1953, and 1954, amended the maternity benefits of the 1946 Act. A maternity grant of £10 is payable for all confinements, and where more than one child is born at any confinement additional grants may be payable. A home confinement grant of £4 is payable where the mother is not confined in free accommodation under the National Health Service or in accommodation otherwise paid for out of public funds. A maternity allowance of 40s. a week, beginning with the eleventh week before the expected week of confinement, payable for 18 weeks, is available for working women who satisfy the contribution conditions. These are that during the year ending 13 weeks before the expected week of her confinement, the claimant must have paid 26 contributions as an employed or self-employed person and, for the full rate of the allowance, have a total of at least 50 contributions paid or credited. The maternity allowance provided under the 1946 Act of 36s. weekly for 13 weeks is retained for a limited transitional period by the 1953 Act; for this allowance, a married woman need not have paid contributions, although she must show that she is ordinarily at work.

Widow's Benefit

There are three kinds of widow's benefit, paid only on the deceased husband's insurance. A Widow's Allowance of 55s. a week plus 11s. 6d. a week for the first or only child under the age limits (see p. 294) and 3s. 6d. a week for second and subsequent children (in addition to family allowances) is paid for 13 weeks. A Widowed Mother's Allowance of 51s. 6d. a week is paid following widow's allowance to a widow who has a child within the meaning of the Family Allowances Act (see p. 294); she also receives 3s. 6d. a week, in addition to any family allowance, for each child after the first. A Widow's Pension of 40s. a week is paid to a widow (a) who is 50 or over at the time of the husband's death and has been married ten years, or (b) who is 40 or over when her widowed mother's allowance ends, provided ten years have elapsed since the marriage, or (c) who, when her widow's allowance or widowed mother's allowance ends, is incapable of self-support because of infirmity and is likely to remain so for a long time.

Guardian's Allowance

A Guardian's Allowance of 18s. a week may be paid to a person having care of a child whose parents (or step-parents) have died and one of whom was insured under the National Insurance Act. This continues while the child remains in the guardian's family and is a child within the meaning of the Family Allowances Act.

Retirement Pension

Retirement pensions are paid to men at the age of 65, and to women at the age of 60, provided they have retired from regular employment. From the age of 70 (men) and 65 (women), however, the pension is payable whether or not the claimant has retired. The standard rate is 40s. a week. A married woman ordinarily qualifies for pension on her husband's insurance at the standard rate of 25s. a week. If after retirement a pensioner below the age of 70 (65 for a woman) earns any money, then, for every 1s. earned over £2 a week, 1s. is deducted from the pension.

Men and women are encouraged not to retire at minimum pension age and are able to earn a larger retirement pension by continuing in their jobs. For every six months they stay at work between the ages of 65 and 70 (men) or 60 and 65 (women) their pension is increased by 1s. 6d. a week. The pension of the wife of such a contributor is increased by 1s. a week for each six months' extra work and continues at this rate up to the time of the contributor's death; if his wife survives him her pension is re-calculated at the 1s. 6d. rate. A man now reaching the age of 65 who continues at work for a further five years can therefore receive a pension of as much as 55s. on attaining the age of 70. If he has a wife not more than five years younger than himself, their combined pensions can be 90s.; if the wife survives her husband her pension can be 55s.

A retirement pensioner is entitled to an increase of 25s. a week for his wife if she is under 60 and also to an increase of 11s. 6d. for the first child under school-leaving age and 3s. 6d. for each succeeding child, in addition to any family allowance payable.

Death Grant

A Death Grant of up to £20 is paid towards the expenses in connection with the death of an adult, and a smaller sum on the death of a child. Grants are not paid for persons already over pension age on 5th July 1948, or for children born before 5th July 1948 if they die before they are ten years old. Reduced grants are paid on the deaths of people who on 5th July 1948 were over 55 (men) or over 50 (women).

* NATIONAL INSURANCE (INDUSTRIAL INJURIES)

The Industrial Injuries Insurance scheme, which replaced the Workmen's Compensation scheme in July 1948, provides benefits for personal injuries caused by accidents arising out of, and in the course of, employment, and for prescribed diseases due to the nature of employment. It covers practically everyone in Class 1 of the National Insurance scheme and certain others.

Benefits

Injury Benefit

Injury Benefit for an adult is 67s. 6d. a week plus 25s. for an adult dependant and 11s. 6d. for the first or only child under school-leaving age and 3s. 6d. for each other eligible child, in addition to any family allowance payable. It is paid when the insured person is incapable of work as a result of an industrial accident or disease, and payment can continue for a maximum of 26 weeks from the date of the accident or development of the prescribed disease.

Disablement Benefit

Disablement Benefit may be paid when injury benefit stops and the amount depends on the extent of the disablement, as assessed by a medical board. It varies from 67s. 6d. for 100 per cent disablement to 13s. 6d. a week for 20 per cent disablement. For disablement of less than 20 per cent a gratuity is paid, ranging up to £225.

In the following circumstances Disablement Benefit may be increased:

1. It will be made up to the 100 per cent rate during in-patient treatment in a hospital for the relevant injury or disease, and increases for dependants will be paid.
2. If benefit is being received at the 100 per cent rate and someone is needed to look after the insured person, a constant attendance allowance not exceeding 30s. a week (60s. in certain cases) may be paid.
3. If the insured person is permanently unfit for work an unemployability supplement of 40s. a week may be paid, with allowances for dependants.
4. If the insured person is unfit to return to his former job, or work of a similar standard, benefit may be increased (subject to a maximum of 67s. 6d.) by a special hardship allowance of up to 27s. 6d. a week.

Death Benefit

If the accident or disease results in the insured person's death, Death Benefit is paid to the dependants. The amount varies according to the degree of relationship and the extent of maintenance during lifetime.

A widow receives a pension of 55s. a week for the first 13 weeks. Thereafter she gets a pension of 45s. a week if she is over 50 or permanently incapable of self-support or has the care of a child of the dead man. In other cases the pension is 20s. a week. In addition, an allowance of 11s. 6d. can be paid for the first or only child, and 3s. 6d. for each other child under school-leaving age.

Certain other dependants, such as parents, are entitled to pensions, allowances or gratuities. The amounts vary with the closeness of the relationship and the extent to which they were maintained by the deceased during his lifetime.

Adjudication

Claims to benefit under the National Insurance and National Insurance (Industrial Injuries) Acts are decided by independent statutory authorities appointed under the Acts.

NATIONAL ASSISTANCE AND CARE OF CHILDREN

The National Assistance Act, 1948, also came into operation on 5th July 1948. It provides a unified State service of financial assistance for those in need, replacing the various 'needs' services provided in the past by the State and local authorities. As the residual service, National Assistance meets the financial needs of all those people who are unable to maintain themselves and who fall outside the scope of the other social security services, and supplements the insurance benefits when they are insufficient.

The National Assistance Board is responsible for administering these weekly cash grants. It has various other duties, including the administration of non-contributory pensions under the Old Age Pensions Act, 1936; the administration of hostels provided under the Polish Resettlement Act, 1947, for Poles in Britain who are not yet absorbed into the normal life of the community; and the assessment under the Legal Aid and Advice Act, 1949, and Legal Aid and Solicitors (Scotland) Act, 1949, of the disposable income and disposable capital of persons seeking aid under the Acts.¹

The Board is responsible for influencing 'persons without a settled way of living' (formerly known as 'casuals') to lead a more settled life. It provides temporary accommodation for such persons, usually through the agency of local authorities, and it runs a residential re-establishment centre for men of this type or men who have been long unemployed and in receipt of National Assistance grants.

The provision under the National Assistance Act of residential accommodation for the aged, infirm and others, and of special welfare services for the blind, the deaf, the crippled and other handicapped persons is not the responsibility of the National Assistance Board but of county and county borough councils and, in Scotland, of councils of large burghs.

The Children Act, 1948, provides that all local authorities shall have special children's committees to be responsible for the care of all children deprived of a normal home life, and in other ways makes improved provision for their care.

In Northern Ireland financial assistance is given under the provisions of the National Assistance Act (Northern Ireland), 1948, to persons in need and there is also a system of non-contributory pensions similar to that in operation in Great Britain. Under the Welfare Services Act (Northern Ireland), 1949, local authorities, in their capacity as welfare authorities, provide residential accommodation for the aged, infirm and other persons who are in need of care and attention. The welfare authorities also provide special services for the blind, deaf and other handicapped persons and are responsible under the Children's Act (Northern Ireland), 1950, for the care of all children deprived of normal home life.

WAR PENSIONS AND RELATED SERVICES

Pensions to persons disabled or bereaved through the wars are paid under Royal Warrants. Rates are to be raised in February 1955.

The basic pension for 100 per cent disablement for a private soldier will be 67s. 6d. a week but the amount varies according to the rank and the degree of disablement. Supplementary allowances for dependants, unemployability, constant attendance, additional comforts and reduction of earning power are also paid. The degree of disability is assessed by comparing the disabled person with a normal healthy person of the same age and sex, without taking earning capacity into account.

Both the basic disablement pension and the supplementary payments are free of

¹ For further information on legal aid see p. 74.

income tax, and children's allowances are paid in addition to any allowance payable under the Family Allowances Act.

War pensioners have priority (except over more urgent cases) for treatment of their war disabilities in National Health Service hospitals.

The Ministry of Pensions and National Insurance maintains a welfare service for war pensioners, with a special branch for war orphans.

The British Legion and other voluntary associations also give financial aid and personal service to disabled ex-servicemen and women and their families. The Ministry and these bodies work in co-operation.

The Imperial War Graves Commission

The Commission was founded in 1917, its purpose being to commemorate the war dead of the British Commonwealth and Empire by establishing war cemeteries, ensuring the perpetual care of war graves, whether in these cemeteries or elsewhere, and erecting suitable memorials to those who have no known grave. A Charter of 1940 extended the Commission's powers to enable them to deal with the dead of the 1939-45 war. The members of the Commission include representatives of the United Kingdom and Commonwealth Governments and of the three Services, and a number of unofficial members chosen for distinction in various walks of life. The cost of the Commission's work is borne by the respective Governments in proportion to the numbers of the graves of their dead.

HEALTH

The concern of the State with public health is chiefly a development of the last 100 years. The second half of the nineteenth century saw the growth of compulsory and comprehensive environmental health services, such as provision of pure water, sewerage, disposal of refuse, cleaning of streets, building byelaws and other measures designed to promote healthy living conditions in Britain. Local authorities provided smallpox and other infectious-disease hospitals and poor law infirmaries in the nineteenth century, but the main hospital and medical services remained in the hands of voluntary hospitals and private practitioners until the twentieth century. The main development of publicly provided personal health services, as distinct from environmental services, took place in the twentieth century. The medical benefit introduced under the National Insurance Act of 1911 was the first step in the provision of a State-aided general practitioner service outside the poor law. There was progressive development in the hospital services provided by local authorities, and the period before the first world war is notable for the development of maternity and child welfare and of measures for the prevention and treatment of tuberculosis.

Since the first world war there has been progress in many directions: medical research, discovery of important new drugs, blood transfusion, control and treatment of venereal disease, and research into diet.

The second world war served to emphasize the importance of a sound diet and as a result the Welfare Foods Service for expectant mothers was introduced (see pp. 306-7) and the School Meals Service (see p. 313) and industrial canteens were expanded. War also stimulated developments in industrial health services (see pp. 244-5) and in the rehabilitation of the disabled (see pp. 234-5 and 304).

THE NATIONAL HEALTH SERVICE

The National Health Service was established in 1948. The relevant Acts, the National Health Service Act, 1946, the National Health (Scotland) Act, 1947, and

the Health Services Act (Northern Ireland), 1948, came into force simultaneously on 5th July 1948.

The National Health Service Act, 1946, aims 'to promote the establishment in England and Wales of a comprehensive health service designed to secure improvement in the physical and mental health of the people of England and Wales and the prevention, diagnosis and treatment of illness, and for that purpose to provide or secure the effective provision of services'. The National Health Service (Amendment) Act, 1949, the National Health Service Act, 1951, and the National Health Service Act, 1952, make some modifications in the scheme for Great Britain and provide for charges to be made for certain parts of the Service, which is otherwise free of charge, and which is available to all according to medical need. Its availability is not dependent on contribution to National Insurance.

Health Service Administration in Great Britain

In England and Wales the Minister of Health has assumed direct responsibility for (1) the provision on a national basis of all hospital and specialist services, (2) the former mental health functions of the Board of Control and local authorities, except for the quasi-judicial functions of the Board designed to safeguard the liberty of the patient,¹ (3) the conduct of research work into any matters relating to the prevention, diagnosis or treatment of illness or mental defect, (4) a public health laboratory service, and (5) a blood transfusion service. He has indirect responsibility for the establishment and maintenance of general practitioner services and all other services. He is advised by the Central Health Services Council and by standing advisory committees on various aspects of the Service.

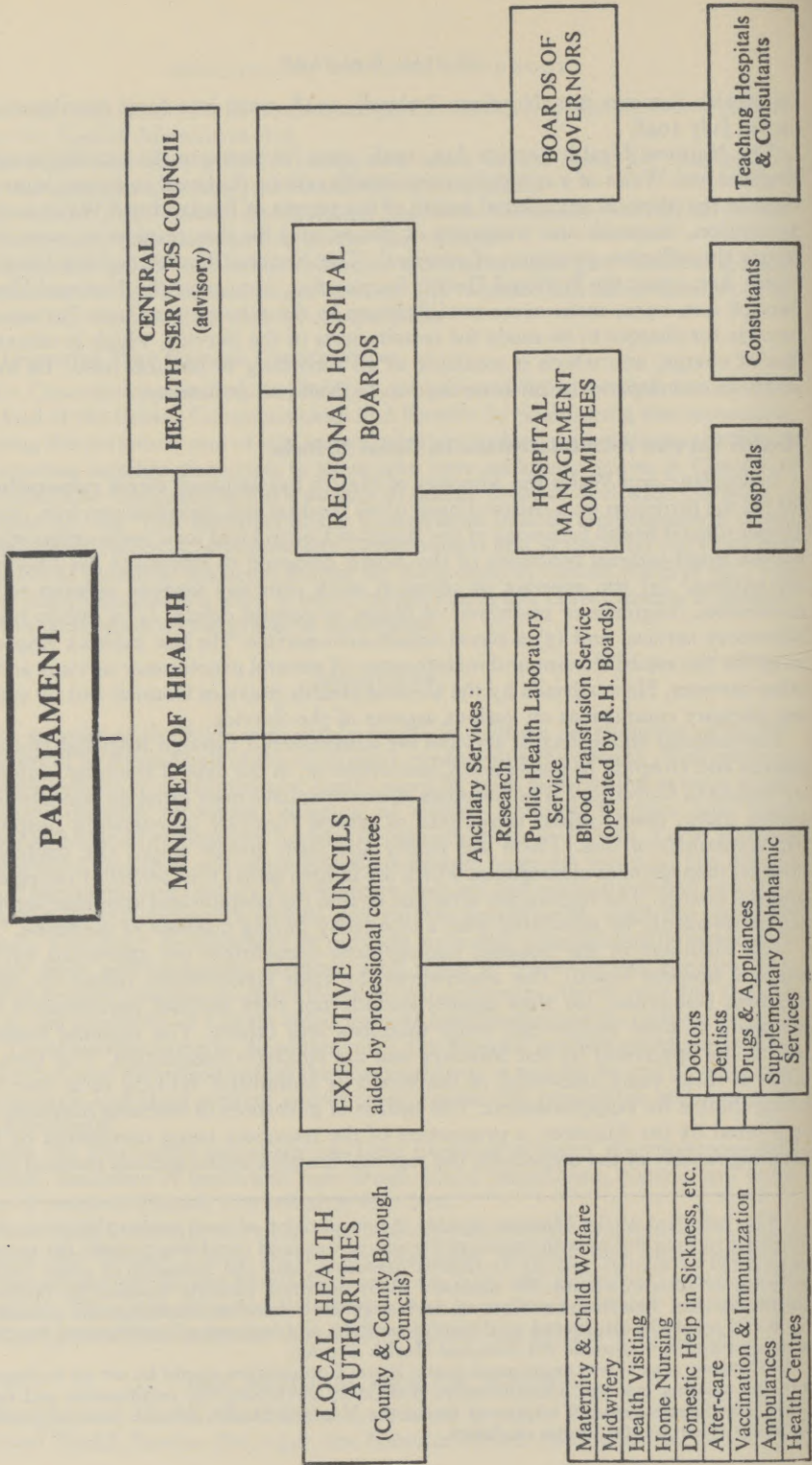
The hospital and specialist services are administered through Regional Hospital Boards and Hospital Management Committees or, in the case of teaching hospitals, by Boards of Governors. The hospitals themselves have been grouped into administrative units; these consist sometimes of several formerly independent hospitals, and sometimes of one. There are nearly 400 such groups under the control of hospital management committees, which are in turn under the control of 14 regional hospital boards. The regions are arranged so that the hospital and specialist services can conveniently be associated with a university having a school of medicine.

The members of the hospital management committees are appointed by the regional hospital board. The committees, by their constitution, reflect the communities concerned, for they usually include not only medical practitioners but members of local authorities, trade unionists and others. The regional hospital boards are appointed by the Minister and are similarly constituted. The term of office is three years, one-third of the board or committee retiring each year but being eligible for reappointment. The boards of governors of teaching hospitals are appointed by the Minister, a proportion of the members being nominated by the teaching faculty of the university, the regional hospital board and the medical staff.

¹ The functions of the Minister include the supervision of local authorities in the performance of their duties with regard to persons of unsound mind (see p. 308), the general supervision of matters relating to mental defectives, and the licensing or other formal approval of accommodation for mentally ill or defective patients outside the National Health Service. The Board of Control deals with the admission, discharge and periodical review of mentally disordered or defective patients and inspects all institutions for their care, whether in or outside the National Health Service.

In October 1953 it was announced that a Royal Commission would be set up to inquire into the existing law and administrative machinery governing the certification and care, other than hospital care or treatment under the National Health Service Acts, of persons suffering from mental illness or defect.

ORGANIZATION OF THE NATIONAL HEALTH SERVICE IN ENGLAND AND WALES



All appointments to hospital management committees, regional hospital boards and boards of governors are honorary.

Medical and dental schools are not under the control of the Minister. It is the Minister's responsibility to provide clinical facilities for the training of medical students. The universities are responsible for the provision of teaching.

The administration of the General Medical Services (see p. 305) is in the hands of 138 Executive Councils, each covering the area of a county or county borough. (In a few cases two areas are combined under one council.) Each council has an Ophthalmic Services Committee responsible for administering the Supplementary Ophthalmic Service. Councils of counties and county boroughs are the 146 local health authorities in charge of local health services (see pp. 305-8).

In Scotland the Secretary of State for Scotland is the responsible Minister; 31 county councils and 24 town councils of large burghs are the local health authorities; hospital and specialist services are administered by five Regional Hospital Boards appointed by the Secretary of State, assisted by 85 Boards of Management (the equivalent of hospital management committees in England); and there are 25 Executive Councils, each serving the area of one or more local health authorities. The Scottish Health Services Council and its Standing Advisory Committees advise the Secretary of State and keep closely in touch with the Central Health Services Council on common issues.

The Northern Ireland Health Service is described separately on pages 308-9.

Health Service Finance

About four-fifths of the cost of the National Health Service falls on the Exchequer. The balance is met by a transfer from the National Insurance Fund, staff superannuation contributions, payments by persons using the Service and local rates. (Half the expenditure by local health authorities is refunded to them by the central Health Departments.)

Since 1950 an attempt has been made to check the rising expenditure on the National Health Service and to keep the net total cost to the Exchequer for the Service in Great Britain from greatly exceeding £400 million. To help to limit expenditure without reducing the services offered, it was found necessary in 1951 and again in 1952 to introduce charges for certain items in the Service. There is a charge of 1s. on each prescription form, and charges are also made for dentures and spectacles (except children's spectacles in standard frames), for elastic hosiery supplied in the family doctor service or hospital out-patients department, for certain appliances supplied to out-patients, for treatment (not examination only) in the Dental Service, and for the use of local health authority day nurseries. Certain exemptions or refunds are made and anyone may apply to the National Assistance Board for help in meeting any of these charges. Under the 1946 Act a certain number of beds may be put aside for hospital patients wishing for privacy, provided that this accommodation is not needed on medical grounds for non-paying patients. Charges for these 'amenity' beds are fixed under Regulations. Provision is also made at certain hospitals for patients who wish to occupy private patients' accommodation on payment of the whole cost of this accommodation and treatment. Such patients may make private arrangements for treatment by a doctor of their own choice.

Hospital medical staffs are either full-time and salaried or part-time; part-time medical officers are usually paid on a sessional basis and are free to accept private patients.

General medical practitioners in public service are remunerated mainly by capitation fees according to the number of persons on their lists. In some circumstances doctors may receive an Initial Practice Allowance which is limited to a

three-year period and to a maximum of £600 in the first year, £450 in the second, and £200 in the third. There is a right of appeal if the Executive Council refuses its consent.

Dentists providing treatment in their own surgeries are paid on a prescribed scale of fees according to the items of treatment they have carried out. Pharmacists dispensing on their own premises are paid on the basis of the prescriptions they dispense. Doctors and ophthalmic opticians taking part in the Supplementary Ophthalmic Service are paid on the basis of the number of sight tests made; opticians who dispense glasses are paid according to the number of pairs of glasses supplied.

Hospital and Specialist Services

The hospital and specialist services include the provision of consultants; hospitals of all kinds including maternity accommodation, tuberculosis sanatoria, mental hospitals and institutions for the mentally defective, infectious-disease units, convalescent homes and rehabilitation centres; and all forms of specialized treatment.

At the end of 1953 there were in the Service in England and Wales 2,688 hospitals (including teaching hospitals) with 478,367 available beds and a nursing and mid-wifery staff of 144,558 full-time and 28,704 part-time nurses. In Scotland there were 412 hospitals with 64,905 beds. A small number of hospitals remain outside the Service for special reasons. Most of these are run by religious orders.

Teaching Hospitals

There are in all about 140 hospitals in Great Britain with medical teaching facilities. The 26 London teaching hospitals are in fact groups of hospitals, and include 65 hospitals and 30 convalescent homes, branches, annexes or treatment centres. The 10 teaching hospitals in Wales or in the provinces cover 55 hospitals and 12 other establishments. The teaching hospitals in Scotland come under the control of the Regional Hospital Boards, but special Medical Education Committees consider matters relating to medical teaching.

Rehabilitation

Rehabilitation departments are established at the main hospital centres. The work is carried out under the guidance of the appropriate medical specialist by physiotherapists, remedial gymnasts, occupational therapists and social workers, working as a team. The aim is to prevent undue disability and to restore fitness after all forms of sickness and injury. Experience has shown that efficient medical rehabilitation reduces the stay in hospital, the incidence of permanent disability and the period of incapacity for full work. The departments work in close association with the Disablement Resettlement Service of the Ministry of Labour and National Service (see pp. 234-5). Rehabilitation methods have been applied with advantage in the care of the chronic sick and have enabled many patients to be discharged from hospital and to resume an independent life in their own homes.

Blood Transfusion

The National Blood Transfusion Service is administered by the regional hospital boards under the National Health Service. Each of the regions is centred on a university town, where an organization is maintained for collecting blood within the region. The blood is kept in the Regional Blood Bank, or issued to Area Blood Banks which are maintained at general hospitals in each county. Each of the principal hospitals holds a supply of blood sufficient not only for its own needs but

also for the smaller hospitals, nursing homes and general practitioners in its district. In Scotland, the Scottish National Blood Transfusion Association organizes the service on behalf of the Secretary of State. The blood is provided free by voluntary donors recruited from the public. In 1953 the total of blood donations was 660,000.

Medico-Social Work

There are about 1,000 trained almoners working in Britain; the majority work in hospitals, others in local health authority services or elsewhere. The almoner co-operates with the medical staff in the investigation and treatment of disease by elucidating and adjusting social and economic factors which contribute to a patient's disability or impede his restoration to health. Psychiatric social workers are specially trained for work in the mental health and education services. They are an invaluable complement to doctors not only in mental and mental deficiency hospitals but also in the local health and educational services, in assessing the environmental factors in mental abnormalities and in helping to adjust patients to their environment, or to change the circumstances of their lives.

The General Medical Services

The General Practitioner Services cover the medical attention given to individuals by doctors and dentists of their own choice, from among those enrolled in the Service. Doctors and dentists normally work at their own surgeries; in a few places they practise in health centres established under the National Health Service Acts.

Over 20,000 general medical practitioners (principals and assistants) out of a total of about 21,000 in England and Wales, and over 2,400, or almost all, general practitioners in Scotland, are in the Service.

Doctors previously in practice were entitled to join the Service at its start in the place where they were practising. Those now wishing to start practice have to apply through their Executive Councils to the central Medical Practices Committee, so that a better distribution of doctors throughout the country may be facilitated. The maximum number of patients' names permitted to be on one principal's list has been reduced from 4,000 to 3,500. The average number in England and Wales is about 2,400.

Of about 10,000 dentists in England and Wales available for general practice, about 9,500 are in the Service, and of about 1,250 dentists in Scotland practically all are in the Scottish Service.

Nearly 1,000 ophthalmic medical practitioners and just over 7,000 ophthalmic and dispensing opticians in England and Wales and 72 ophthalmic medical practitioners and 933 ophthalmic and dispensing opticians in Scotland are engaged in the Supplementary Ophthalmic Service. This service provides for the testing of sight and provision of glasses. Cases requiring treatment are dealt with through the hospital eye service.

Almost all chemists (15,000 in England and Wales and 1,750 in Scotland) are taking part in the Service.

Local Health Services

The Local Health Services administered by the county and county borough councils (in Scotland, county and large burgh councils) include those for maternity and child welfare (but not hospitals and maternity homes), domiciliary midwifery, vaccination and immunization, health visiting, home nursing, the prevention of illness and the care and after-care of the sick (including the mentally ill and also the mentally defective), the provision of domestic help in time of sickness or confinement, etc., the ambulance service (in Scotland, the responsibility of the Secretary

of State), and the establishment and maintenance of local health centres (in Scotland, the responsibility of the Secretary of State).

Welfare Centres

Maternity and child welfare centres have been established for many years. In England and Wales there are about 5,000 child welfare, 1,800 ante-natal and 270 post-natal clinics. In Scotland there are 400 child welfare, 90 ante-natal and 80 post-natal clinics. These are part of the advisory and preventive services of the local health authority and they provide regular supervision by nurses and doctors for expectant and nursing mothers and young children. Special clinics for test feeding and for remedial exercises may also be arranged at a number of centres and a feature of the service is the education of the mothers by means of talks, demonstrations and special classes, particularly in mothercraft. Some centres are also the distribution points for the national dried milk and vitamin preparations provided for expectant mothers and young children which are now being distributed by local health authorities (see p. 307). In England and Wales more than three out of four babies attend the centres.

Maternal Care

According to the advice given by the doctor or midwife and her own preference, the expectant mother may arrange to have her baby at home or in hospital; in allocating hospital beds priority is given to those for whom domiciliary confinement is inadvisable for medical or obstetric reasons or because of adverse home conditions. For a home confinement every mother has available to her the services of either a general practitioner obstetrician or her own family doctor if he is willing to undertake her maternity care, besides those of a trained midwife employed in the domiciliary service of the local health authority. The doctor carries out certain ante-natal and post-natal examinations, attends at the confinement (if he thinks it necessary) and gives any other medical care required. Routine supervision and advice is provided by the midwife, who visits regularly before the confinement for the purpose of examination and to give the mother advice and help generally. In addition, the expectant mother may attend the ante-natal clinic for instruction in the preparation for motherhood and in some cases for interim ante-natal supervision. The midwife delivers the patient (unless the doctor considers it necessary to be present) and continues in attendance for the first 14 days after the birth. Midwives work in close touch with the welfare centres in the care of the mother both before and after the birth of the child.

Vaccination and Immunization

Arrangements are made with doctors for a service providing free vaccination against smallpox, and immunization against diphtheria. Parents cannot be compelled to make use of this service but they are given every encouragement to do so; and the success of the diphtheria immunization campaign is a very hopeful sign. In 1953 there were only 23 deaths from diphtheria in England and Wales as against 2,641 in 1941; in Scotland, only 2 deaths as against 517 in 1941.

Welfare Foods Service

Local health authorities distribute the welfare foods other than liquid milk that the Welfare Foods Service¹ provides for expectant and nursing mothers and young

¹ The Service began in 1940 with the National Milk Scheme and in 1946 the extended scheme was put on a permanent basis as the Welfare Foods Service. Beneficiaries now obtain the necessary coupons from the Ministry of Pensions and National Insurance.

children, at a low cost or free of charge. These foods are National Dried Milk as an alternative to liquid milk¹ and at an equivalent price; orange juice, at 5d. a six-fluid-ounce bottle, and cod liver oil, free of charge, for expectant mothers and children under five; vitamin A and D tablets, free of charge for expectant mothers as an alternative to cod liver oil, and also for mothers for 30 weeks after confinement. Milk and orange juice are supplied free to expectant mothers and to children under school age if the families cannot afford to pay.

Other Maternity and Child Welfare Services

Many local health authorities make special arrangements for premature babies remaining in their own homes, by lending equipment and appointing experienced nursing staff to supervise their care.

There are some day nurseries for children under five in Great Britain provided by local health authorities or voluntary associations working with them. The National Health Service Act, 1952, gave local authorities power to make charges for the use of day nurseries. Private or factory nurseries must be registered with the local health authorities; this regulation applies also to persons who mind for payment more than two children, not all of the same family.

Local authorities co-operate with voluntary denominational and other bodies caring for unmarried mothers and their babies, or make direct provision for their special needs through welfare workers, homes, hostels and nurseries, and by finding suitable foster-mothers.

Health Visiting

Health visitors, who are qualified nurses with special additional training, give expert advice to mothers in their own homes on such matters as breast feeding, the general care of the baby, and the nurture of children up to five years old. They are also responsible for giving advice on the care of the sick and the measures necessary to prevent the spread of infection.

Home Nursing

The employment of nurses for attending persons who require nursing in their own homes is the responsibility of the local health authorities. Although many authorities employ nurses directly for this purpose, others have entered into arrangements with voluntary organizations to provide a service on their behalf.

Domestic Help

Local health authorities have the power to make arrangements for providing domestic help in households where it is needed owing to illness, confinement, or the presence of children, old people or mental defectives. This is not one of the free services and authorities are authorized to recover from those assisted such charges as the authorities consider reasonable having regard to the person's means.

Ambulance Services

Free conveyance between home and hospital or clinic is provided where necessary either directly by local health authorities or by arrangement with voluntary organizations. The Hospital Car Service (organized by the British Red Cross Society, the St. John Ambulance Brigade, and the Women's Voluntary Services)

¹ The liquid milk allowance (which is obtained through usual retail channels) is one pint a day at 1½d. a pint for expectant mothers, children under five, and children between five and sixteen who are physically or mentally disabled and are unable to attend school where they would receive milk.

provides transport in many areas for patients who do not require an ambulance; such patients are conveyed in private cars whose owners volunteer to give this service, and the authorities make a mileage payment to the volunteers to cover their expenses. In Scotland, ambulances are run by the Scottish Ambulance Service (St. Andrew's Ambulance Association and the Scottish Branch of the British Red Cross Society) on behalf of the Secretary of State.

Mental Health Services

Persons of unsound mind who are in need of care and treatment which cannot be provided in their homes may be admitted to mental hospitals as voluntary, temporary or certified patients. If such persons, or their relatives, are unable or unwilling to make the necessary arrangements for admission to a mental hospital, it is the duty of a duly authorized officer of the local health authority to do so.

Local health authorities have a duty to ascertain mental defectives in the community, to supervise them and to provide suitable training or occupation. This is given in occupation centres where the defectives attend daily, as at school, or by home teaching. If supervision affords insufficient protection it is the duty of officers of the local health authority to take the initial steps to place such defectives under guardianship within the community or to arrange for their admission to a mental deficiency hospital.

Control of Infectious Disease

Control of infectious disease is based on four main principles: notification, isolation, supervision of contacts, and immunization. The investigation of outbreaks of infectious disease is the concern of local Medical Officers of Health and of the Public Health Laboratory Service associated with the Medical Research Council (see pp. 345-6).

There are arrangements to deal with certain conditions and diseases which require specialized treatment both to alleviate the sufferings of the patients and to protect the community as a whole, such as the provision of treatment centres for venereal disease and the provision of sanatoria and chest clinics for the specialist treatment of tuberculosis. The prevention of tuberculosis, and of infectious diseases generally, is also a matter of active concern. The public is offered free examination by mass miniature radiography for the early detection of chest disease; at the end of 1953, about 70 mass radiography units were operating in England and Wales.

Health Centres

Local health authorities are also responsible for the provision of health centres—buildings in which facilities may be made available for all or any of the main health services, other than hospital beds. A few health centres have already been established, but scarcity of resources has prevented the building of centres on a large scale and also it is generally felt that experience should be gained from the use of a few experimental centres before any general provision of them is attempted. In Scotland the provision of health centres is the direct responsibility of the Secretary of State for Scotland.

HEALTH SERVICES IN NORTHERN IRELAND

In Northern Ireland the historical development of the health services has taken broadly the same course as in other parts of the United Kingdom and the Health Service established under the Health Services Act (Northern Ireland), 1948, corresponds fairly closely to the medical care system established under the National

Health Service in Great Britain. The essential principle is that the same range of services shall be available to citizens in Northern Ireland as in England, Wales and Scotland. The Service in Northern Ireland is financed as in the rest of the United Kingdom.

In hospital administration the role of the central Government is not quite so immediate or direct as in Great Britain, and hospital property, for example, is vested not in the Minister but in a public board, the Northern Ireland Hospitals Authority. The Hospitals Authority has under its control 63 hospitals with about 14,000 beds.

The Tuberculosis Service is on a separate footing from the main Hospital Service, having been established a little earlier to deal urgently with a serious tuberculosis problem. The Northern Ireland Tuberculosis Authority, which was constituted for the prevention of tuberculosis and the care of tuberculous patients by the Public Health (Tuberculosis) Act (Northern Ireland), 1946, has eight hospitals under its control.

Vaccination against smallpox is compulsory in Northern Ireland but otherwise the range of preventive and domiciliary services is similar to that existing in Great Britain.

THE MEDICAL, DENTAL AND AUXILIARY PROFESSIONS

Only persons whose names are on the medical register can practise as doctors under the National Health Service. Apart from medical practitioners, only persons whose names are on the dentists' register can practise dentistry in Britain. The minimum qualification for registration as a doctor requires five to seven years' training in medical school and hospital, plus one year as an intern; for a dentist, four or more years at a dental school are required.

The minimum period of hospital training required to qualify for registration as a general trained nurse is three years. Training is available also in sick children's, mental, and mental deficiency nursing. The enrolled assistant nurse undergoes an essentially practical training for one year, followed by a year's work under supervision before enrolment.

Only registered pharmacists may describe themselves as such, and qualifications requiring four to five years' vocational training are necessary for registration.

For the professions of almoner, chiropodist, dietitian, medical laboratory technician, occupational therapist, psychiatric social worker, physiotherapist, radiographer and speech therapist a good general education is required followed by a professional training. The length and nature of the training varies according to the profession.

VOLUNTARY AID FOR THE SICK AND HANDICAPPED

A number of voluntary organizations provide services of various kinds for sick and handicapped persons in co-operation with, or supplementary to, the services provided by central and local authorities. A number of convalescent homes, for instance, of a type outside the scope of the hospital service are administered by such bodies. In many areas invalid children and others needing care in their own homes are visited and helped by voluntary organizations. Special organizations also serve the welfare of the blind, the deaf and other special classes. Though the need for material aid from private sources becomes less as public provision extends, many special forms of help to meet individual needs that would not otherwise be met are given by voluntary agencies. Their most valuable service is probably to provide personal service and the continued personal interest that can contribute so much to the welfare of the sick and infirm. These voluntary agencies usually depend largely on the work, part-time or full-time, of unpaid volunteers.

EDUCATION

There are over seven million children and young people in full-time attendance at schools or universities in the United Kingdom. Over 90 per cent of school children attend publicly provided or aided schools. The universities are independent, self-governing institutions but they derive an increasing proportion (now over two-thirds) of their funds from public sources. Many schools and colleges continue to benefit from the endowments provided by benefactors in past centuries.

In England and Wales, the main development of publicly provided primary education dates from 1870, and that of secondary education from the beginning of the present century. In 1833 the Government had begun to make annual grants to the voluntary societies which were providing schools, and the Elementary Education Act of 1870 accepted the principle of compulsory education. By the end of the nineteenth century elementary education had become virtually both compulsory and free. Public provision of secondary education (already begun in Wales) started in England under the Act of 1902. The Education Act of 1944 now governs public education in England and Wales. It seeks to widen and improve educational opportunities at every stage.

The Scottish and Irish educational systems have each a long history independent of that of education in England, but the same general policy is now being implemented throughout the United Kingdom, with some national variations in Scotland, Wales, and Northern Ireland.

Educational Administration

The national system provides education in three stages : primary, secondary, and (for those who have left school) further education. Local authorities are responsible for ensuring that adequate facilities are available in their areas throughout these stages.

The relation of the central authority (the Ministry of Education in England and Wales, the Scottish Education Department, and the Ministry of Education for Northern Ireland) to local education authorities is based on consultation and co-operation by direct contact with the Minister and the Department and through Her Majesty's Inspectors who act as liaison officers. All schools, including independent schools, are subject to official inspection.

SCHOOLS

School attendance is compulsory between the ages of 5 and 15 in Great Britain (temporarily 14 in Northern Ireland). In England and Wales over 6,270,000 children, including about 173,000 under and 222,000 over compulsory school age, are attending publicly maintained schools, besides 99,000 others (including 1,500 under and 27,000 over school age) who are at schools receiving direct grants from the Ministry of Education. There are also about half a million children of all ages at independent schools. In Scotland, 833,300 children are attending publicly maintained or aided schools and about 21,000 are at independent schools. In Northern Ireland, 248,000 children (including 16,000 under and 18,000 over compulsory school age) are attending publicly maintained or aided schools; independent schools are few.

In England it is usual for boys and girls to be taught together in primary schools, but more often than not they attend separate secondary schools. Mixed schools are more common in Wales; and in Scotland all but a few city schools take both boys and girls. In Northern Ireland there are a number of separate schools for boys and

girls, especially among schools under voluntary management, except for the smallest primary schools.

The majority of independent schools are for boys or for girls only, except in classes for small children. There are, however, a few schools which are co-educational.

In England and Wales the State provides money for three broad types of school: county schools which are provided and maintained by local education authorities, i.e. their full cost falls on public funds; voluntary schools which have been provided by a voluntary body (usually of a religious denomination) but which are maintained by local education authorities; and direct grant schools which are completely independent of local education authorities but receive a grant-in-aid from the Ministry of Education.

In Scotland the schools provided by education authorities are called public schools, but in England this term is used for a different type of school (see below), of which there are also a few in Scotland and in Northern Ireland.

In Northern Ireland there are county schools, managed by local education authorities, and voluntary schools, which are grant-aided schools under voluntary management.

Primary Schools

A child's primary education continues until about the age of 11 in England, Wales and Northern Ireland and 12 in Scotland. There are some nursery schools and classes for children between 2 and 5 years old. In England and Wales there are infant schools, or departments, for all children between 5 and 7 and junior schools for those aged 7 to 11. In Scotland there are primary departments for children between 5 and 12 years old.

Secondary Schools

England, Wales, and Northern Ireland

Public provision of secondary education is being greatly extended with the aim of providing for all children an education suited to their particular abilities. The *grammar school* takes children who hope to reach a university and others with an academic bias. Most grammar schools are now either maintained or aided from public funds although many are of ancient foundation. *Secondary modern schools* (intermediate schools in Northern Ireland) are the largest group and give a more general education with a practical bias, closely related to the interests and environment of their pupils; the *secondary technical schools* (technical intermediate schools in Northern Ireland) are the smallest group and offer an education largely related to one or other of the main branches of industry, including commerce, or agriculture. These different types of education may be provided in separate schools or combined in one school. Some authorities are experimenting with the large *comprehensive school* providing all types of secondary education.

Most grammar school pupils remain until they are 16 years old, some till they are 17, 18 or 19. Most secondary modern school pupils at present leave at the age of 15.

Public Schools. The public school is a characteristic English institution which has made a notable contribution to English education. Many public schools date from the sixteenth century, some are older (e.g., Winchester, 1382, and Eton, 1440). The public school is controlled by its Board of Governors, although it may nowadays receive aid from public funds, usually by way of direct grant from the Ministry of Education. Public schools have emphasized the importance of character-building,

and in these schools were developed the prefect system, whereby day-to-day discipline is largely controlled by the pupils themselves, and the house system, whereby a school is divided into groups of about 50 each under the care of a house-master. A public school is often, although not necessarily, a boarding school. The usual age of entry for boys is 13 and the leaving age about 18. There are some girls' public schools modelled to a certain extent on the public schools for boys.

General Certificate of Education. The examination system for secondary schools in England and Wales was revised in 1951 when an examination, conducted at three levels, for a General Certificate of Education replaced the former School Certificate and Higher School Certificate examinations. Candidates from both State-aided and independent schools may take the examination, which is also open to candidates not attending any school. Most candidates are at least 16 years old on 1st September of the year of their examination, but a child can sit at an earlier age at the discretion of the head master or mistress of the school. In the summer of 1953 some 19,000 children under the age of 16 took the examination. In Northern Ireland the Junior Certificate Examination is taken at about the age of 15 and the Senior Certificate Examination, which is conducted at two levels, at about 17.

Scotland

Scottish secondary schools fall into two main categories, those providing courses extending normally to three years, generally called junior secondary schools, and those providing courses of five or six years, known as senior secondary schools. In each type of school the courses are intended to provide a general education, but they are differentiated in character to suit the varying needs and abilities of the pupils, and include literary, commercial, boys' technical, domestic and rural courses. While some schools are purely junior secondary and some purely senior secondary, there are also a number of schools of the 'comprehensive' type in which all kinds of courses, both junior secondary and senior secondary, are provided. Many schools also provide modified courses for pupils of limited ability for whom the normal courses are too exacting.

The courses, extending to five or six years, normally provided in senior secondary schools lead to presentation for the Scottish Leaving Certificate which is awarded and issued by the Scottish Education Department.

Private Schools

Private schools are independent schools owned by individuals or groups of individuals. They comprise a variety of day and boarding schools, but are usually comparatively small. Some provide both primary and secondary education, others take only pupils of a certain age group. Private schools include most of the preparatory schools, usually boarding schools, for boys aged about 8 to 13 who are intending to enter public schools.

Broadcasting and Visual Aids

The School Broadcasting Department of the British Broadcasting Corporation sends out over 50 transmissions a week which reach more than 25,000 schools in the United Kingdom, over 60 per cent of the possible total. School broadcasting does not attempt to cover the whole school curriculum, or to replace the teacher, but to supplement existing methods of teaching.

Visual aids to education—films, film strips, wall charts, pictures, and models—are being increasingly used in Britain's schools.

Religion in Schools

All children in county or voluntary schools, that is, all schools wholly or partly financed by local authorities, receive religious instruction and take part in a daily corporate act of worship unless their parents object. In the voluntary school there is opportunity for denominational religious instruction and in the county school religious instruction of an undenominational Christian character is given. Over a third of the schools maintained by local education authorities in England and Wales are voluntary schools and the majority of these are Church of England primary schools. There are nearly 2,000 Roman Catholic voluntary schools and smaller numbers belonging to other religious bodies. In county schools in Northern Ireland clergy have a right of access to give denominational instruction to children of their persuasion for a limited period each week. In Scotland, subject to safeguards for the individual conscience, matters relating to religious instruction are in the hands of the school managers, but there are a number of denominational schools conducted by education authorities.

Services in the school chapel and religious teaching are an essential part of the life and education of the independent public schools and most of these schools are linked to some religious denomination.

Health and Welfare of School Children

Special educational treatment, either in special schools or otherwise, is provided for children between the ages of 5 (or less) and 16 who require it on account of any physical or mental handicap, including maladjustment. There are over 700 special schools in the United Kingdom, including hospital schools, day and boarding schools, and boarding homes for handicapped children attending ordinary schools.

The School Health Service provides regular medical examination and certain free treatment for all children attending schools maintained by local education authorities. Treatment provision includes dental clinics and child guidance centres. (There are also child guidance clinics in the National Health Service.) In Northern Ireland the School Health Service is operated by the health authorities as part of the National Health Service.

Milk (one-third of a pint a day in Great Britain and two-thirds in Northern Ireland) is given free to all children in schools who wish to have it, and the School Meals Service provides a daily dinner at a subsidized price (remitted where there is need) to nearly half the pupils in county and voluntary schools. Free transport is provided for children attending these schools who live more than a reasonable walking distance from their schools (two miles for those under eight years and three miles for those over eight years).

Teachers

Teachers are appointed by local education authorities or school governing bodies or managers. They are not subject to official control on questions relating to curricula or methods.

In 1953 there was one full-time teacher to 27 pupils in publicly maintained primary and secondary schools in England and Wales; the figure was 24.5 for Scotland and 30 for Northern Ireland. The high birth rate at the end of the second world war is the chief of several factors in the present need for more teachers.

There are some 153 teachers' training colleges in England and Wales giving a training usually lasting two years to students aged 18 or over, and 23 university departments of education providing a one-year course for graduates. In Scotland there are four general training centres, two denominational training colleges and a college for women teachers of physical education. Courses are normally of one

year's duration for graduates or the equivalent, and of three years for non-graduates. Northern Ireland has two general teacher training colleges, one university training department and three specialist colleges—one for training teachers of physical education, one for teachers of domestic science and one for teachers of art. The basic course in the general training colleges lasts three years.

The Education Departments, the universities, local education authorities and other bodies provide a variety of short courses for practising teachers. Teachers from schools in the United Kingdom go to a number of overseas countries each year under interchange schemes or schemes for temporary overseas posts.

UNIVERSITIES

In 1953 there were some 82,000 full-time students at universities or university colleges in the United Kingdom. In Great Britain in October 1953 the number was 79,600; in 1938-39 it had been about 50,000, and increased from under 38,000 to over 85,000 in the first five years after the war. Nearly three out of four students are now being aided from public funds or from scholastic endowments (see p. 316).

The Education Departments have no jurisdiction over the universities, and their relations with them are concerned mainly with the training of school teachers, the provision of adult education, and the award of scholarships from public funds. The universities, though self-governing institutions, receive aid from the State in the form of direct grants from the Treasury made on the advice of the University Grants Committee, a committee appointed by the Chancellor of the Exchequer from persons with experience of university administration and education.

There are 15 degree-giving, self-governing universities in England and Wales: Oxford, Cambridge, London, Birmingham, Bristol, Durham, Hull, Leeds, Liverpool, Manchester, Nottingham, Reading, Sheffield, Southampton and Wales; and 3 university colleges of lesser status. Oxford and Cambridge Universities, each with a number of colleges, are very old foundations and are residential. Most of the other universities, three of which—London, Durham and Wales—also comprise groups of largely autonomous colleges, are mainly non-residential. The tutorial system of individual tuition to supplement the lecture system is a traditional and valued feature of Oxford and Cambridge Universities, and is now being developed in the other universities and colleges of Britain.

There are four Scottish universities, all dating from the fifteenth or sixteenth centuries: St. Andrews, Glasgow, Aberdeen and Edinburgh. Northern Ireland has the Queen's University of Belfast and the Magee University College, Londonderry (associated with the Universities of Dublin, in the Irish Republic, and of Belfast).

Degree courses generally extend over three or four years, though in medicine five or six years are required. All the universities provide for post-graduate work and research. Courses in arts and science, pure and applied, are offered by all universities. Further reference to technology in the universities is made below.

FURTHER EDUCATION

Outside the universities there is a great variety of further education, full-time and part-time, for men and women, and for boys and girls who have left school. Local education authorities are required to secure such provision, either directly or by aiding voluntary bodies and institutions. Vocational and non-vocational courses at all levels and in all subjects are available in technical, commercial and art colleges,¹ in evening institutes and in adult education classes. Increasing numbers of young

¹ There has been a notable post-war increase in the number of art students. For further information on art colleges see p. 359.

persons are being released by their employers during working hours for part-time education, both vocational and general.

Evening classes for adults, in addition to the extra-mural courses provided by the universities, are organized by local education authorities and also by voluntary bodies, notably the Workers' Educational Association, and are aided by Government grants. There are six grant-aided residential colleges which provide one-year non-vocational courses for adult students, and since the end of the war more than 20 residential colleges have been established where adult students can take short courses lasting from a few days to a few weeks.

Technical and Technological Education

Technical education is related closely to the needs of the individual industry and of the individual student. In the technical colleges most of the students are taking part-time national courses while serving an industrial apprenticeship. A steady programme of development in technical education is being carried out.

Higher technical or technological education is provided, in close co-operation with industry, in both the universities and the technical colleges of Britain. There has been a great expansion of facilities for technological education since the second world war, and the Government is promoting a further expansion by increased grants for selected technical colleges and courses and the planned expansion of institutions of university rank in London (see p. 340), Glasgow, Manchester, Leeds and Birmingham and for developments in other centres.

FINANCE

The bulk of expenditure on education in the United Kingdom comes from public funds: of this public expenditure about 60 per cent comes from taxes and about 40 per cent from local rates. It is estimated for 1954-55 that total public expenditure on education, which is increasing, will be about £471 million for Great Britain. This includes expenditure on university education. Northern Ireland Exchequer expenditure on education is estimated at about £7½ million for 1954-55.

The proportion of university income provided by the Exchequer is increasing and in 1952-53 was over two-thirds for Great Britain. Another 4 per cent was contributed by local authorities, 13 per cent by fees, and the balance by endowments and other sources.

In England and Wales no fees are charged to parents of children attending schools maintained by local education authorities, and books and equipment are supplied free. Local education authorities pay for free places in direct-grant schools and, to a lesser extent, for free and assisted places in independent schools which normally charge fees. A number of schools are able to offer some scholarships from endowments. In Scotland, education authorities may charge fees in certain schools provided that this does not prejudice the provision of free education for all who desire it. In Northern Ireland no fees are charged to parents of children attending any county or voluntary primary, intermediate or special school and qualified pupils attending both county and voluntary grammar schools receive scholarships from the local education authorities which cover the whole or most of the fees charged by the school.

Grants and Scholarships

England and Wales

Grammar schools receiving grants direct from the Ministry of Education still charge fees but they are required to offer each year, to pupils who have at any time previously attended a grant-aided primary school for not less than two years, free

places to the extent of not less than 25 per cent of the previous year's admission to the upper school, and a further 25 per cent must be placed at the disposal of the local education authorities if they require them. Pupils occupying these latter places need not previously have attended a grant-aided primary school.

Day pupils not holding free places are entitled to claim a remission of fees in accordance with an approved income scale, and the Ministry pays the governors of the school the amount of the fees so remitted.

Over the past five years the number of scholarships and awards for university students has been greatly increased with the aim of ensuring that no able candidate shall be debarred from a university education for lack of means. Some 2,800 State scholarships for university honours degree courses were taken up by young students in 1953 besides 120 technical State scholarships and 25 mature scholarships for students over 25 years of age from adult education classes. In 1953 local education authorities in England and Wales awarded nearly 10,000 university scholarships with maintenance grants. Numerous exhibitions and scholarships are also awarded from endowments by universities and colleges and private benefactions. The Ministry supplements university open scholarships and exhibitions as may be necessary.

Scotland

In Scotland the power of awarding bursaries and scholarships is confined in the main to the education authorities, who in exercising this power are required to comply with regulations made by the Secretary of State. There are no State scholarships, but the Secretary of State supplements scholarships at English universities won in open competition by Scottish students.

Northern Ireland

University scholarships in Northern Ireland are awarded either by the local education authorities or from endowment funds. The Ministry of Education awards State exhibitions. Supplementary awards are made by the local education authorities and not, as in England and Wales, by the Ministry.

Educational Building

The requirements of the Education Acts, war damage, population movements and the higher birth rate have combined to call forth an exceptionally large programme of educational building. In England and Wales the value of all such work begun between 1945 and the end of May 1954 amounted to approximately £284 million. This included some £194 million for major projects on primary and secondary schools and about £23 million worth of major building for further education; the number of schools completed was 2,004 (1,636 primary and 368 secondary schools). In Scotland, work to the value of £40 million was approved between 1945 and the end of 1953, during which period about 3,750 rooms were built.

The Exchequer grant-in-aid for universities in Great Britain for the year 1954-55 included £6.2 million for capital developments.

In Northern Ireland, capital investment in school building rose from £500,000 in 1949 to £3 million in 1953 and is expected to increase to £4 million in 1955.

THE YOUTH SERVICE

The object of the Youth Service in Britain is to provide for the leisure-time activities of young people and to offer them opportunities—complementary to those of home, formal education and work—for discovering and developing their

personal resources of body and spirit, so that they may be better equipped to be responsible members of a free and civilized society. There is no regimentation of young people; they are free to join any of the youth organizations, or none, and the facilities for recreation, educational pursuits and social contacts offered are sufficiently varied to appeal to every type of boy and girl.

Responsibility for the Youth Service is shared by the Education Departments, local education authorities and numerous voluntary organizations. There is no attempt to impose a system of uniformity or to create anything in the nature of a national youth movement. The voluntary organizations, though strengthened financially by State support, retain their independence of action. The practice of democratic self-government has an established place in most youth organizations and service to the community is encouraged. The major voluntary youth organizations have memberships totalling over two million young people under 21 years of age.

Youth groups have been developed mainly by voluntary organizations. The oldest of these were formed during the nineteenth century and most of them, for example, the *Young Men's Christian Association*, the *Young Women's Christian Association*, the *Boys' Brigade* and the *Church Lads' Brigade*, were religious in origin and purpose. Later organizations, such as the *Boy Scouts' and Girl Guides' Associations*, which, as movements, have no definite affiliation with a religious body although local groups are often attached to a church or chapel, also recognize the importance of spiritual values in the formation of character and seek to inculcate high ideals of personal conduct and of service to others.

Local education authorities have been indirectly concerned in the Youth Service since 1918, and in 1939 the then Board of Education decided to take direct responsibility for youth welfare. The Board urged local education authorities to stimulate the provision of leisure activities for young people, both by co-operating with voluntary agencies and by establishing Youth Centres and other recreational facilities of their own.

The status of the Youth Service as an essential part of the educational system, thus recognized in 1939, was confirmed by the Education Act of 1944 and the Education (Scotland) Act of 1945 and, today, all local education authorities are required to ensure that adequate facilities for the recreational and social needs of young people exist in their areas. In areas where voluntary youth organizations are well established, local education authorities are expected to co-operate with them, and where existing services are inadequate, to make provision themselves (usually in the form of Youth Centres which offer varied activities to large groups of young people). Most local education authorities now employ full-time paid youth organizers and have appointed local youth committees or councils, on which official and voluntary bodies are represented.

Over twenty voluntary organizations, each with at least 10,000 members between the ages of 14 and 20, belong to the Standing Conference of National Voluntary Youth Organizations.¹ There are also the youth organizations of the political parties. In addition, there are a number of bodies which, though not specifically youth organizations, cater for the welfare of young people by providing them with opportunities for physical training, holidays, camping and travel. Local authorities provide playgrounds and playing-fields in public parks and gardens.

¹ The Standing Conference of National Voluntary Youth Organizations was founded in 1936 as a consultative body which takes action only in the name of its constituent members and with their consent. Its member organizations have a common aim in the development of character through educational and recreational interests, and the promotion of the physical, mental and spiritual training of their members.

Finance is provided by voluntary subscriptions from members and others, by money-raising efforts by members, by grants from the great charitable trusts, by contributions from local authorities' rates, and by direct grants from the Education Departments. It is estimated that in the year 1954-55 the Education Departments will give £275,000 in direct grants to voluntary youth organizations in England, Wales, and Scotland, while local education authorities will probably spend several times this amount on the Youth Service. The Ministry of Education for Northern Ireland estimates that its expenditure on youth work in 1954-55 will exceed £93,000 and local education authorities expect to spend more than £31,000. About £1 million from the King George VI Memorial Fund is to be spent by the King George VI Foundation on schemes for the benefit of young people.

Some Youth Organizations

The following examples are selected to illustrate the variety and wide scope of the services and activities provided by voluntary organizations in Britain concerned with the welfare of young people in their leisure hours. Other groups include the Catholic Young Men's Society, the Methodist Association of Youth Clubs, the Co-operative Youth Movement and the Welsh League of Youth.

Scouts and Guides

The *Boy Scouts' Association* and the *Girl Guides' Association*, which were founded by Lord Baden-Powell in 1908 and 1910 respectively, are based on the principle of the development of character and good citizenship in boys and girls by training them in habits of observation, self-reliance, self-discipline, loyalty and thoughtfulness for others, and by promoting physical fitness and a knowledge of useful crafts. Both associations have world-wide affiliations, and are undenominational and non-political in character.

In 1954 there were 229,000 Boy Scouts (aged 11 to 18 years) and Rovers (18 to 25 years) in the United Kingdom. This total includes Sea Scouts and Air Scouts. There were also 220,000 Wolf Cubs (aged 8 to 11 years).

At the end of 1953 there were 225,000 Girl Guides in the United Kingdom, including Sea and Air Guides, and also Cadets and Rangers (aged 16 to 21 years). There were also 204,000 Brownies (aged 7 to 11 years).

The Boys' Brigade

The Boys' Brigade, which was founded in 1883, is essentially a Protestant religious organization. Every company must be affiliated to a church, and regular attendance at church is a vital principle. Companies have regular drill parades, there are club rooms for games and other pastimes, and organized camping during the summer months is a feature of the movement.

The Church Lads' Brigade

The Church Lads' Brigade, which is a similar organization, is attached to the Anglican Church. Companies are formed in parishes under the direct control of the incumbent.

National Associations of Clubs

The *National Association of Boys' Clubs* and the *National Association of Mixed Clubs and Girls' Clubs*, which are non-sectarian, provide educative recreational facilities for young people designed to develop their mental, physical and spiritual well-being. Discussion groups, handicrafts, drama, music and many other activities are encouraged.

Pre-Service Organizations

Pre-Service organizations, which comprise the *Sea Cadet Corps*, the *Army Cadet Force Association* and the *Air Training Corps* (see pp. 98, 101 and 103), have special connections with the respective Service Departments and receive financial grants from them. The training of boys for entry into the armed forces, provided by these organizations, is linked with training to promote their social, educational and physical development. Similarly the *Girls' Training Corps*, the *Girls' Nautical Training Corps* and the *Women's Junior Air Corps* prepare girls for entry into the Women's Services.

Young Farmers' Clubs

The *National Federation of Young Farmers' Clubs* (see pp. 145-6) instructs its members in agricultural subjects and rural crafts, and each club has the support of an advisory committee on which local farmers are represented.

Outward Bound Trust

The Outward Bound Trust, which maintains a mountain school at Eskdale, in Cumberland, and sea schools at Aberdovey, in North Wales, and at Burghead, Morayshire, in Scotland, provides four-week character-building courses for boys from all walks of life but mainly for young employees in industrial firms sent at their employers' expense. The boys live as a community and are given the opportunity to assess and develop their qualities of courage, endurance, initiative and self-discipline in learning the techniques of sailing or of rock-climbing, by various physical tests, and in expeditions over rough hill country lasting several days. Similar, but modified, courses for girls are held from time to time, chiefly at Bisham Abbey, in Berkshire.

Youth Hostels

The *Youth Hostels Association*, which was founded in 1930, seeks to promote a greater knowledge of, and love for, the countryside. It caters for young people of limited means by providing hostels where they can stay for one or two shillings a night when on walking or cycling tours or canoe trips. The movement has a membership of over 200,000 and maintains 300 hostels in England and Wales. There is a membership in Scotland of some 31,300 with 24 hostels, and of about 5,000 in Northern Ireland where there are 23 hostels. The Association is linked closely with similar organizations in other countries and, through its International Travel Bureau, encourages and facilitates the exchange of visits.

Political Party Youth Groups

Youth groups which are junior branches of the political parties in the United Kingdom are maintained by each of the leading parties to spread party doctrine among young people, and to obtain party recruits. Members are encouraged to form debating societies and to engage in other social activities, and they are trained to take an active part in party politics.

Youth Sections

Youth Sections are maintained by several other adult voluntary organizations which have a particular function; for example, the *British Red Cross Society* and the *St. John Ambulance Brigade* train their young members in first aid and home-nursing.

The Central Council of Physical Recreation

The Central Council of Physical Recreation, on which the leading voluntary youth organizations are represented, is grant-aided by the Ministry of Education and by the corresponding Department in Northern Ireland. It was founded in 1935 to improve the physical and mental health of the community through physical recreation. The Central Council arranges training courses, provides instructors in games and athletics, plans and judges athletic competitions and organizes demonstrations of sport and physical training. It also arranges training holidays for young people in its three National Recreation Centres. The corresponding body in Scotland is the Scottish Council of Physical Recreation.

The National Playing Fields Association

The National Playing Fields Association is another central organization which provides amenities for the Youth Service. It was founded in 1925 to secure adequate playing fields and playgrounds for young people, either directly or in co-operation with local authorities and youth organizations.

XI. HOUSING AND PLANNING

PROBLEMS AND ADMINISTRATION

The problems of housing and of planning the use of land in Britain have their origins mainly in the sevenfold expansion of the population in the last two and a half centuries and its concentration in industrial urban areas (see pp. 6 and 11). This gave rise to overcrowding in the older houses in the centres of cities and to the unplanned spread of outer suburbs. Overcrowding persisted in spite of a high rate of building in the nineteen-thirties and was aggravated by the second world war which left behind increased needs and new opportunities for housing and planning. New building had virtually ceased for six years, while the United Kingdom population had risen by nearly $1\frac{1}{2}$ million; meanwhile, approximately one house in every three had been destroyed or damaged by enemy action.¹

Ministerial Responsibility for Housing and Planning

The Minister of Housing and Local Government is responsible in England and Wales for formulating housing policy, for housing standards and for general supervision of the housing programme. In planning, the Minister is responsible for implementing general policy regarding the use and development of land throughout England and Wales, and for the direction and guidance of local planning authorities, the New Towns Development Corporations and the National Parks Commission in the carrying out of their planning functions.

In Scotland local housing and planning authorities are supervised by the Department of Health.

In Northern Ireland the Minister of Health and Local Government is responsible for housing and planning.

The Ministry of Works acts as production authority in Great Britain for certain building materials and equipment; it is responsible for general building efficiency and for relations with the building industry, and it is primarily responsible for keeping building research under review (see p. 351). The Ministry of Labour and National Service is concerned with the supply of labour to the building industry and its ancillary trades; and the Building Apprenticeship and Training Council reviews the industry's long-term labour needs and the measures necessary to maintain the skilled labour force. The Agricultural Departments are responsible for advising on the agricultural value of land proposed for housing or other development. The Board of Trade is responsible for regulating the distribution of industrial development (see p. 117). An Inter-Departmental Committee on Services' Land Requirements meets to harmonize Service and civilian needs and proposals for land use.

HOUSING

The 1 per cent sample of the 1951 Census of Great Britain showed the number of occupied structurally separate dwellings in Great Britain as 13,312,000, the number of private households as 14,481,000 (of which 2,079,000 were in shared dwellings),

¹ In 1941 a scheme of payment for damage by enemy action to land and buildings in the United Kingdom was set up, and the War Damage Commission was appointed to administer it.

and the excess of households over dwellings as 1,169,000 (see p. 14). The average number of persons per room was 0.76.

HOUSING POLICY AND PROGRESS

Since 1945, when Britain's post-war housing drive began, it has been the consistent policy of the Government to use the share of the national resources that could be made available for housing to provide the greatest possible number of houses of a good standard and to ensure that they went to those families most in need of them. To achieve this object, control has been exercised over the use of resources, and priority over other less urgent forms of building has been given to housing, together with schools and with factories for Development Areas. Private building was controlled by a system of licensing until November 1954. The amount of building by local authorities themselves, who have been responsible for the greater part of the post-war housing programme, has been carefully controlled. In the course of following this general policy there have been changes in methods and emphasis in accordance with changes in the availability of resources.

The Conservative Government which came into office in October 1951 decided that the house-building programme in Great Britain should be increased to a rate of 300,000 completions a year as soon as practicable. To this end, limitations on the local authorities' programmes were relaxed in accordance with the availability of resources, and encouragement was given by easing the licensing policy to those wishing to provide homes for themselves. In the calendar year 1953, over 318,000 houses were completed in Great Britain and the object of increasing the level of the programme was thus achieved. Since the middle of 1953 action has been taken to steady the level of the programme at about 300,000 completions a year.

The amount of private building that local authorities might license was subject to a maximum ratio to local authority building. For the greater part of the period up to the end of 1951 the maximum in England and Wales was one privately built house to four local authority houses. The reasons for giving preference to local authorities as housebuilders were that they were considered to be in a better position than private enterprise to build houses for letting that would be within the reach of tenants who could not afford to buy, that local authorities were able to select tenants according to need, and that the activities of local authorities were more easily planned than those of private enterprise. From the beginning of 1952 it was found possible and thought desirable to allow private enterprise a larger share in the programme, without any reduction in the number of houses built by local authorities.

Post-war Progress

By 30th June 1954, 1.9 million new houses, permanent and temporary, had been built in Great Britain since early 1945, and over 316,000 more were under construction. The total number of families rehoused in this period (by new building, repair of uninhabitable houses and conversion) was 2,201,461. Of the 1,742,745 permanent houses built, 337,327 were of non-traditional types constructed with the use of new methods or materials.

Local authorities in England and Wales had built 1,284,529 of the total number of new houses and local authorities in Scotland, with the Scottish Special Housing Association (see p. 323), had built 218,210.

In addition, in Northern Ireland 51,304 houses were built between January 1945 and the end of June 1954, including 18,619 permanent houses built by local authorities and 12,650 by the Northern Ireland Housing Trust (see p. 324).

Slum Clearance

Because of the need to concentrate on providing new houses for families without a separate home of their own, slum clearance was virtually in abeyance for some years after the end of the war, and the number of houses demolished was relatively small. Early in 1954 local authorities were informed that, in view of the amount of new housing provided since the war, it had now become an essential part of the Government's housing policy that the authorities should take up again, as a matter of urgency, the campaign of slum clearance which the war interrupted. Each local authority should determine the pace and phasing of a slum clearance programme, having regard to the circumstances of its area, and should put such a programme into operation as soon as possible.

In some areas the number of slum houses is so large that it would not be practicable to replace all of them within five years or so. The Housing Repairs and Rents Act, 1954, and the corresponding Scottish Act, therefore contain provisions which empower local authorities to acquire, and to defer the demolition of, houses unfit for human habitation which are destined for clearance but which cannot be dealt with for some time to come, because the local slum problem is so large. To make conditions more tolerable for the occupants, local authorities are empowered to patch these houses. It has been made clear that patching is to be the exception and not the rule—to be done only in the comparatively few areas which have the largest problems—and that these houses are to be demolished as early as possible; patching is not intended to prolong the life of the slums, or to be an alternative to slum clearance. Exchequer contributions are available to meet part of the cost of acquisition and patching.

HOUSING AUTHORITIES

Housing Powers and Duties of Local Authorities

While responsibility for housing policy and for the general execution of the housing programme rests with the Minister of Housing and Local Government (in Scotland, the Secretary of State for Scotland, and in Northern Ireland, the Minister of Health and Local Government), local authorities have executive responsibility for all housing in their areas (including building by Housing Associations, which are non-profit-making bodies providing houses mostly for letting rather than for sale, and Self-Help Groups, which build in their spare time for the benefit of members). In England and Wales and Northern Ireland these authorities are the councils of county boroughs, boroughs (including metropolitan boroughs), urban districts and rural districts, the London County Council and the Common Council of the City of London. In Scotland all town and county councils are housing authorities.

These authorities are responsible for ensuring as far as possible that housing conditions in their areas are satisfactory. To this end they must draw up and submit plans for the provision of new houses in their districts, and ensure that other dwellings in their areas comply with certain standards of fitness, design, construction, equipment, etc. They may themselves provide houses for letting by new building or by the conversion of existing buildings. The Minister has given a general consent to the sale of houses on certain conditions to occupying tenants or to persons in need of a house for themselves.

Scottish Special Housing Association

The Scottish Special Housing Association, a statutory body, assists local authorities in their housing programmes. It has built about one in seven of the permanent

post-war houses completed in Scotland. The Association is financed entirely from Government funds and is under the general direction of the Secretary of State for Scotland.

Northern Ireland Housing Trust

The Northern Ireland Housing Trust, a statutory body, was established in 1945 for the purpose of erecting houses for letting to supplement the activities of local authorities. The Trust has built about a quarter of Northern Ireland's post-war houses.

BUILDING METHODS AND STANDARDS

Non-Traditional and Temporary Housing

Much research has been and is being done on housing design, construction and equipment. Components have been standardized and new methods and materials have been evolved to ease the strain on skilled workers and traditional materials.

To help to meet the immediate post-war need, the Government provided over 157,000 temporary factory-built houses for erection on sites provided by local authorities. Within four years from April 1945 the programme had been completed at a cost of £216 million for the houses and their erection.

A number of new forms of construction for permanent houses were also developed with practical encouragement from the Government during the experimental period. Some types were steel-framed, some of pre-cast concrete, some concrete poured *in situ*, and some timber-framed. A number of proved new systems have been able to compete successfully with traditional house-building methods, and are making an increasing contribution to the housing programme.

Standards for Housing

Despite shortages, local authorities are now building better houses than before the second world war.

The central Departments have issued manuals of guidance for local authorities setting standards of space, structure, design and equipment for different types of houses, and describing how estates can be laid out attractively while saving land and money, by the use of new and improved types of layout.

HOUSING FINANCE

Housing Costs and Subsidies

The cost to a local authority of building the average three-bedroom traditional house in England and Wales (with a superficial area of 1,050 square feet) was about £1,450 for houses completed in October 1951, with another £240 for land, roads and services and professional fees. Since 1951 new designs have been introduced to achieve economies in space and to keep down the cost per house.

To enable local authorities, notwithstanding the high cost of building, to let their houses at reasonable rents, subsidies are provided under the Housing (Financial and Miscellaneous Provisions) Act, 1946, and the Housing Act, 1952. Housing subsidies have existed since 1919, but they are now on a more generous scale than before the war. The standard rate in England and Wales is £26 14s. per house per year for 60 years from the Exchequer and £8 18s. from the local authority for houses completed before 1st April 1955 and £22 1s. and £8 18s. respectively for houses completed after that date.

Special rates of subsidy are provided for special types of housing, including houses for agricultural workers, houses in poor areas, and flats and houses on

expensive sites, also where expensive works are necessary in order to minimize the risk of subsidence due to mining operations. All subsidy rates are reviewed annually.

The Housing Act, 1949, provides Exchequer assistance for the improvement of existing housing or adaptation of buildings for housing by local authorities or private owners. Grants can be made by local authorities, with Exchequer assistance, to persons converting or improving existing buildings for housing at a cost of over £100 a dwelling. The grants may amount to half the cost, with a maximum of £400. There are certain technical conditions which the dwellings as improved or converted must satisfy to ensure that public money is only spent on property that will provide satisfactory accommodation for a sufficient period. The Housing Repairs and Rents Act, 1954, has considerably eased the conditions attaching to these grants, and it is the Government's intention that they shall be much more widely employed in the future, in order to make the utmost use of the nation's stock of existing houses. A subsidy for residential hostels built by local authorities or by certain other local bodies is also granted under the Act of 1949.

Subsidies are similarly provided in Scotland, though the amounts are generally higher owing to the different rating system and higher costs.

In Northern Ireland annual subsidies are paid for 60 years to local authorities, the Northern Ireland Housing Trust and Housing Associations. In addition 'lump sum' subsidies are paid to private persons who build houses for letting or for owner occupation. Under the Housing on Farms Act (Northern Ireland), 1950, grants are available for the provision of new houses and for the reconditioning of existing premises to accommodate farmers and approved workers.

House Purchase Schemes

Loans to enable persons to buy their houses by a system of instalment purchase extending over several years are provided by some local authorities as well as by building societies, certain insurance companies and other financial institutions.

Building societies have not actually built houses for over 100 years, but for a long time they have been the most important source of finance for private building (see p. 262).

Rent Control

The great majority of the privately owned houses in Great Britain which are let are subject to rent control. Houses owned by local authorities are, in general, free from control, as are new houses completed since 30th August 1954.

The first Rent Restrictions Act was passed in 1915. The Acts now in force in England and Wales, either wholly or in part, are the Rent and Mortgage Interest Restrictions Acts, 1920 to 1939, the Landlord and Tenant (Rent Control) Act, 1949, and the Housing Repairs and Rents Act, 1954. These Rent Restrictions Acts, which apply, with few exceptions, to all unfurnished dwellings below a certain rateable value, achieve their purpose of preventing undue rises in rent, liable to result from housing shortages, by limiting the rent a landlord may legally recover from a tenant, while at the same time giving the tenant in most circumstances security of tenure. The Acts also make illegal most premiums for the grant of a tenancy of rent-controlled premises. Landlords restricted in this way are themselves protected against undue increases in rates of mortgage interest and against the calling in of mortgages so long as they pay the restricted interest due. This protection applies to anyone buying a controlled house on mortgage. The standard rent (i.e. the maximum the landlord can recover) is fixed by reference to the rent payable on a certain date (for 'old control' houses 3rd August 1914; for 'new control' houses 1st September 1939). The standard rent of a house let for the first time since

1st September 1939 is the rent at which it was first let, except where this rent is reduced by a rent tribunal, which on the application of either party will determine a reasonable rent.

The Housing Repairs and Rents Act, 1954, allows landlords to increase their rents to pay for repairs, subject to certain conditions and to a maximum limit. This is part of the Government's policy of making the utmost use of existing accommodation. Broadly similar provisions apply in Scotland under the Housing (Repairs and Rents) (Scotland) Act, 1954.

The rents payable for furnished accommodation in England and Wales are controlled by the Furnished Houses (Rent Control) Act, 1946. The Act provides for the control of rents of houses or parts of houses let furnished or with services, without limitation by rent or rateable value. Local rent tribunals, appointed for the purpose, determine the rents of furnished lettings in cases referred to them by either party or by the local authority. Similar legislation for controlling rents of furnished lettings was passed for Scotland in 1943.

A somewhat similar measure of control applies in Northern Ireland. In 1951, however, legislation was passed which permitted prescribed increases in the rent of 'old control' houses provided they were maintained in good and accountable repair.

TOWN AND COUNTRY PLANNING

The land of Britain is one of the most densely populated areas in the world and it is therefore of vital importance in the public interest that competing claims to its use should be settled in such a way that the necessary balance between them is maintained.

From 1909 onwards, the idea of the planned use of land was given a degree of expression in successive Acts of Parliament, but because the pattern of development over much of the country had already hardened into large unplanned urban concentrations (as a result of the industrialization processes of the previous century) the powers granted to planning authorities by the early Acts were inadequate for the task in hand.

The twenty years between the two world wars were also decades of expansion in industry, engineering and house-building; the population was increasing, and there was a general movement towards better standards of living which required more space for individual members of the community. At the beginning of the nineteen-thirties, a major effort was made to consolidate and strengthen planning law and to extend the planning powers of central and local authorities to the point at which they could exercise effective control. Despite this effort, which culminated in the Town and Country Planning Act, 1932, inter-war planning legislation had only a limited effect, mainly because it failed to deal adequately with the question of compensation, which had always been an obstacle to satisfactory planning. By the nineteen-twenties, the principle had been accepted that the property of an individual might be subjected to restrictions in the public interest, provided that he received some compensation out of public funds for any deprivation which went beyond the requirements of good neighbourliness that he might suffer thereby. The method adopted for implementing this principle, however, placed so heavy a financial burden on planning authorities that they were often prevented from, or at least hampered in, carrying out their work. As a result, at the time of the outbreak of the second world war many of the outstanding problems of land use remained unsolved.

Renewed efforts were made to deal with these problems during the course of the war. Between 1939 and 1943 three expert committees were appointed to study

and report upon (a) the unregulated growth and spread of industry, (b) the hampering of planning by the financial and administrative difficulties of compensation and betterment and (c) the encroachment of urban development upon the countryside. After the war, two other committees studied the question of New Towns and National Parks respectively.

Almost all the principal planning recommendations of these five committees have now been incorporated in Acts of Parliament, as follows: the Distribution of Industry Act, 1945; the New Towns Act, 1946; the Town and Country Planning Act, 1947; the Town and Country Planning (Scotland) Act, 1947; the National Parks and Access to the Countryside Act, 1949; and the Town and Country Planning Acts, 1953 and 1954.

The Town and Country Planning Acts

The Town and Country Planning Act, 1947, and the Town and Country Planning (Scotland) Act, 1947, are comprehensive and radical measures which provide a framework or pattern of land use for the whole of Great Britain (the Acts do not apply to Northern Ireland). Their main purposes are:

1. To co-ordinate planning throughout the country by means of development plans against which day-to-day development can be considered.
2. To extend both the powers of public authorities to acquire and develop land for planning purposes and the scope and scale of grants from central funds to local authorities towards carrying out the acquisition and redevelopment of land.
3. To bring all development, with certain exceptions, under control by making it subject to planning permission from a local planning authority or from the central Government in order that land should be put to its best use in the interests of the community as a whole. Under this control, building over good agricultural land or on land containing valuable mineral deposits may be prevented, the outward sprawl of great towns may be restrained, living conditions and industrial efficiency may be improved, and the countryside and coastline may be preserved from further disfigurement and destruction.
4. To deal with certain specific problems of amenity, e.g., the preservation of trees and woodlands and of buildings of special architectural and historic interest, and the control of the display of advertisements.

The 1947 Acts were also intended to solve the compensation-betterment problem; and, to this end, they provided for the transfer of development values in land to the State, the establishment of a system of 'development charges' payable before development could take place by any person whose land was increased in value by the grant of planning permission to develop, and the setting up of a £300 million fund from which payments could be made to owners whose land was depreciated in value by the Acts. It was hoped that by these provisions the pre-war obstacles to effective planning might be removed; but, in the event, serious difficulties were encountered in the working of the system, due mainly to the fact that the development charge became in effect a tax on development. The financial provisions of the 1947 Acts have therefore been amended in three subsequent Acts: the Town and Country Planning Act, 1953, which abolished the development charges and suspended payment from the £300 million fund; and the Town and Country Planning Act, 1954, and the Town and Country Planning (Scotland) Act, 1954, which provided a new scheme for the payment of compensation for depreciation in land values and a new basis of compensation for public acquisition. Under

the terms of the Acts, claims for compensation out of the £300 million fund form the basis for all future compensation payments, but payments will not actually be made unless and until loss is suffered. Since development charges have been abolished, owners will normally be able to realize the full value of their land on the open market and compensation will, in fact, become payable only when land is acquired by a public authority or restricted against development. Loss of development value through the imposition of planning restrictions, other than restrictions in the interests of 'good neighbourliness', is to be met by the State, in order that local planning authorities shall continue to be relieved of the burden of paying the compensation for which they were responsible until the passing of the 1947 Acts. On compulsory acquisition, compensation is paid for development value only if a claim on the £300 million fund exists and up to the value of the claim.

The Acts also contain provision for a simplified and extended system of planning grants to local planning authorities to replace that of the 1947 Acts, and a transitional system of payments, again based on claims, to redress the financial effects on owners of land of the now discontinued development charge scheme.

Development Plans

Under the terms of the 1947 Acts, local planning authorities in England and Wales and in Scotland are required to prepare, and submit to the Minister of Housing and Local Government and the Secretary of State for Scotland respectively, development plans covering the whole of their districts, based on a careful survey of physical and other resources. The local authorities for the purpose are: in England and Wales, the county councils, the county borough councils, or where necessary, joint planning boards; and in Scotland, the county councils or joint county councils, the large burghs, two small burghs, or, if appointed, joint planning committees. Smaller units of local government may assist in the work in areas of interest to them, and provision is made for public inquiry before any plan receives ministerial approval, so that persons whose land is affected may have an opportunity to state their case.

By the end of March 1954, all but seven of the local planning authorities in England and Wales had submitted completed plans to the Minister of Housing and Local Government. By the same date in Scotland, 28 of the 57 local planning authorities had submitted plans to the Secretary of State for Scotland.

Individual plans for the reconstruction of parts of many of the large towns and cities in Great Britain have also been drawn up and approved; and special provision has been made for rebuilding the centres of those of them that were badly damaged during the war. By the end of 1953, works valued at about £14.6 million had been completed, further work of reconstruction costing about £10 million had been authorized in provincial cities in England and Wales and £10 million had been made available for this purpose in the City of London.

The Distribution of Industry

The Distribution of Industry Acts, 1945 and 1950, and the Town and Country Planning Acts, 1947, contain provisions to control the general location of industry throughout the country. Under the terms of the Distribution of Industry Act, 1945, the Board of Trade, as the responsible Department, has wide powers to promote industrial development in the Development Areas,¹ i.e. areas in Britain which, in

¹ All action in connection with development areas in Scotland is taken by the President of the Board of Trade and the Secretary of State for Scotland, acting jointly.

the past, have been peculiarly liable to severe unemployment in times of depression owing to their dependence for employment and prosperity on a few basic industries (see p. 117).

The Board of Trade is also responsible, under the terms of the Town and Country Planning Acts, 1947, for certifying that any proposed industrial development involving the erection of industrial buildings of more than 5,000 square feet can be carried out consistently with the proper distribution of industry, before permission to develop can be given by the local planning authorities. General problems of industrial development are dealt with jointly by a number of Government Departments, but the main responsibility for controlling the siting of industry as apart from its general location rests with the local planning authorities, for it is their duty to ensure that industrial development fits properly into existing and expanding communities and is consistent with the best use of land.

The New Towns

The New Towns Act, 1946, gives the Government powers to create new towns when it is in the public interest so to do. Under the terms of the Act, the Minister of Housing and Local Government and the Secretary of State for Scotland, who are the responsible ministers, may, after consultation with the local authorities concerned, make an order designating any area of land (which might include as its nucleus the area of an existing town) as the site of a proposed new town. Once the site has been designated, the responsible minister appoints a Development Corporation (consisting of a chairman and up to eight other members) to be responsible for the development of the new town. One of the first tasks of the development corporation, when appointed, is to prepare a master plan which, when it has received ministerial approval, becomes the basis for the detailed planning of the area. These details must likewise be submitted to the responsible minister, who must consult the appropriate local planning authority before the detailed proposals can be approved.

The development corporations have powers in general (subject to the consent of the Minister of Housing and Local Government or the Secretary of State for Scotland) to acquire, by agreement or compulsory purchase, any land or property necessary for their purposes. They may provide housing, commercial and industrial premises, estate roads and sewers and other buildings essential for the development of the towns; and, in certain circumstances, they may make provision for main services. In England and Wales, the Minister of Housing and Local Government has made a special development order to exempt the development corporations from the necessity of obtaining planning permission from the local planning authorities; but in Scotland, in the absence of a similar order, permission to develop has to be obtained from the local planning authority.

The capital cost of developing the new towns is advanced to the corporations from public funds and must be repaid on terms approved by the ministers with the concurrence of the Treasury. The corporations must submit their reports annually to the Minister or to the Secretary of State for Scotland, who are responsible for laying them before Parliament; their accounts must be audited annually and are then presented to Parliament by the Comptroller and Auditor General.

When the purposes for which development corporations are established have been substantially achieved, the corporations are to be dissolved and the towns handed over to the appropriate local authorities, on terms settled by agreement, or after reference to the House of Commons.

There are now 12 new towns in England and Wales and two in Scotland. Eight

of these—Basildon and Harlow in Essex; Hemel Hempstead, Stevenage, Hatfield and Welwyn in Hertfordshire; Crawley in Sussex; and Bracknell in Berkshire—are designed to help in absorbing excess population from the Greater London area; four—Corby in Northamptonshire; Aycliffe and Peterlee in Durham; and Cwmbran in Monmouthshire—are to serve the special needs of their areas. Of the Scottish new towns, East Kilbride in Lanarkshire is designed to take the surplus population from Glasgow; and Glenrothes in Fife to serve the general needs of the surrounding area.

In spite of the fact that the development corporations have been somewhat handicapped by shortages of materials and labour and by restrictions on capital investment, their work represents a notable achievement in the translation of planning into reality. By the end of October 1954 the total population of the new towns in England and Wales, designed to be 545,000 when the towns are completed, had reached the figure of 216,160 (including the people previously living in the area); a total of 25,629 houses had been built by the development corporations with a further 11,233 under construction; 118 factories had been established and a further 74 were being erected; 291 shops had been completed and 276 more were being built; 37 schools had been finished and 36 more were under construction. Many miles of roads had been laid and large main sewerage works had gone well ahead of housing needs.

In the Scottish new towns, particularly satisfactory progress was made during the year ended October 1954, by which date 3,416 houses had been built by the development corporations with a further 2,033 under construction; 32 shops had been completed and 16 were under construction; four new schools were in use and the building of a further four was in progress; and the extension of communications and public services was under way.

Under the New Towns Acts of 1946, 1952 and 1953, £150 million was advanced from the Exchequer to the development corporations for work on the new towns. By 31st October 1954, £141 million of expenditure from this amount had been approved by the Minister of Housing and Local Government and the Secretary of State for Scotland. In December 1954 a New Towns Bill was presented to Parliament with the object of providing the corporations with an additional £100 million to enable them to meet their commitments during the next two years.

National Parks, Access to the Countryside and Nature Conservation

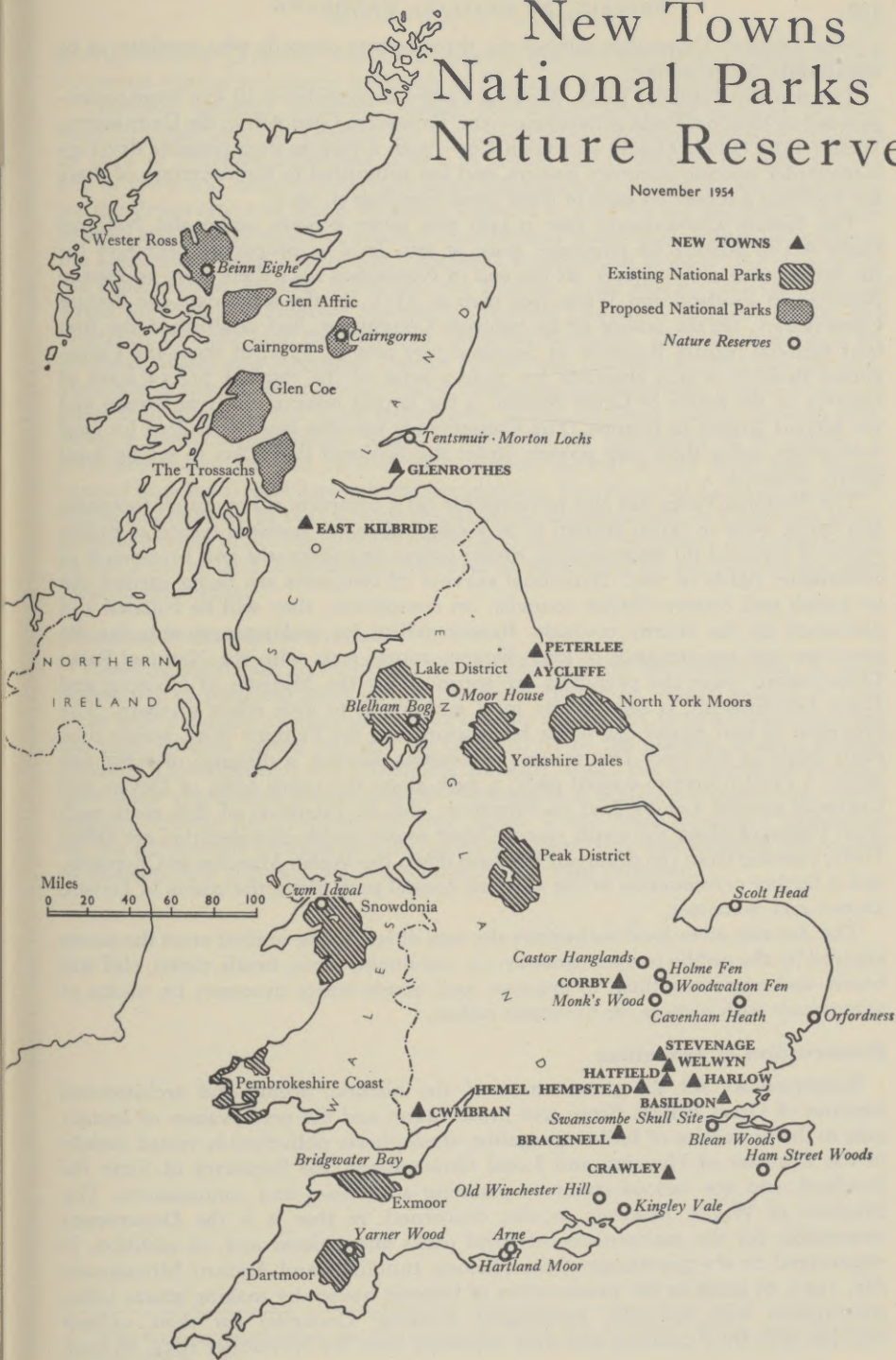
The National Parks and Access to the Countryside Act, 1949, provided for the designation of a number of extensive areas of beautiful and relatively wild country in England and Wales as National Parks. The characteristic landscape of these areas is to be carefully preserved, and facilities for open-air recreation are to be improved or provided.

A National Parks Commission for England and Wales was set up by the Act of 1949, and by the end of October 1954 the first eight of the 12 National Parks recommended by the National Parks (England and Wales) Committee (which reported in 1947) had been established, with a total area of 4,380 square miles. These are: the Peak District, the Lake District, Snowdonia in North Wales, Dartmoor in Devonshire, the Pembrokeshire Coast in South Wales, the North York Moors, the Yorkshire Dales, and Exmoor in Somerset and Devon. Administrative systems are now in operation for six of the parks, as follows: The Peak and Lake District National Parks are administered by Joint Planning Boards; for Dartmoor, the Pembrokeshire Coast and the North York Moors, special Park Planning Committees of the county councils concerned have been set up; while in Snowdonia,

New Towns National Parks & Nature Reserves

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- NEW TOWNS ▲
- Existing National Parks ▨
- Proposed National Parks ▩
- Nature Reserves ○



a Joint Advisory Committee advises the three county councils who continue to be responsible for planning.

The Scottish National Parks Working Party has considered all five areas recommended as National Parks in Scotland—the Trossachs, Glen Affric, the Cairngorms, Wester Ross (Loch Maree) and Glen Coe—with a view to their possible development under existing statutory powers, and has submitted to the Secretary of State for Scotland a report on each of these areas (see map p. 331).

The Nature Conservancy (see p.348) was given powers under the National Parks Act to acquire by purchase, lease or gift, land or properties necessary for the furtherance of its objects. At the end of November 1954 there were 19 Nature Reserves in England and Wales (see map p. 331). By the same date the Nature Conservancy, on the advice of its Scottish Committee, had established the first four national Nature Reserves in Scotland (see map p. 331); of these the Cairngorms Reserve, which accounts for 39,639 acres of the total of 71,153 acres of reserves in the whole of Great Britain, is the largest reserve in Great Britain and the second largest in Europe. The Conservancy has also been consulted by local authorities, using their own powers under the National Parks Act to set up local nature reserves.

The National Parks Act also provides for (a) a complete survey of all footpaths and bridle ways in Great Britain to be a comprehensive national record of public rights of way and (b) long-distance routes connecting footpaths and bridleways as continuous rights of way. Individual surveys of footpaths are being carried out by parish and county district councils; on completion, they will be collated and published by the county councils. Responsibility for making proposals for the provision and maintenance of long-distance routes rests with the National Parks Commission; once the proposals are approved by the Minister of Housing and Local Government, it falls to the local authorities to give effect to them. The provision of four routes has so far been approved: the Pennine Way, which runs from Edale in the Peak District to the Scottish Border, a distance of some 250 miles; a Pembrokeshire coastal path; a path along the north coast of Devon and Cornwall around Land's End to Penzance; and an extension of this coast path from Penzance along the south coast. Other routes under consideration are Offa's Dyke, running from the coast of Flintshire down the Welsh Marches to Chepstow, and a further continuation of the Cornish coastal path along the coasts of Devon, Dorset and Somerset.

The Act also gives local authorities the task of surveying in their areas the access enjoyed by the public to open country, i.e. mountain, moor, heath, down, cliff and beach, and empowers them to improve such access where necessary by means of agreements with owners, or by access orders.

Preservation of Amenities

Responsibility for the preservation of the historic, scenic and architectural beauties of Great Britain (from tree preservation and the preservation of ancient inns to the protection of buildings against atmospheric pollution) is vested mainly in the Minister of Housing and Local Government, the Secretary of State for Scotland, and the various statutory planning authorities and commissions. The Ministry of Works, however, is also concerned, in that it is the Department responsible for the maintenance of royal parks and palaces and, in addition, is empowered by the provisions of the Historic Buildings and Ancient Monuments Act, 1953, to assist in the preservation of historic houses by making grants (after consultation with specially constituted Building Councils) for their upkeep together with their contents and their adjoining land. By November 1954, 86 such

grants, totalling £215,000, had been approved towards the cost of urgently needed structural repairs to historic buildings in England, Scotland and Wales.

Unofficial amenity societies, wholly dependent upon the support of their members, include: the Council for the Preservation of Rural England, founded in 1926 to organize concerted action to secure the protection of rural scenery and of town and country amenities from disfigurement or injury; the Association for the Preservation of Rural Scotland, founded in 1927 for the protection of rural scenery and the amenities of country districts and towns and villages in Scotland; the Commons, Open Spaces and Footpaths Preservation Society; the Society for the Protection of Ancient Buildings; the Pilgrim Trust (see p. 356); the National Trust for Places of Historic Interest or Natural Beauty in England, Wales and Northern Ireland¹; and the National Trust for Scotland. The National Trust for England, Wales and Northern Ireland (which was founded in 1895 and by mid-1954 had nearly 50,000 members) is the largest landowner in the United Kingdom other than the State and State institutions. It has acquired, mainly through gifts, about a thousand properties, which it holds for the enjoyment of the public; it administers over 200,000 acres of land of great natural beauty (including 30,000 acres of woodland); and it owns many fine gardens. The National Trust for Scotland, which was founded in 1931 to save properties of natural beauty or historic or architectural interest in Scotland for the future enjoyment of the public, administers over 55,000 acres of land (including 1,100 acres of woodland) on which there are more than 60 properties.

Planning in Northern Ireland

Planning legislation in Northern Ireland provides for the preparation by local authorities of planning schemes for the development or redevelopment of their areas with the object of securing proper sanitary conditions, adequate amenities and the most suitable laying out and use of land. Since the passing of the Planning (Interim Development) Act (Northern Ireland), 1944, the authorities concerned have made appreciable progress in the preparation of outline advisory plans, which indicate broadly the proposals for their areas. These plans provide a foundation for the preparation of more detailed plans at a later stage and facilitate the control of development pending the completion of the final schemes.

¹ For further information on the National Trust for England, Wales and Northern Ireland, see p. 360.

XII. RELIGION, SCIENCE, AND THE ARTS

RELIGION

Every person living in Britain possesses the rights of religious freedom as they are described in article 18 of the Universal Declaration of Human Rights; that is, he may change his religion at will and may manifest his religion in teaching, practice, worship and observance. Churches and religious societies of any faith may own property, conduct schools and propagate their faith in speech and writing. Freedom of conscience for minority religious groups and for non-religious groups has been achieved gradually and not without a struggle.

The Church of England and the Anglican Communion

The Church of England 'by law established' occupies a middle position between the Roman Catholic Church and the Protestantism of continental Europe. At the Reformation it repudiated the supremacy of the Pope and certain religious doctrines but retained the creeds, the historic episcopate and liturgical worship, the last being embodied in the Book of Common Prayer. Religious Orders were restored a hundred years ago. No single law defines the establishment of the Church of England in any such way as, for example, the Act of Union, 1707, defines the position of the Church of Scotland. The relation of Church and State in England is one of mutual obligations, of privileges accorded to the Church but balanced by certain duties. The Church of England is uniquely related to the Crown. The Sovereign, who must be a member of the Church of England, is called 'Defender of the Faith', a statutory title as protector of the Church, and promises on his or her Accession to uphold it. Prayers for the Sovereign are said in all the statutory services of the Church and the clergy take the oath of allegiance to the Crown.

The second link of Church and State is through the House of Lords, in which the two archbishops of Canterbury and York and 24 bishops have seats. This makes it possible for the mind of the Church to be freely expressed on any great moral issue raised in connection with the corporate conduct of the State, as well as on more narrowly ecclesiastical issues. Clergy of the Church of England are legally disqualified from sitting in the House of Commons. All bishops and deans are appointed by the Sovereign on the advice of the Prime Minister. The State upholds sentences passed in ecclesiastical courts (see p. 71). The highest court of appeal from an ecclesiastical court is the Judicial Committee of the Privy Council.

The State recognizes and protects church property. It makes no payments to the Church except for services rendered (e.g., chaplaincies to the armed forces and to prisons). 'Church property' belongs to parishes, dioceses or church societies. An investigation in 1951 showed that half the Church's income came from present giving and half from past giving, in the form of endowments. Endowments produced an income of £8½ million a year and, of this total, property representing an annual income of £7 million was administered by the Church Commissioners, most of it for specific purposes from which it could not be transferred. The present figure for property administered by the Church Commissioners is £8¼ million a year, but there may be other factors affecting the aggregate which any new inquiry would have to take into account. The State is represented on this body and it reports annually to Parliament.

The Established Church is not free to change its forms of worship, as laid down

in the Book of Common Prayer, without the consent of Parliament. A proposed revision (1928) was accepted by the Church Assembly and the Convocations of Canterbury and York (see below), though with substantial minority opposition in some of the Houses, but was rejected by the House of Commons. A Church-appointed commission on Church-State relations reported in January 1952 and suggested certain changes in the relations between Church and State, but it was opposed to disestablishment; its report was unanimously accepted by the Church Assembly.

The Church is organized mainly by geographical areas (parishes and dioceses), and not by congregations. Every Englishman is born in a parish—about two-thirds being baptized by the Established Church—and he tends to look to the Church for personal services (baptism of children, marriage and burial) and to expect it to play a part in local life. Only those who are baptized and confirmed may receive the Holy Communion but anyone who is baptized and not a member of another Church and who is over 18 years of age may apply for membership of the electoral roll of the parish where he habitually worships. The total number on the roll is just under 3 million, but this figure does not represent anything like the total Church membership.

Spiritual authority in the Church of England rests in the bishops. There are 43 dioceses, 29 in the province of Canterbury and 14 in that of York. The most ancient authoritative bodies in the Church in matters of doctrine and discipline are the Convocations of Canterbury and York. Each is presided over by its archbishop and consists of an upper house of bishops and a lower house of deans, archdeacons and elected clergy. The Houses of Convocation meet separately or together in May and October.

In 1919 by Act of Parliament the Church of England was given a National Assembly, commonly called the Church Assembly. This consists of three houses, Bishops, Clergy and Laity. The Laity (346 in number, including about 85 women) are elected on the basis of the electoral rolls to represent their dioceses. The Church Assembly may pass regulations and measures. Regulations affect matters which do not require parliamentary consent; thus, for example, the Diocesan Conferences were set up in 1935 by regulation. Measures, when passed through successive stages, are presented to the Ecclesiastical Committee (15 members from the House of Commons and 15 from the House of Lords). This committee reports on the expediency and possible legal results of the measure. On its advice the measure is either laid before Parliament and forwarded on resolution for the Royal Assent or, more rarely, is the subject of debate like any other Bill. The advantages to the State are the removal of the greater part of church business from its overcrowded debating time, and to the Church the initiation, discussion and framing of necessary matters by a fully representative church body and their speedy passing into operation.

The Assembly co-ordinates the vast scattered labours of the Church through Councils which report to it annually. The Training Colleges Council maintains 24 colleges for the training of teachers—an indication of the part played by the Church in the country's educational system. The Schools Council, in co-operation with the National Society, deals with matters affecting the Church Schools. Other councils include the Central Advisory Council of Training for the Ministry. Selection of ordination candidates lies in the power of the bishops, but they have recently agreed that candidates under 40 years of age shall attend one of the Council's 'selection centres' where a group of assessors spend several days with the men and discuss with them the future training which would best suit their needs. There are at present 24 theological colleges in England, one in Ireland, one in Scotland, and two in Wales.

At the time when the Church Assembly was set up the laity were associated in the government of the local churches through new elected bodies, the Parochial Church Councils.

There are Anglican Churches in Ireland, Scotland and Wales, but these are not established. The Church of Ireland has 14 dioceses or united dioceses, and some 400,000 members; the Episcopal Church in Scotland, seven dioceses and some 106,000 members; and the Church in Wales, six dioceses and some 200,000 members.

Outside the United Kingdom the Anglican Communion exists wherever Englishmen have gone as settlers, traders and missionaries. The Protestant Episcopal Church in the United States of America, the Church of India, Pakistan, Burma and Ceylon, and the Anglican Churches of South Africa, Canada, Australia, New Zealand, the West Indies, China, Japan, and West Africa are all autonomous members of the Anglican Communion, while there are 21 oversea dioceses, mainly in Africa and Asia, which are under the jurisdiction of the Archbishop of Canterbury.

On 8th May 1955 two of these Church of England dioceses, namely Nyasaland and Northern Rhodesia, will join with the dioceses of Mashonaland and Matabeleland from the Church of the Province of South Africa to form a new autonomous Church of the Province of Central Africa, the Archbishops of Canterbury and Cape Town respectively relinquishing their jurisdictions in these areas.

Since 1867, except for the war years, the Lambeth Conference has met every tenth year as an unofficial consultation between all Anglican bishops. It has no authority but enjoys great moral prestige, and its findings on doctrine, discipline, relations with other communions, and on the attitude of the Churches to political and social questions are widely read. In August 1954, the first of a series of Anglican Congresses, including clergy not in episcopal orders and laymen as well as bishops, was held in Minneapolis, Minnesota, U.S.A. The Congresses will take place between the Lambeth Conferences.

The Church of Scotland

The established Church in Scotland is the Church of Scotland, which in government is Presbyterian. It has been described as 'the supreme example of a Church which is established and yet is free'. Whereas Episcopacy in church government is a hierarchy of persons, in Presbyterianism there is a hierarchy of courts. All ministers are of equal status, and the Church is governed locally by the Kirk Session, consisting of the minister and elected elders: above this is the court of the Presbytery, then that of the Synod, and finally the General Assembly, which meets annually and consists of elected ministers and elders presided over by an elected Moderator who serves for one year. The Sovereign is represented at the General Assembly by the Lord High Commissioner. The complete independence of the Church of Scotland to appoint its own officers and decide all matters of doctrine and discipline has been fought for by the Church with the utmost vigour down the years. The freedom of the Church is recognized by Parliament without being the subject of debate or modification. The thorough training of the ministry—lasting a minimum of six years—has given the Church a high reputation for scholarship and has in turn influenced the standard of education in the country. The communicant membership of the Church is over a million and a quarter.

The Free Churches

The largest of the Free Churches, formerly more generally known as the Nonconformist Churches, is the Methodist Church, the product of a union

of Methodist Churches in 1932. It has three-quarters of a million adult full members. The supreme authority in the Church is the Annual Conference and the system of government is in many ways presbyterian; the Leaders' Meeting corresponding to the Kirk Session, with Circuit Meetings and District Synods resembling Presbytery and Synod. It is not, however, the form of government that distinguishes Methodism from other Churches. Starting as a powerful evangelistic movement within the Church of England in the eighteenth century under the leadership of the brothers John and Charles Wesley, the Methodists had no idea of founding a Church until forbidden to preach by ecclesiastical authority. One of the Church's characteristics is its strong emphasis on lay leadership. There are more than 25,000 trained lay preachers sharing the ministers' work and preaching in thousands of local churches.

The Congregational and Baptist Churches both regard the Church as a covenanted fellowship of believers, ministers being called to special service and set aside, trained and recognized by the Church. Local churches have formed county and national unions, whose secretariat and assemblies, however, have no compulsive authority over them, though much influence.

The Congregationalists in Britain number 227,000 and the Baptists 335,600 adult members. The importance they both attach to the autonomy of the local church meeting has been an influential factor in the development of British democratic methods. They both admit women to the ministry. Baptists differ from Congregationalists in not practising infant baptism.

The Presbyterian (or Calvinistic Methodist) Church of Wales, which arose from the revivalist movement led by Howell Harris in 1735, embraces a large section of the Welsh-speaking population: its adherents number some 211,000.

Next in size among Presbyterian Churches is the Presbyterian Church in Ireland. The Presbyterian Church of England is organized in 14 Presbyteries and its highest court is the General Assembly. It admits women to the eldership.

The Society of Friends, or Quakers, founded in the middle of the seventeenth century by George Fox, have no ordained ministry, and do not observe the Sacraments. They have borne a consistent witness to pacifism, and their influence, especially in social reform and the relief of suffering, has been out of all proportion to their number (20,000). There are about 300 Unitarian and Free Christian Churches united by loyalty to the principle of freedom of thought in religion. Since 1904 they have admitted women to the ministry. The Salvation Army, founded in 1878 by William Booth, a Methodist, replaces ecclesiastical by military terminology. William Booth's mission to the poorest attracted first the scorn and then the respect of a large public. The movement is now world-wide and its social work is well supported.

The Christian Scientists have over 340 branch churches and societies in Britain.

The Roman Catholic Church

The Roman Catholic Church in the United Kingdom claims nearly four million adherents including children. The head of the Church in England is the Cardinal Archbishop of Westminster. There are 18 dioceses and nearly 2,000 parishes. The Church attaches great importance to educating children in its own schools. Schools, social work and many institutions are staffed by the great Roman Catholic Orders for men and women.

Jewry

The virtual destruction of whole Jewish communities on the Continent has left English Jewry as the largest group of Jews in Europe. These same events have

caused religious organizations among Jews to gain in numbers and influence. The two main divisions are between Orthodox and Progressive Jews and each has within it several groups of congregations and synagogues. The Chief Rabbi is the head of the largest group within the Orthodox Jews.

Other Non-Christian Communities

Among other non-Christian communities in Britain, the Muslims are the most widely represented. The principal mosque is the Shah Jehan Mosque at Woking, and there are also mosques in London, Birmingham, Manchester, Cardiff and Glasgow.

A Buddhist temple was ceremonially opened in South Kensington, London, in May 1954.

Co-operation between Churches

An outstanding feature of recent years has been the growth of co-operation between the Churches. The British Council of Churches was founded in 1942 and includes official representatives from all the Churches of the British Isles with the exception of the Roman Catholic Church. The Council facilitates common action between the Churches and seeks to further the cause of Christian unity. The Archbishop of Canterbury is President. In addition, many though not all of the Free Churches in Britain are members of the Free Church Federal Council (formed in 1940 by the amalgamation of the Federal Council of Evangelical Free Churches with the National Free Church Council) the aims of which are to promote unity and joint action between the Free Churches and to provide a channel through which the Free Churches can communicate and negotiate with central and local government organs as a united body.

The Church of England, the Church of Scotland and the Free Churches in England, Scotland, Ireland and Wales also participate in the World Council of Churches which was constituted at Amsterdam, Holland, in 1948, and held its Second Assembly at Evanston, Illinois, U.S.A., in August 1954. The Council links together 163 Churches in 48 nations for co-operation in action and the study of common problems.

Co-operation of other Churches with the Roman Catholic Church takes place on specific issues but there is no machinery of continued co-operation. The Council of Christians and Jews works for better understanding between members of the two religions, and deals with problems arising in the social field.

THE PROMOTION OF THE SCIENCES

While the promotion of the sciences in the United Kingdom is largely the concern of those learned societies and institutions devoted specifically to this end, only a small part of the research which is vital to science is carried out directly by them. Most of the 'pure' or 'fundamental' research is conducted in the universities, which also play an essential part in promoting the sciences by maintaining a steady supply of trained scientists. In practice it has become impossible to distinguish clearly between science and its extensive applications in everyday life, with the result that scientific research in the widest sense has become the concern also of industry and of various Departments of Government.

In recent years it has become an acknowledged responsibility of the Government not only to undertake research directly but also to keep under review the facilities for the training of scientists, to encourage fundamental research, to finance certain research projects, and to ensure that adequate research is directed to matters of

national interest. As a result a system of collaboration has developed between the universities, industry, the learned societies and the Government which is of great value to the community and leaves the greatest possible measure of freedom to individual scientists.

Though scientific research is carried out mainly under three different kinds of administration—university, industry and Government—there is strong liaison and close co-operation between them, while the learned societies remain free to play a most important part in the discussion and publication of the results of research.

Important work is also undertaken by independent organizations—for example, in medical research, by the British Empire Cancer Campaign, the Imperial Cancer Research Fund, the Nuffield Foundation, the Lister Institute of Preventive Medicine, and by some large pharmaceutical firms. The Nuffield Foundation, which was established by Lord Nuffield in 1943, has a wider scope. Its aims are: the advancement of health and the prevention and relief of sickness; the advancement of social well-being; the care and comfort of the aged poor; the advancement of education; and such other charitable purposes as shall be declared by Lord Nuffield in his lifetime and by the trustees after his death. Prominent among the Foundation's many activities are the promotion of medical, scientific and social research and the development of medical services and of technical and commercial education. Its resources consist of a fund of £10 million provided by Lord Nuffield and of gifts and bequests from other persons. The Foundation's total income over the ten years 1943 to 1953 was £5,245,675 and its grants in that period totalled £4,208,586.

THE LEARNED SOCIETIES

The learned societies have had a profound and lasting influence upon the development and organization of science in Britain; not only have they provided the background for the continuity of research from the seventeenth century onwards, but they have been a meeting ground where all scientists can fgather for the exchange of ideas, and a reliable source from which new ideas for the enrichment of knowledge can flow. Although today the bulk of research operations is conducted under auspices other than theirs, the learned societies have retained their traditional function of facilitating the spread of scientific knowledge and the application of new discoveries.

At present there are over 200 learned scientific societies in Britain with approximately 400 scientific publications. There are also numerous technical institutions and professional associations, many of which are playing a distinguished part in promoting their own branches of science and are interested in the education and professional well-being of their members. Prominent examples of these are the British Medical Association, the Institution of Civil Engineers, the Institution of Mechanical Engineers, the Institution of Electrical Engineers, the Institution of Metallurgists, the Royal Institute of Chemistry, the Institute of Physics, and the Institute of Biology.

The Royal Society, founded in 1660, occupies a unique place in the country's scientific affairs, although for two centuries scientists were in a minority among its members, whose interests lay mainly in history, art, archæology or exploration. The Society has always been independent of State control but its advice on scientific matters has frequently been sought by the Government. Today its influence remains as strong as ever and its Fellows serve on most, if not all, of the Advisory Councils of Government Departments.

In addition the Society is responsible for the administration of many research funds and special funds derived from various sources and a number of Government

grants. These funds and grants are used for the promotion of science through research, publications, congresses, the award of medals, lectures, and in many other ways. Its Fellowship consists of approximately 500 eminent scientists and 50 foreign members. Admission of the former is restricted to 25 a year, and of the latter to four a year; a few eminent non-scientists are also elected to Fellowships. The Society maintains a library (145,000 books of a purely scientific nature), issues a large number of publications, including the *Philosophical Transactions* and the *Proceedings* and convenes conferences which are attended by scientists from all countries.

The Royal Society of Arts (originally the Society for the Encouragement of Arts, Manufactures and Commerce) was founded in 1754, and as it was the first society of its kind its work was at first very wide, covering scientific, technical, industrial and commercial matters on a world-wide scale. As institutions devoted to the specialized branches of science and industry came to be established, the Society gradually abandoned some of its earlier fields of work, but it is still a recognized forum for the discussion of technical and other subjects.

The Royal Institution was founded in 1799 as a public body for facilitating the introduction of useful mechanical inventions and improvements, and for teaching the application of science to everyday life. Later it undertook the 'promotion of chemical science by experiments and lectures for improving arts and manufactures', and 'the diffusion and extension of useful knowledge'. Its character, however, was largely determined by the work of Sir Humphry Davy and Michael Faraday who established a tradition of research. Today the Institution has extensive research laboratories, and lectures are given on the recent developments in science and other branches of knowledge. Its library of 70,000 books includes many early scientific works and manuscripts.

The British Association for the Advancement of Science was founded in 1831 to promote general interest in science and its applications. At the present day one of its chief activities is the Annual Meeting. Its 13 sections cover the whole range of pure and applied science other than medical science, and there is a division for studying the social and international relations of science. Collaboration with other scientific organizations has always been an important function of the British Association, and it has an organized relationship with over 150 scientific bodies and learned societies. It has also played an important part in the development of science by taking or recommending action to remove obstacles to the discovery and application of scientific knowledge.

THE UNIVERSITIES

The universities carry the main responsibility for the pursuit of fundamental research and for the training of scientists. During recent years there has also been a considerable expansion of technological training and research facilities within the universities, all of which now offer work in one or more technological subjects (applied science, engineering, metallurgy, industrial fermentation, etc.). Early in 1953 it was decided that the Imperial College of Science and Technology (part of London University) should undergo a major expansion with the aim of increasing the number of scientists and technologists under full-time training from the present figure of 1,650 to 3,000 by the end of 1962.

The 20 universities and the 4 university colleges in the United Kingdom (see p. 314) all have laboratories or research departments. Over two-thirds of the income of the universities comes from Government sources. There is no direct departmental control and the method of administering the grant—through the University Grants Committee (see p. 314)—ensures academic freedom. Additional funds for

the prosecution of research are also secured in some instances by the private endowment of research fellowships generally awarded by the universities to selected persons, or by grants from outside bodies tenable at the universities. Examples are the Leverhulme Fellowships, the Imperial Chemical Industries Fellowships and the research grants of the Nuffield Foundation.

The universities are also assisted by grants from industry and commerce and from the Government Research Councils. An example of the close co-operation that has been achieved between several branches of industry and the research departments of universities is the Glass Delegation of the University of Sheffield. This is responsible for the general direction of the work of the Department of Glass Technology and is composed of members appointed by the Council of the University and representatives of firms and companies who subscribe funds for the furtherance of training and research. By these means the universities are closely associated with the Government research departments and with the most important industries in the country.

RESEARCH IN INDUSTRY

Industrial research in Great Britain is conducted by individual industrial firms and organizations independently of Government aid, by co-operative Research Associations which make use of facilities afforded by the Government, by sponsored research institutes, and by universities and a number of the major technical colleges.

The main nationalized industries have their own research establishments and also give financial support to organizations concerned with research into matters of interest to them. An account of the provision for research by the National Coal Board, the British Electricity Authority and the Gas Council is given on pp. 153, 160, and 163, respectively.

Industrial Organizations

The Industrial Research Secretariat of the Federation of British Industries has conducted a comprehensive survey (1945-46) of the research work done in private organizations (*Scientific and Technical Research in British Industry*, FBI, July 1947). This showed that about 1,000 British firms were conducting research: 420 spent at least £1,000 a year on research, and the total sum spent by industry on research and development was approximately £30 million. The number of workers engaged in industrial research was estimated at 45,000; about 10,000 were qualified staff with a university degree or equivalent, and nearly one-half of these were chemists. About 100 firms had first-class research facilities and extensive research programmes which embraced both pure and applied research. The survey showed that about 300 firms were in touch with universities and technical colleges on research questions, and 60 firms had a very close connection, through endowing scholarships and research fellowships, with appropriate universities. It also revealed that more than 300 of the firms surveyed were members of a Research Association and that more than half of these were members of more than one Research Association.

A later report (*Research and Development in British Industry*, FBI, July 1952) suggested that, in the year 1950-51, the total expenditure on research and development had increased by between 50 and 100 per cent since 1945-46, and the number of qualified staff by about 50 per cent. The other figures remained substantially the same.

Research Associations

One of the first acts of the Advisory Council for Scientific and Industrial Research (see pp. 343 and 344), when it was established in 1915, was to recommend a scheme

by which the Government associated itself with groups of firms having similar interests to form Research Associations. Today there are 42 such Research Associations,¹ with a combined income of £4 million of which about one-third is contributed by the Government through the Industrial Grants Committee of the Department of Scientific and Industrial Research (see pp. 344-5). The amounts of the Government grants are related to the contributions made by the industries concerned.

The Research Associations are autonomous bodies, governed by their own councils, the large majority of whose members are representatives of industry. The councils are advised by research committees in the preparation of research programmes.

Sponsored Research Institutes. A number of sponsored research institutes have been established to meet the needs of private firms which are unable to maintain fully equipped research laboratories. They are establishments where research can be carried out confidentially so that the results and any patents which may arise from it are retained as the property of the sponsoring body. Examples of such institutes are the *Fulmer Research Institute* and the *Sondes Place Research Institute*.

National Research Development Corporation. The National Research Development Corporation (NRDC) was set up by the Board of Trade in 1948. Its function is primarily to develop in the public interest, inventions resulting from research carried out by Government Departments and other public bodies. Under the Development of Inventions Act, 1954, however, NRDC is now allowed, under certain conditions, to initiate research as well as to develop inventions resulting from research. It is an independent body, subject only to general direction by the Board of Trade, with powers to borrow from Government funds up to £5 million in the first ten years of its life. Projects selected for development include electronic digital computers, Merton diffraction gratings, a lightweight power unit, and the production of hecogenin for the manufacture of cortisone.

GOVERNMENT RESEARCH ORGANIZATION

Early Developments

Although the active participation by the Government in scientific effort is, for the most part, a twentieth-century development, its association with science dates from a much earlier time. Interest in navigation led Charles II in 1675 to establish Britain's first State-supported institution—the Royal Observatory at Greenwich²—for the purpose of correcting the tables of the positions of the moon and fixed stars 'for the use of his seamen'. The Geological Survey of Great Britain—the first national institution of its kind in the world—originated in 1835. In 1842 the Department of the Government Chemist was founded, and in 1854 'for the safeguarding of seamen' the Meteorological Office was established by the Board of Trade. All these Government Departments were using scientific knowledge but there was little organized effort towards the application of the discoveries made in pure science. Government scientific organization, like many British institutions, evolved gradually in response to the changing social and economic circumstances of the times.

The need for research in physics and engineering, and particularly into methods

¹ For a complete list of these Research Associations see the Annual Reports of the Department of Scientific and Industrial Research.

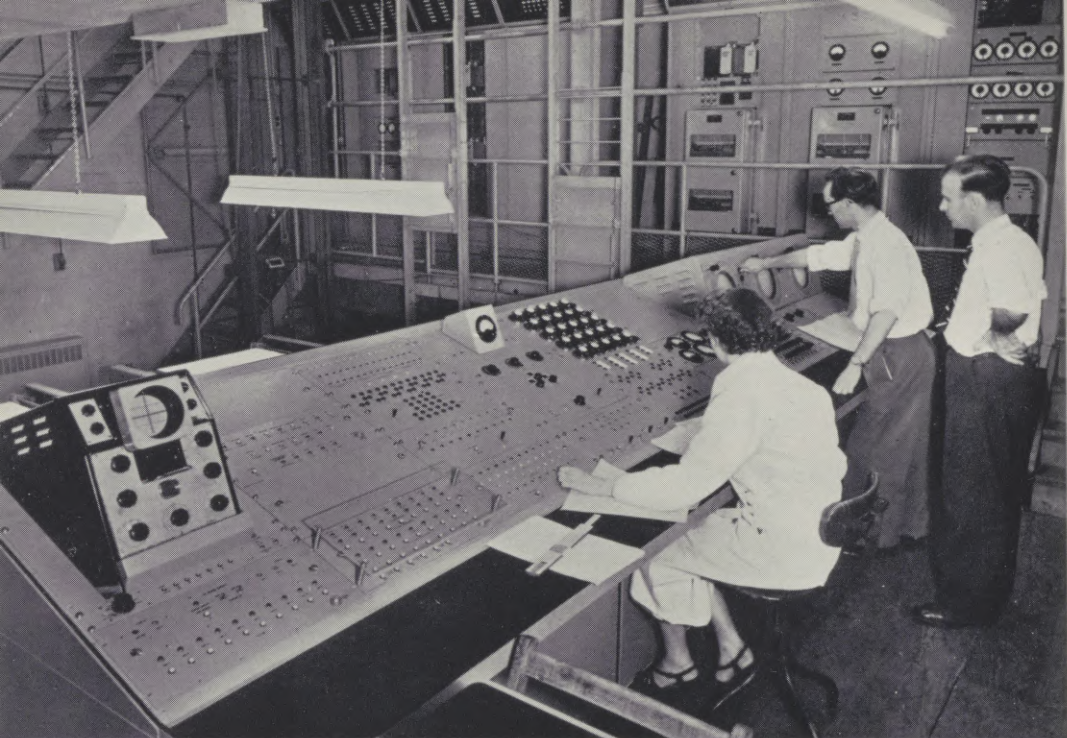
² Now in process of removal to Herstmonceux, Sussex.



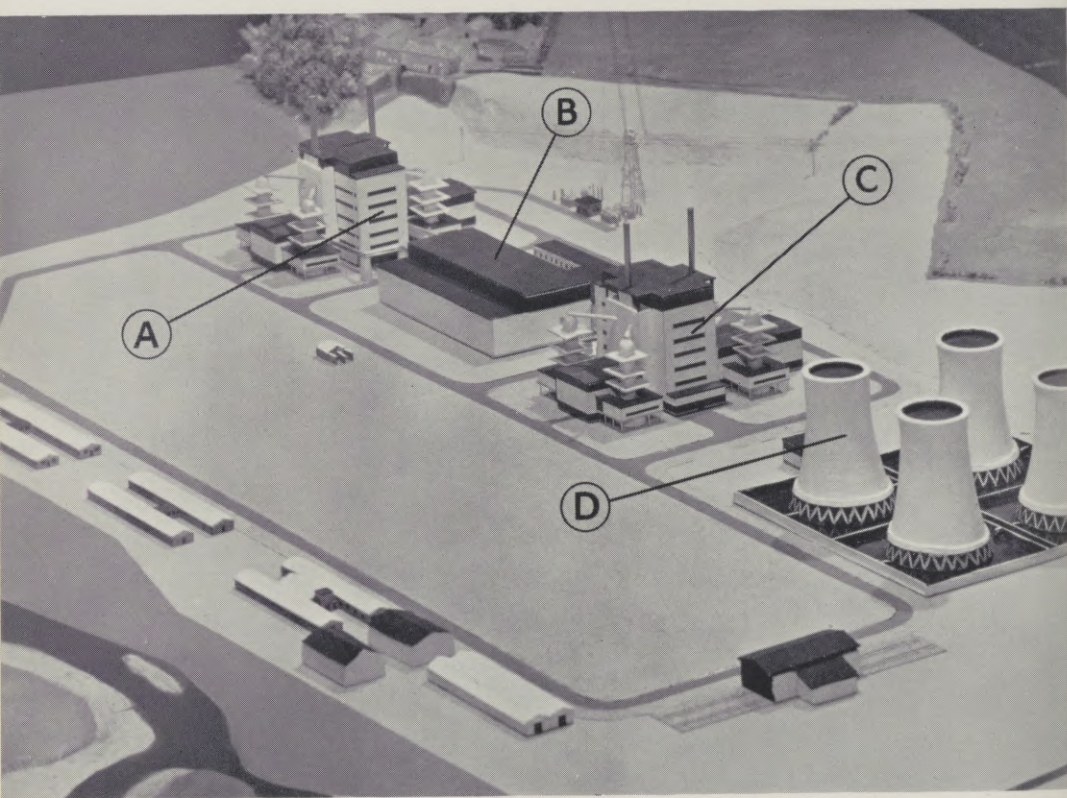
The historic Abbey of Westminster, crowning place of the Kings and Queens of England for nearly 1,000 years.



In the parish church of Uffington, Berkshire.



Control room of the giant calculating machine at the Royal Aircraft Establishment, Farnborough, Hants.



A scale model of the British Atomic Power Station under construction at Calder Hall, Cumberland (pp. 158 and 349). Key: A. and C. Reactors and Vertical Boilers. B. Turbine House. D. Cooling Towers.

of precise measurement, led to the establishment of the National Physical Laboratory under the control of the Royal Society in 1900, with a modest grant from the Treasury towards equipment and a yearly grant towards upkeep.

From 1909, however, the Government assumed a wider responsibility for promoting and encouraging scientific research and since that time its assistance has been adapted to meet the rapidly changing conditions in industry and education.

The Development Commission, appointed in 1909 by the Government, recommended that financial aid should be made available from the Development Fund to 'aid and develop agriculture and rural industries by promoting scientific research'. In 1911 the Development Fund was used to establish a comprehensive scheme which led to the formation of most of the present-day agricultural research institutes.

In 1913 a Medical Research Committee (the forerunner of the Medical Research Council) was appointed to administer the research funds provided under the National Health Insurance Act of 1911.

Up to the outbreak of the first world war, the Government's contribution to scientific research was made directly through such organizations as these, and indirectly through grants administered on its behalf by such bodies as the Royal Society and the Imperial College of Science and Technology.

The recognition of the importance of scientific research and of the application of scientific knowledge to commerce and industry led to the establishment of the Department of Scientific and Industrial Research (DSIR) as a separate Government Department in 1916 (see pp. 49 and 344-5). The Advisory Council for Scientific and Industrial Research, to which all proposals for new work are referred by the DSIR in the first instance, was given responsibility for (1) instituting specific researches; (2) establishing or developing special institutions or departments of existing institutions for the specific study of problems affecting particular industries or trades; (3) the establishment and award of research studentships and fellowships.

In 1918 financial responsibility for the National Physical Laboratory was transferred from the Royal Society to the DSIR, although the Royal Society continued to advise on the scientific direction of the Laboratory.

The Forestry Commissioners were appointed in 1919 with powers to undertake and aid research for the promotion of forestry.

In 1920 the Government established the Medical Research Council with a grant in aid provided directly by Parliament.

The third of the Councils created by the Government for the promotion of research, the Agricultural Research Council, was established in 1931. In addition to its duties as adviser to the Development Commissioners and the Agricultural Departments (for England and Wales and for Scotland), the Council was given funds of its own from which grants could be made for special research projects.

During the second world war a Scientific Advisory Committee to the War Cabinet was created, with the object of co-ordinating defence research and civil research.

The Lord President of the Council, as the Minister responsible for the three Research Councils, and as President of the Scientific Advisory Committee, came to be regarded as the member of the Cabinet responsible for the direction of Government scientific organization.

Post-war Developments

At the end of the second world war, the Government established an Advisory Council on Scientific Policy 'to advise the Lord President of the Council in the exercise of his responsibility for the formulation and execution of Government scientific policy'.

The Advisory Council, appointed by the Lord President in January 1947, has 15 members—12 eminent scientists from the universities, industry and Government service, and 3 senior Government administrators.

In the same year the Defence Research Policy Committee was established 'to advise the Minister of Defence and Chiefs of Staff on matters connected with the formulation of scientific policy in the defence field'.

These two bodies replaced the Scientific Advisory Committee to the War Cabinet.

In order to give adequate attention to each of the subjects within its wide range of interest, the Advisory Council has established the following standing committees:

The Committee on Scientific Manpower

The Scientific Library and Technical Information Committee

The Committee on Overseas Scientific Relations.

Government Machinery for Civil Scientific Research

The principles underlying Government scientific organization are briefly as follows:

1. The Lord President of the Council is responsible for the formulation and execution of Government scientific policy and is advised by the Advisory Council on Scientific Policy on general questions which relate to the whole field of civil science.
2. The Lord President is the Minister responsible to Parliament for the Department of Scientific and Industrial Research, the Medical Research Council, the Agricultural Research Council, and the Nature Conservancy, and is chairman of the three Privy Council Committees to which they report—the committees for Scientific and Industrial Research, Medical Research, and Agricultural Research and Nature Conservation.
3. The Lord President is also the Minister responsible to Parliament for general oversight of the development of atomic energy, and appoints the members of the Atomic Energy Authority (see p. 348).
4. Other Ministers are responsible for the scientific establishments within their own Departments.
5. The advice of the Research Councils is at the disposal of the Executive Departments and there is close liaison between them, but the Research Councils are not subject to departmental control.

Department of Scientific and Industrial Research

The DSIR¹ is responsible to the Committee of the Privy Council for Scientific and Industrial Research of which the Lord President is chairman. This Committee is advised by the Advisory Council for Scientific and Industrial Research (see pp. 341-2 and 343), which includes in its membership eminent scientists and leading industrialists, two members closely connected with organized labour and assessors appointed by Government Departments.

With the exception of medicine, agriculture and atomic energy, the DSIR includes in its scope all branches of natural science and their application to industrial processes. Its activities fall into three main groups:

1. Scientific research in the national interest and to meet the needs of Government Departments.

¹ See also p. 49.

2. The encouragement of research and the application of scientific knowledge in industry.
3. The encouragement of fundamental research at universities and elsewhere, and the maintenance of an adequate supply of trained research workers for laboratories of all kinds.

The first of these functions is discharged through 13 national research organizations¹ under the Department's own control and direction and financed from its own Vote, and one, the Fire Research Organization, which is maintained by the Department and the Fire Offices Committee jointly.

The National Physical Laboratory at Teddington, Middlesex, is the largest of the DSIR establishments and conducts research in a variety of branches of physics. These include aerodynamics; electricity; electronics; X-ray, ultra-violet, visible and infra-red radiations; mathematical computation; metallurgy; heat and temperature measurement; sound and noise; and ship design. The Laboratory also maintains the British primary standards of length, mass, temperature, illumination, electrical and other physical units. The facilities for accurate measurement are also employed for precision work and determination of the physical properties of materials. The Laboratory carries out high-grade testing of a wide range of apparatus and materials.

The second of the DSIR's functions is discharged mainly through the autonomous Research Associations (see p. 342); while its third function is carried out by means of grants to individual workers or institutions for special investigations.

The close contacts maintained between the DSIR and other Government Departments, Research Associations and other bodies help to ensure that the scientific resources of the Department are applied to the solution of problems which are of most importance to the national economy and are used to make the maximum contribution to improving industrial efficiency.

Medical Research Council

The Medical Research Council (MRC), the successor of the Medical Research Committee (see p. 343), was incorporated under its present title by Royal Charter in 1920.

The MRC is responsible to the Committee of the Privy Council for Medical Research of which the Lord President is chairman, the Minister of Health is vice-chairman, and the Secretaries of State for the Home Department, Scotland, Commonwealth Relations, and the Colonies are members.

The MRC has 12 members. Nine of these members are appointed for their scientific qualifications; and of the other three, one must be a member of the House of Lords and one a member of the House of Commons. The scientific members are appointed by the Privy Council Committee after consultation with the Medical Research Council and the President of the Royal Society.

¹ National Physical Laboratory	Fuel Research Station
Building Research Station	Geological Survey and Museum of Practical
Chemical Research Laboratory	Geology
Food Investigation Organization including:	Hydraulics Research Station
Low Temperature Research Station	Mechanical Engineering Research
Torry Research Station and Humber	Laboratory
Laboratory	Pest Infestation Laboratory
Ditton Laboratory	Radio Research Station
Smithfield and Covent Garden	Road Research Laboratory
Laboratories	Water Pollution Research Laboratory.
Forest Products Research Laboratory	

The Council's chief function is to undertake or promote scientific investigations to obtain new knowledge likely to be of value in the field of curative and preventive medicine. In promoting investigations on particular subjects it has the advice of a large number of expert technical committees which it appoints for the purpose. In general, the arrangements for the support of research fall under three headings:

1. Investigations by members of the Council's scientific staff, mostly working in the Council's own research establishments.
2. Temporary research grants to independent investigators in universities and elsewhere.
3. Research studentships and travelling fellowships.

The Council's principal research establishment is the National Institute for Medical Research, at Mill Hill, London. In addition, the Council maintains some 50 research units, departments or groups attached to university or hospital institutions; some of these are concerned with clinical research and others with laboratory studies.¹

The Public Health Laboratory Service is administered by the MRC on behalf of the Ministry of Health. It consists of a chain of public health laboratories throughout England and Wales, the largest establishment of the Service being the Central Public Health Laboratory, Colindale (London). This laboratory includes the National Collection of Type Cultures, the Standards Laboratory for Serological Reagents, and reference laboratories specializing in the identification of particular groups of infective micro-organisms, as well as other specialized laboratories such as the Air Hygiene and Food Hygiene Laboratories.

Agricultural Research Council

The Agricultural Research Council (ARC) was established by Royal Charter in 1931. It is responsible to the Committee of the Privy Council for Agricultural Research and Nature Conservation, of which the Lord President of the Council is

¹ Department of Clinical Research, University College Hospital Medical School, London	Radiobiological Research Unit, Atomic Energy Research Establishment, Harwell
Clinical Research Unit, Guy's Hospital, London	Radiotherapeutic Research Unit, Hammer-smith Hospital, London
Neurological Research Unit, National Hospital, Queen Square, London	Otological Research Unit, National Hospital, Queen Square, London
Department of Experimental Medicine, Cambridge University	Wernher Research Unit on Deafness, Royal National Throat, Nose and Ear Hospital, Golden Square, London
Clinical Endocrinology Research Unit, Edinburgh Royal Infirmary	Ophthalmological Research Unit, Institute of Ophthalmology, Judd Street, London
Clinical Chemotherapeutic Research Unit, Glasgow University	Group for Research in the Physiology of Vision, Institute of Ophthalmology, Judd Street, London
Tuberculosis Research Unit, Medical Research Council Laboratories, Hampstead, London	Group for Research in Occupational Optics, Institute of Ophthalmology, Judd Street, London
Electro-Medical Research Unit, Stoke Mandeville Hospital, Bucks	Unit for Research on the Experimental Pathology of the Skin, The Medical School, University of Birmingham
Blood Transfusion Research Unit, Post-graduate Medical School of London	Nutrition Building, Mill Hill, London
Blood Products Research Unit, Lister Institute, London	Human Nutrition Research Unit, Medical Research Council Laboratories, Hampstead, London, and Field Research Station, Fajara, Gambia, W. Africa
Blood Group Research Unit, Lister Institute, London	
Blood Group Reference Laboratory, Lister Institute, London	

[Continued on p. 347.]

chairman, and the Minister of Agriculture and Fisheries is vice-chairman. The other members of the Committee are the Secretaries of State for the Home Department, Scotland, and the Colonies, and the Ministers of Education and Housing and Local Government.

The ARC consists of 15 members, five appointed for their general experience of, and interest in, agriculture, and the rest for their scientific qualifications. The Privy Council Committee, after consulting the ARC itself and (as regards the scientific members) the President of the Royal Society, makes the appointments.

The Council plans and co-ordinates work over the entire field of agricultural research and is assisted in this task by standing committees and a number of technical committees and conferences.

The Council advises both the Ministry of Agriculture and Fisheries and the Department of Agriculture for Scotland on the programmes, estimates and staffing of the Agricultural Research Institutes¹, which with certain exceptions have their

Continued from p. 346.

Dunn Nutritional Laboratory, Cambridge University	Toxicology Research Unit, Serum Research Institute, Carshalton, Surrey
Dental Research Unit, King's College Hospital, London	Environmental Hygiene Research Unit, London School of Hygiene and Tropical Medicine
Unit for Research on the Molecular structure of Biological Systems, Cavendish Laboratory, Cambridge University	Climate and Working Efficiency Research Unit, Oxford University
Biophysics Research Unit, King's College, London	Royal Naval Tropical Research Unit, University of Malaya
Spectrographic Research Unit, London Hospital	Group for Research on Bilharzia Disease, Winches Farm, St. Albans
Cell Metabolism Research Unit, Sheffield University	Applied Psychology Research Unit, Cambridge University
Chemical Microbiology Research Unit, School of Biochemistry, Cambridge University	Group for Research in Industrial Psychology, University College, London
Group for Research in Chemotherapy, Molteno Institute, Cambridge University	Unit for Research in Occupational Adaptation, Maudsley Hospital, London
Group for Research in Chemotherapy, Manchester University	Social Medicine Research Unit, Central Middlesex Hospital, London
Department for Research in Industrial Medicine, London Hospital	Statistical Research Unit, London School of Hygiene and Tropical Medicine
Industrial Injuries and Burns Research Unit, Birmingham Accident Hospital	Serum Research Institute, Carshalton, Surrey
Pneumoconiosis Research Unit, Llandough Hospital, Penarth, Glamorgan	Antibiotics Research Station, Clevedon, Somerset
	Laboratory Animals Bureau, Medical Research Council Laboratories, Hampstead, London.

¹ Rothamsted Experimental Station, Harpenden, Herts
 Plant Breeding Institute, Cambridge
 John Innes Horticultural Institution, Bayfordbury, Herts
 Horticultural Research Station, East Malling, Kent
 Agricultural and Horticultural Research Station, Long Ashton, Bristol
 Glasshouse Crops Research Station, Tottington, Sussex
 Welsh Plant Breeding Station, Aberystwyth
 Institute for Research in Plant Physiology, Imperial College of Science and Technology, London

National Institute for Research in Dairying, Reading
 Foot and Mouth Disease Research Institute, Pirbright, Surrey
 National Vegetable Research Station, Wellesbourne, Warwickshire
 Grassland Research Institute, Drayton, Warwickshire, and Hurley, Berks
 National Institute of Agricultural Engineering, Silsoe, Bedfordshire
 Poultry Genetics Station, Cambridge
 Hops Research Centre, Wye College, Kent
 Macaulay Institute for Soil Research, Aberdeen

[Continued on p. 348.]

own governing bodies but are almost wholly financed from State funds by means of annual block grants from the Agricultural Departments. The Council has 14 research stations and units under its direct control in Great Britain.¹

In addition the ARC devotes part of its funds to encouraging research by means of special research grants which are allocated to one or other of the research institutes, to university departments or to advisory centres. It also awards scholarships and training grants.

Nature Conservancy

The Nature Conservancy was established by Royal Charter in 1949 and is responsible to the Committee of the Privy Council for Agricultural Research and Nature Conservation. Its functions, as summarized in the charter, are 'to provide scientific advice on the conservation and control of the natural flora and fauna of Great Britain; to establish, maintain and manage nature reserves in Great Britain (see p. 332), including the maintenance of physical features of scientific interest; and to organize and develop the research and scientific service related thereto'.

Atomic Energy Authority

From 1946 to 1953 responsibility for atomic energy research and development rested with the Minister of Supply. By April 1953, however, the Government had decided in principle to transfer responsibility for atomic energy from the Minister of Supply to a non-departmental organization, in view both of the growing importance of the industrial applications of atomic energy and the need for an organization for atomic energy more akin to that of a large industrial undertaking. It was subsequently announced that the Minister to be generally responsible for the control and development of atomic energy in the United Kingdom would be the Lord President of the Council.

As an interim measure the Department of Atomic Energy was set up under the Lord President; this Department took over responsibility for the operation of the atomic energy project from 1st January 1954. Subsequently Parliament passed the Atomic Energy Authority Act, 1954, and the United Kingdom Atomic Energy Authority, set up under that Act, took over responsibility for the project from the Department of Atomic Energy on 1st August 1954. The Lord President is still responsible to Parliament for atomic energy policy generally and also, subject to the consent of the Treasury, for providing funds for the Authority out of money provided by Parliament. In particular he has the duty of securing that, in the Authority's operations, the proper degrees of importance are attached to the various applications of atomic energy. He is assisted, in the exercise of these responsibilities, by the Atomic Energy Office, which also provides any necessary liaison between

Continued from p. 347.

Scottish Society for Research in Plant
Breeding, Edinburgh
Animal Diseases Research Association,
Moredun Institute, Edinburgh
Rowett Research Institute, Aberdeen

Hannah Dairy Research Institute, Ayr
Scottish Horticultural Research Station,
Mylnefield, Aberdeen
Scottish Agricultural Machinery Testing
Station, Howden, Midlothian.

¹ Experimental Field Station, Compton,
Berks
Animal Breeding and Genetics Research
Organization, Edinburgh
Institute of Animal Physiology, Babraham,
Cambridgeshire
Poultry Research Centre, Edinburgh
Plant Virus Research Unit, Cambridge
Unit of Insect Physiology, Cambridge

Unit of Animal Reproduction, Cambridge
Unit of Experimental Agronomy, Oxford
Unit of Biometrical Genetics, Birmingham
Unit of Microbiology, Sheffield
Unit of Soil Physics, Cambridge
Potato Genetics Station, Cambridge
Potato Storage Investigation Team, Sutton
Bonnington, Leicestershire
Unit of Plant Nutrition, Bristol.

the Authority and other Government Departments. The Minister of Supply continues to be responsible for providing atomic weapons to the Services and places contracts with the Authority for the production of nuclear components of such weapons and research related to them; the Authority is free to conduct experimental work which may lead to improved types of warheads for such weapons.

The Authority, whose members are appointed by the Lord President, consists of not less than eight and not more than 11 members. Eight members, three of whom are serving on a part-time basis, were originally appointed.

The Authority, like other statutory corporations, is free from day-to-day Government control (subject to the power given to the Lord President to issue directions to the Authority on any matter where he considers over-riding national interests require his intervention), but differs from them in that the bulk of its revenue is derived from money voted by Parliament and in that its accounts are examined and certified by the Comptroller and Auditor General (see p. 248).

The Authority's establishments, and their respective functions, are as follows:

The Atomic Energy Research Establishment at Harwell, in Berkshire, is responsible for fundamental research into nuclear physics and atomic energy, and provides basic scientific information to the other establishments. It houses the United Kingdom's first two experimental piles, *GLEEP* and *BEP0*, a new zero energy experimental fast reactor, *ZEPHYR*, which went into operation on 5th February 1954, and a new heavy water reactor known as *Dimple*, which started working on 1st August 1954.

An Isotope School was established at Harwell in April 1951 (see p. 185) and a Reactor School in September 1954. The first gives training in the handling and measuring of radioisotopes, and the second provides courses in reactor physics and reactor engineering as well as in nuclear physics and metallurgy.

The Radiochemical Centre at Amersham, in Buckinghamshire, is a dependency of the Harwell Establishment. It is concerned with preparing radio-active substances such as radium, radon and radioactive isotopes produced in the atomic piles. These are used for medical, scientific and industrial purposes.

The production of fissile material is directed from the headquarters of the Industrial Group at Risley, near Warrington, Lancashire. Production factories are situated at Springfields, near Preston, Lancashire, where pure uranium is produced from uranium concentrates; at Windscale in Cumberland, where plutonium is produced from uranium by means of atomic piles; at Capenhurst in Cheshire, where there is a gaseous diffusion plant for separating the uranium isotope U235 from the more abundant isotope U238, thus providing a fissile material which can be used as an alternative to plutonium. The Industrial Group is also responsible for the design, construction and operation of the experimental atomic power plant that is being built at Calder Hall, adjoining the Windscale factory, and for the experimental breeder reactor to be built at Dounreay, in Caithness, Scotland.

Research work on atomic weapons is carried on at the Establishment at Aldermaston, in Berkshire, and its out-stations at Woolwich and Fort Halstead.

The work of these establishments is co-ordinated at the headquarters of the Atomic Energy Authority in London.

Other Government-sponsored Scientific Research

All Departments rely on one or other of the Government Research Councils for scientific advice. While some use these bodies as their main source of scientific information, a few have set up supplementary research organizations of their own.

Defence Research with Civil Applications

Research and development undertaken by the Admiralty is almost exclusively directed to meeting the requirements of the Royal Navy, but a substantial amount

of this work has important civil applications. The research activities of the Royal Observatory and the National Institute of Oceanography, which are mainly in the civil field, are administered by the Admiralty.

The Ministry of Supply carries out research needed to meet the technical requirements of defence and is also responsible for research in some civilian fields, e.g., the Royal Aircraft Establishment and the National Gas Turbine Establishment at Farnborough. Some fundamental research is also carried out for the Ministry by universities and industrial organizations.

The Air Ministry is responsible for the Meteorological Office (see p. 40), where the research carried out has many applications on the civil side.

Agriculture

Apart from research at the grant-aided Institutes and the centres financed by the Agricultural Research Council, the Ministry of Agriculture and Fisheries conducts research in its own Veterinary Laboratory at Weybridge, Surrey, and also at its Plant Pathology Laboratory at Harpenden, Herts; and its Infestation Division at Tolworth, Surrey, conducts research into problems affecting the destruction and control of insect pests of stored food, rodent pests and other animal and bird pests. The Department of Agriculture for Scotland maintains a plant pathology laboratory in Edinburgh (carrying out research in entomology and helminthology). In Northern Ireland research in all the major agricultural sciences is carried out directly by the Ministry of Agriculture.

Fisheries

The authorities concerned with fisheries research are the Ministry of Agriculture and Fisheries, which maintains a laboratory for marine research, a number of research vessels, and an experimental station for shellfish investigation; the Scottish Home Department, which maintains a research laboratory at Aberdeen and four research ships; and the Development Commissioners.

The Development Commissioners, through their Advisory Committee on Fishery Research, co-ordinate all fishery research, not only that which is aided by the Development Fund (see p. 343). The latter bears a large part of the cost of fishery investigation by the Ministry of Agriculture and Fisheries and fishery research in Scotland. From it a number of independent institutions receive grants for marine and freshwater research.¹

Food

The Ministry of Food (see p. 42), under the direction of its Chief Scientific Adviser, conducts research in nutrition and food technology. It has experimental laboratories and kitchens in London and has established an experimental factory at Aberdeen to facilitate the commercial development and application of the results of research.

Forestry

The Forestry Commission² is responsible for forestry in Great Britain and undertakes experimental work relating to silvicultural and allied problems. By

¹ The Marine Biological Association, Plymouth
University of Liverpool (Port Erin Biological Station)
Scottish Marine Biological Association, Millport, Isle of Cumbrae
Freshwater Biological Association, Ambleside, Westmorland
Dove Marine Laboratory (King's College, Newcastle upon Tyne).

² See pp. 43 and 150.

means of grants, it also aids forest research work undertaken by various universities and by the Imperial Forestry Institute, Oxford.

Fuel and Power

The Ministry of Fuel and Power has responsibility for research on safety in mines, and plays a direct part in research such as that into the development of coal-consuming gas turbines, underground gasification and total gasification. There is close collaboration between the Ministry, the Scientific Departments of the National Coal Board, the British Electricity Authority, the Gas Council, and the Fuel Research Station of the Department of Scientific and Industrial Research, all of which are responsible for research in their own fields.

Transport

The Ministry of Transport and Civil Aviation is concerned with two main fields of scientific research: research on radio aids to marine navigation, conducted by the Admiralty Signal and Radar Establishment, the cost being borne by the Ministry of Transport and Civil Aviation; and road research, in co-operation with the DSIR, including soil mechanics, materials, construction and road safety.

Land Use and Planning

The Ministry of Housing and Local Government is responsible for policy relating to the use and development of land in England and Wales. Through its Technical Services Directorate, the Ministry deals with technical planning and geographical, geological economic and sociological matters. Similar arrangements are made for Scotland by the Department of Health for Scotland. The Ministry of Health and Local Government is responsible for the general administration of the planning legislation in Northern Ireland.

Building

The Ministry of Works is responsible for reviewing the whole field of research and technical development of the building industry and for ensuring that the results of research are made available to the industry. Research is carried out by the Building Research Station of the Department of Scientific and Industrial Research.

Radio and Telecommunications

The Post Office undertakes scientific research on a wide range of subjects relating to telephone, telegraph and radio systems which is carried out by the Research Branch of the Engineering Department. It also undertakes the experimental development of radio transmitters and receivers for Post Office services and other Government Departments. The Post Office keeps in close touch with the BBC in connection with the development of broadcasting techniques for both sound and vision.

Analytical Chemistry

The Department of the Government Chemist is responsible for providing analytical services to all Government Departments that may require them. It carries out special investigations, e.g., in connection with nutritional and physiological surveys, and conducts fundamental research in infra-red spectrography, chromatography and X-ray study of crystals.

Medicine and Health

The Ministry of Health is responsible for conducting and promoting research into the cause, prevention and treatment of illness. It controls the Public Health

Laboratory Service, which is administered for the Ministry by the Medical Research Council (see pp. 345-6).

The Department of Health for Scotland has similar responsibilities, and an Advisory Committee on Medical Research in Scotland works with the Medical Research Council.

In Northern Ireland, the Hospitals Authority (a statutory body set up by the Minister of Health and Local Government) has permissive powers to conduct or assist medical research. In addition, it has a statutory duty to provide adequate bacteriological and pathological services.

The General Register Office carries out research in four main fields: (1) analysis and interpretation of statistics of causes of death; (2) statistical inquiry into the treatment of cancer and its results; (3) morbidity as revealed in hospital statistics; and (4) mental health.

Colonial Research

The bulk of the research work relating to Colonial development is done locally, but much of it requires close collaboration with research institutes and laboratories in Britain. It is the function of the Colonial Research Council to co-ordinate the work of the specialist committees and to advise on general questions relating to policy.

The Colonial Products Research Council was set up by the Colonial Office in 1943 for the organization of research under its own director. It initiates schemes of research in Colonial raw materials, such as sugar, timber, and mineral oils.

Anti-Locust Research

In 1931 a small locust research organization at the Imperial Institute of Entomology in London was internationally adopted as the world centre for locust research. This organization, later known as the Anti-Locust Research Centre, has during the past twenty years received and co-ordinated information on locust movements and breeding from 40 countries, undertaken scientific research into the life-history and habits of the different species, and investigated and developed methods for their control and destruction. One half of the expenditure on control is contributed by the member countries of the Commonwealth, the United Kingdom itself contributing one third.

Other Research Work

Finally there are a number of scientific institutions administered by Government Departments which undertake a certain amount of research work in addition to their other scientific activities. These include the Royal Botanic Gardens (Kew) and the Ordnance Survey Department.

Scientific Museums

The British Museum (Natural History)—an independent section of the British Museum—contains one of the world's largest collections of natural history material and is recognized as a leading research institution.

The Science Museum illustrates the development of pure and applied science in all countries, but chiefly in Great Britain which has always held a leading place in engineering, agriculture, navigation, mining, aeronautics, and every kind of industrial machinery and process, all of which are represented in the Museum's collections. The geology of Britain is known in more exact detail than that of any other country in the world, and the Geological Survey, responsible for this work, also has an outstanding collection of exhibits in its Geological Museum. These three museums are in South Kensington, London.

Parliamentary and Scientific Committee

The Parliamentary and Scientific Committee was founded at the end of 1939 by members of the House of Commons and replaced the former Parliamentary Science Committee. It is one of a number of informal, unofficial, all-party Parliamentary groups, which have grown up spontaneously and have a varying degree of influence (see p. 30). Membership is open to members of Parliament of any party and in both Houses, and also to nominated representatives of such non-profit-making scientific and technological organizations in Britain as may be affiliated under its constitution. Membership in 1953 comprised 163 members of Parliament and representatives of 85 scientific and technological institutions. The aims and objects of the committee are:

1. To provide members of Parliament with authoritative scientific information from time to time in connection with debates.
2. To bring to the notice of members of Parliament and Government Departments the results of scientific research and technical development which bear upon questions of current public interest.
3. To arrange for suitable action through parliamentary channels whenever necessary to ensure that proper regard is had for the scientific point of view.
4. To examine all relevant legislation and to take such action as may be suitable.
5. To watch the financing of scientific research.
6. To provide its members and other approved subscribers with a regular summary of scientific matters dealt with in Parliament.

Broadly speaking the activities of the committee may be divided under two headings. First it provides, as far as possible, for a regular exchange of information between members of Parliament and scientists; secondly, it endeavours to ensure that action is taken to right matters seen to be wrong in the light of such information.

Scientific Liaison Overseas

The history of scientific progress is essentially a story involving many nations, and the organization of a country's scientific research would be incomplete without provision for adequate liaison with other countries.

Before the second world war a vast amount of international scientific collaboration took place through the exchange of university staffs, the awards of scholarships and fellowships, the close relations existing between the learned societies in this country and their equivalent bodies abroad, and through international conferences and congresses.

The war and the post-war period saw the emergence of a number of new developments in oversea scientific collaboration which reflected the Government's recognition of its responsibility in the whole field of science. The result has been that today there now exist a number of official channels through which scientific liaison can be conducted; these include:

1. *The British Commonwealth Scientific Offices.* A feature of the war-time pattern of scientific collaboration was the establishment of Scientific Missions, in London by the United States and the Commonwealth countries, and in Washington by the United Kingdom and the other Commonwealth countries; the latter subsequently joined together as the British Commonwealth Scientific Office in Washington. Immediately after the war a British Commonwealth official Scientific Conference was held in London, and in view of the success of the office in Washington during the war period, it was recommended that this office be continued in peace time, and

in addition that a British Scientific Office be set up in London. These recommendations were approved by all Commonwealth Governments. Since 1948 the Scientific Offices in London of the Commonwealth countries have been located in the same building, and are closely associated with the Overseas Liaison Division of the DSIR.

2. *The Standing Committee on Overseas Scientific Relations.* This committee of the Advisory Council on Scientific Policy was set up after the war to provide, among other things, for discussion of general policy on overseas scientific representation, scientific relations with Commonwealth and foreign countries, and scientific aspects of the work of the United Nations.

3. *The Overseas Liaison Division of the DSIR.* This division is responsible for the executive work arising from the Standing Committee's activities. It is regarded as the general inter-departmental body responsible for overseas scientific liaison, and is placed within the Department of Scientific and Industrial Research for convenience of organization.

4. *Commonwealth Agricultural Bureaux.* Machinery exists in the Commonwealth Agricultural Bureaux for liaison in the field of agricultural science between countries of the Commonwealth. In the United Kingdom there are 10 Bureaux, specializing in various branches of agricultural science, and two Institutes—the Commonwealth Mycological Institute and the Commonwealth Institute of Entomology. A third Institute, the Commonwealth Institute of Biological Control, has its headquarters in Ottawa, Canada. The Bureaux collect, collate and disseminate information resulting from agricultural research.

5. *The British Council.* The aims of the British Council in the pure and applied sciences are to foster closer co-operation between British scientists and scientists of other countries, and to promote a better understanding of Britain among overseas specialists by disseminating a knowledge of British activities and achievements. Under the first objective the exchange of visits between scientists in the United Kingdom and other countries is of prime importance. Besides arranging lecture or advisory tours overseas by eminent British scientists, the British Council, among many activities of a similar nature, brings to the United Kingdom every year a number of senior overseas specialists, postgraduate students and technicians on visits of varying duration, for the purpose of study in British universities and other institutions, or for discussion with their counterparts in Britain. In addition to publishing the *British Agricultural Bulletin* and *British Medical Bulletin*, both intended primarily to keep overseas specialists informed of progress in Britain, the Council maintains a considerable and much used specialist information service. In the 60 countries in which the British Council is represented, libraries are maintained and in many instances these have strong sections of scientific and technological literature.

The British Council maintains at its headquarters specialist departments for medicine and science (including agriculture and engineering), while in some countries scientists are attached to its overseas representatives. The Council is advised by eminent scientists who serve on its Science Advisory Committee and specialist panels for the different subjects.

Government Expenditure on Research

Central government funds to a total of over £198 million for scientific research and development were voted for the financial year 1954-55. Besides civil estimates of £180 million, this sum included¹ £15.2 million in respect of Navy Estimates

¹ Full particulars will be found in *Civil Estimates* 1954-55, Class IV, 10. Appendix, pp. 56-59. HMSO, 4s. 6d.

and £315,000 in respect of Air Estimates. Included in the Civil Estimates were: Ministry of Supply, £163.6 million; DSIR, £7 million; Ministry of Agriculture and Fisheries, £430,130; Medical Research Council, £1.9 million; Development and Welfare (Colonies), £1.3 million; Agricultural Research Council and Nature Conservancy, £1.4 million.

In addition to the above figures, over £50 million has been voted to the Lord President to enable the Atomic Energy Authority (see p. 348) to carry out research into, and the development of, atomic energy.

Science Centre

An important decision to bring together learned scientific societies and Government research agencies in a 'Science Centre' was announced by the Labour Government in 1950, and confirmed by the Conservative Government in June 1952. The Centre is to be built on the South Bank of the Thames immediately below Waterloo Bridge on a site purchased by the London County Council for the purpose. It is intended to improve facilities and contacts between scientists and users of science, both nationally and internationally.

THE PROMOTION OF THE ARTS

Various institutions are concerned either wholly or in part with the preservation of Britain's cultural heritage and the promotion of literature and the arts. There is no Ministry of Fine Arts or equivalent organization to formulate or administer policy in the arts, though bodies such as the Standing Commission on Museums and Galleries (appointed 1931) and the Royal Fine Art Commission (appointed 1924) act in an advisory capacity. Government interest in the arts is expressed mainly through the provision of grants to such bodies as the Arts Council, the British Council, the British Film Institute,¹ and the Council of Industrial Design,² and also to the National Museums and Art Galleries (see p. 361). In addition, under the Local Government Act, 1948, local authorities may now use part of the revenue from the rates for the encouragement of the arts. Local education authorities also make grants to some Schools of Art, Music and Drama.

The Arts Council of Great Britain was established under a Royal Charter in 1946. It consists of not more than 16 honorary members appointed by the Chancellor of the Exchequer in consultation with the Minister of Education and the Secretary of State for Scotland. Its main duties are to increase the accessibility of the fine arts to the public, to improve the standard of execution of the fine arts, and to advise and to co-operate with Government Departments, local authorities and other organizations on any matter connected directly or indirectly with these objects.³

The British Council exists to promote overseas a wider knowledge of the United Kingdom and the English language and to develop closer cultural relations with other countries. It was founded in 1934 and was granted a Royal Charter in 1940. Nine of the 30 members of its Executive Committee are nominated by Government Departments; it is financed almost entirely from public funds, mainly through the Foreign Office. In the Commonwealth it acts directly as the agent of the Commonwealth Relations Office and the Colonial Office. It is usually designated as the Government's principal instrument for the implementation of cultural conventions to which the United Kingdom is a party.

¹ For further information on the British Film Institute see p. 358.

² For further information on the Council of Industrial Design see p. 359.

³ For further information on the work of the Arts Council see pp. 356, 357, 359, 362-3, 364 and 365.

The Council maintains staffs who, in about 60 oversea countries, foster English studies, provide regular information on British life and thought and promote knowledge of the scientific, artistic and other developments and achievements of the United Kingdom.

In the United Kingdom itself, the Council arranges study programmes for scholars and teachers from overseas, and other professional visitors. It also provides a wide range of services for students from overseas (particularly those from the Colonies) who are studying in United Kingdom universities and other educational institutions.¹

Unofficial institutions concerned with the promotion of the arts include many charitable trusts and foundations, e.g., the Carnegie United Kingdom Trust and the Pilgrim Trust, and a large number of societies, associations and other organizations concerned with separate aspects of the arts, some of which are mentioned later in this chapter.

The Carnegie United Kingdom Trust was founded in 1913 by the late Andrew Carnegie. It was incorporated under Royal Charter in 1917. The Trust, which was initially founded for 'the improvement of the well-being of the masses of the people of Great Britain and Ireland', consists of 25 life trustees, 6 trustees nominated by the Corporation of Dunfermline and 3 trustees nominated by the Fife County Council. Its cultural activities include assisting projects relating to music, drama, the visual arts and museums. Grants totalling approximately £27,124 were made for these purposes during the year ended 31st December, 1953.

The Pilgrim Trust was founded in 1930 by the late Edward Stephen Harkness, an American citizen. The Trust, which consists of 8 trustees, is now devoted to 'the preservation of the national heritage of beauty and history and to the advancement of learning and the arts'. Grants made for this last purpose during the year ended 31st December 1953 totalled approximately £16,186.

DRAMA

State patronage of the drama is expressed through the media of (a) the Arts Council, which grants subsidies to certain theatrical managements operating on a non-profit-making basis (i.e. using profits to finance future productions), provided that such managements have given evidence of serious aims and of consistently high standards of practical competence, (b) the Customs and Excise Department, which has power to grant remission of entertainment tax to certain managements, chosen on the same principles as those applied by the Arts Council, and (c) the British Council, which is responsible for making the British theatre better known abroad by organizing and sponsoring international tours by important companies, including the Old Vic Theatre Company and the Shakespeare Memorial Theatre Company, and by sending overseas exhibitions of theatrical design and lecturers on drama.

Moreover, the Treasury is empowered, under the National Theatre Act, 1949, to support the Shakespeare Memorial Trust National Theatre Scheme by contributing £1 million to the cost of building and equipping a national theatre, which will operate under public auspices.

Professional Theatre

The centre of the professional theatre is in London, where there are some fifty principal theatres and a number of suburban and 'little' theatres, which are let to producing managements on a commercial basis for every type of theatrical

¹ For further information on the work of the British Council see pp. 354, 359, 362 and 365.

entertainment. There are also theatres in Scotland, Northern Ireland and in the provinces of England and Wales, which are served by productions touring either before or after London presentation, by companies specially formed for touring, and by local repertory companies. No new theatres have been built in the United Kingdom since the end of the second world war, but several damaged ones have been reconstructed, some have been converted from other uses and, in Coventry, a plan for the building of a new theatre has recently been announced by the City Council.

In addition to managements which rent theatres for limited or long runs, there are a few producing organizations which possess theatres of their own. Among the older and better known of these organizations are the Old Vic Theatre Company in London and the Shakespeare Memorial Theatre Company in Stratford on Avon, both of which are permanent companies presenting their plays in true repertory. Local repertory companies (some of which are assisted financially and otherwise by the Arts Council) may have the use of their own established repertory theatres, e.g., the Bristol Old Vic Company at the historic Theatre Royal in Bristol, or they may tour the various towns and villages in the locality, playing from one to several nights in each place and using any building which can be made suitable for the purpose. Inevitably, the work of repertory companies varies in quality but, generally speaking, the standard of both production and acting is high; many of the leading dramatists, producers and actors in the United Kingdom started their careers with companies of this kind.

Both in London and in the provinces, most managers and artists are members of one or another of the professional organizations which exist to maintain the standards of the professional theatre, to regulate the industry and to promote and safeguard the welfare of those who work in it. Organizations of this kind include the London Theatre Council, the Provincial Theatre Council, the Society of West End Managers, the Theatrical Managers' Association, the Council of Repertory Theatres, British Actors' Equity (the actors' trade union), and the League of Dramatists. The trade union of theatre staffs is the National Association of Theatrical and Kine Employees.

Amateur Theatre

The amateur dramatic movement is widespread throughout the United Kingdom; there are known to be at least 33,000 amateur dramatic societies in existence. The movement is sponsored and fostered by local education authorities, by other public bodies, and by three special organizations—the British Drama League, the Standing Conference of Drama Associations which is supported by the Carnegie United Kingdom Trust and the Department of Education in Scotland, and the Scottish Community Drama Association.

The British Drama League, which was founded in 1919, operates on a basis of affiliation and individual membership. Its many services to its members include organizing courses, lectures and competitions in dramatic work; running an information bureau; and giving advice on many matters connected with the stage, e.g., play-writing, production, stage management and the organization of drama festivals. The work of the Standing Conference is mainly that of co-ordination between the various bodies concerned in the amateur dramatic movement; while the Scottish Community Drama Association fulfils, in Scotland, the functions of both the League and the Conference.

Dramatic Training

Dramatic training is at present provided mainly in the large number of dramatic schools and institutions of all kinds which have been established throughout the

United Kingdom. Among the most important of such institutions are the Royal Academy of Dramatic Art (which was founded in 1904 and is now grant-aided, and which provides a two-year course in all branches of stage work), the Central School of Speech Training and Dramatic Art, and the Webber-Douglas School, all three of which are in London; and the Old Vic School in Bristol.

Some form of education in drama is also provided in many of the general schools and in the youth clubs of Britain; and a varying degree of recognition is given to the subject in the universities. Bristol University leads in this field, in that it has created a Department of Drama offering a course which an Arts student may take as part of his or her general degree. The Universities of Oxford and Cambridge have famous dramatic societies, and there are drama clubs and societies in many other universities and colleges.

FILMS

The first cinematograph exhibition in Britain was given in 1896; and within ten years Britain was in the forefront of film production. This early ascendancy did not survive the impact of the first world war, and since 1914 British films have had to contend with keen and increasing American competition. Legislation, first introduced in 1927 and continued by the Cinematograph Films Acts of 1938 and 1948, has given some assistance by means of the quota system, under which a certain proportion of British films must be shown in British cinemas each year. The proportion is fixed annually by Board of Trade Order after consultation with the Cinematograph Films Council and is subject to confirmation by Parliament.

During the second world war the British cinema re-emerged with new vitality and began again to exert an important influence on film development by the production of many notable feature films depicting Britain's ordeals and achievements in the war. These films were based on the documentary technique which had been developed since 1929 for the making of factual informative films sponsored by the Government or by commercial organizations. British feature films in the post-war years have been influenced by this trend, and realistic treatment is now a characteristic of British feature production, both in dramatic films and in the light-hearted satirical comedies that have won acclaim in recent years. British film makers are now also turning their attention to the potentialities of three-dimensional and wide-screen feature production.

The art of film production is a costly one which depends upon a commercially prosperous industry for its development and well-being, and needs adequate financial backing combined with freedom for the film maker to experiment and to express his own ideas. There is no State-owned feature production unit in Britain, but the National Film Finance Corporation is empowered to lend money for film production. The Corporation was established for a period of five years under the Cinematograph Film Production (Special Loans) Act, 1949. In 1954 another Act extended its life for a further three years. Its members—a chairman, a managing director, and three to five others—are appointed by the Board of Trade. Its funds (limited by statute to £8 million) are provided, up to £6 million, by advances from the Board of Trade; the remaining £2 million may be borrowed from non-Governmental sources. The Corporation is solely concerned with finance and has no brief to influence the content of the film.

The development of the film as an art is promoted by the British Film Institute which is financed by Exchequer grants, administers the National Film Library and is responsible for the National Film Theatre, where programmes of experimental, scientific and documentary films, as well as 'classic features', are shown regularly.

The number of production companies, studios and, to a lesser extent, cinemas in



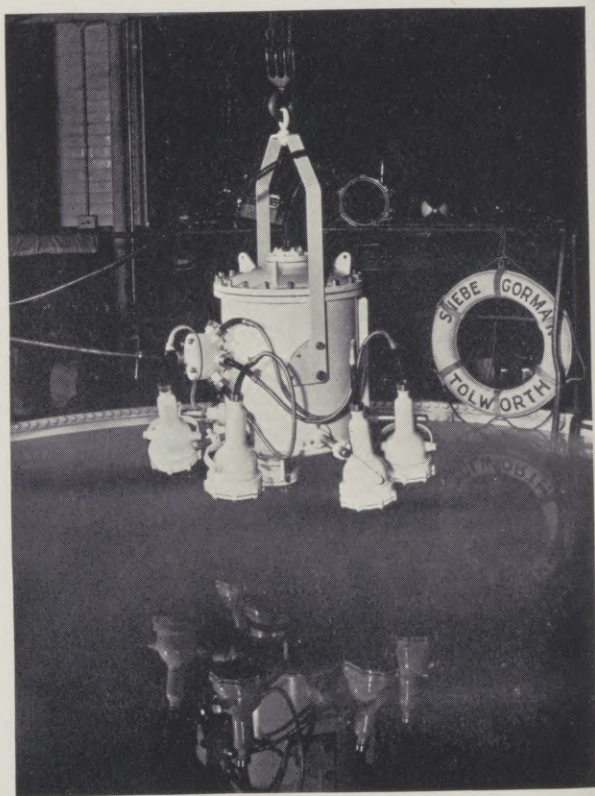
A concert at the Royal Festival Hall,
centre of London's musical life.



Shakespeare at the Old Vic
Theatre. Claire Bloom and
John Neville in 'Twelfth
Night'.



BBC Television Service. An outside broadcast with units of the Royal Navy at Spithead.



Underwater Television. A Marconi-Siebe Gorman underwater television camera being lowered into the test tank.

Britain varies with the financial state of the film industry. In 1954 there were 32 feature production companies belonging to the British Film Producers' Association, 51 short film or specialized film producers belonging to the Association of Specialized Film Producers, and 4,566 cinemas. About one half of these cinemas have increased the size of their screens in the past year though not many have yet adopted the extreme ratio of Cinemascope. One cinema in London has been equipped for Cinerama.

FINE ARTS

The fine arts of painting and sculpture in Britain receive indirect State support through the Arts Council and the British Council, and considerable public support through the many art institutions (including schools and colleges of art and exhibiting societies) and the art galleries and museums of the United Kingdom. There are at present a number of British painters and sculptors of international repute as well as younger artists of great promise; and interest in their work and that of their contemporaries overseas, as well as in that of British and foreign artists of the past, is most marked in all sections of the community. In the year April 1953 to the end of March 1954 the Arts Council organized 100 separate art exhibitions in Great Britain; over 400 showings of these exhibitions were given in more than 200 different places.

Art Institutions

There are 13 colleges of art in the United Kingdom, each of which serves a region; and there are schools of art in nearly all of the larger towns. In London, the most notable of these schools and colleges are the Slade School of painting, drawing and sculpture, the Central School of Arts and Crafts, the Royal Academy Schools, and the Royal College of Art which specializes in industrial design. Industrial design is also the concern of (a) the Council of Industrial Design, a State-sponsored organization (consisting of 22 members, including a chairman appointed by the President of the Board of Trade), which was founded in 1946 to encourage well-designed manufactures, and (b) the Royal Society of Arts, which was founded in 1754 'for the encouragement of arts, manufactures and commerce' (see p. 340). The leading academic institutions for the teaching and study of the history of art are the Courtauld Institute of the University of London, and the Warburg Institute (also a part of London University) which provides facilities for research on the character and history of the classical tradition.

The various national art exhibiting societies include the Royal Academy, which, in summer, holds exhibitions of works by members and non-members, and in winter, a series of exhibitions devoted to national schools of painting; the Institute of Contemporary Arts; the Royal Society of British Artists; the Royal Institute of Oil Painters; the Royal Society of Painters in Water Colours; the Royal Society of Portrait Painters; and the London Group. There are also an increasing number of amateur art societies throughout the United Kingdom which hold local exhibitions and encourage local interest in the fine arts in a variety of ways.

Knowledge of British fine arts overseas is fostered by the British Council by means of exhibitions, the dissemination of reproductions and photographs, lectures, and the provision of information and advice to inquirers abroad and to visitors in Britain.

Architecture

The great interest shown in Britain since the end of the second world war both in the development of modern architecture and in the preservation of architecture

of historic value is reflected in the importance which the State accords to this branch of the fine arts and in the number of professional, advisory and other societies and institutions which exist to maintain and further both its practice and its art.

The Government Departments concerned are the Ministry of Housing and Local Government, the Department of Health for Scotland, and the Northern Ireland Ministry of Health and Local Government, which are responsible in their respective countries for approving the layout and design of local authority housing schemes, and which issue reports and circulars setting standards for local authority housing. The Ministry of Works is the Department concerned with the preservation of historic buildings and ancient monuments in Great Britain.¹ All these departments have architects on their staffs.

State-sponsored organizations concerned with special aspects of architecture include the Royal Fine Art Commission, which is appointed by Royal Warrant to advise Government Departments and other public and quasi-public bodies on questions of public amenity or artistic importance; the National Buildings Record, which maintains a library of photographs of English and Welsh architecture open to the public for consultation, and an index of architectural records in public and private possession; the Royal Commissions on Ancient and Historical Monuments for England, for Wales and Monmouthshire, and for Scotland, which advise the Ministry of Works on the care of these monuments and publish a series of surveys, designed ultimately to cover the whole country; and the Historic Buildings Councils for England, Scotland, and Wales, constituted under the Historic Buildings and Ancient Monuments Act, 1953, whose most important function is to advise the Minister on the provision of grants towards the repair and maintenance of such buildings and their contents.²

The leading professional architectural institution in the United Kingdom is the Royal Institute of British Architects (RIBA) which holds meetings at which papers are read and discussed, publishes a Journal and holds exhibitions, promotes and controls the training of architects through its Board of Architectural Education, and has one of the largest and most important architectural libraries in the world, housing over 65,000 books, periodicals and drawings. Well-known societies include the Architectural Association, the Architecture Club, and a number of societies interested in particular aspects of architecture, for example, the Mars Group—the English Branch of *Les Congrès Internationaux d'Architecture Moderne*—and the Modular Society. Among the preservation societies are the Georgian Group, which is a society designed to awaken interest in Georgian architecture and to save Georgian buildings from destruction; the Society for the Protection of Ancient Buildings; and the National Trust for Places of Historic Interest or Natural Beauty, which owns more than a hundred houses of historic or architectural interest, many of which contain pictures and other works of art which are on view to the public.³

Education in architecture is given at 18 schools of architecture, recognized for exemption from the RIBA Intermediate and Final Examinations; and 6 schools of architecture recognized for exemption from the Intermediate Examination only. There are also 50 schools of art and technical institutions (14 full-time) with facilities for the instruction of intending architects, which prepare students for taking

¹ In Northern Ireland, responsibility for the preservation of ancient buildings is vested in the Ministry of Finance.

² Between July 1953 and July 1954 nearly 300 applications for aid were received by the Historic Buildings Councils for England, Scotland, and Wales.

³ For further information on the National Trust see p. 333.

externally the examinations of the RIBA. It is against the law for any person to practise or carry out work under any name, style or title containing the word 'architect' unless he or she is registered. The statutory body which regulates the registration is the Architects' Registration Council of the United Kingdom.

Museums and Art Galleries

There are in all about 750 museums and art galleries open to the public in Great Britain, though many are only small collections or merely a few rooms set aside in a public building for the display of local treasures.

The national museums and art galleries in London probably contain between them the most comprehensive collection of objects of artistic, archæological, scientific,¹ historical and general interest ever to exist within one city. The British Museum, which celebrated its bicentenary in 1953, has unparalleled collections of archæological and ethnographical material from every part of the world, in addition to housing the national library of printed books, manuscripts, newspapers and periodicals; its Department of Prints and Drawings also possesses collections of the widest extent and richness. The Victoria and Albert Museum contains works of fine and applied art of all countries and periods, arranged mainly according to material, though since the war primary collections have been arranged to bring together, by style, period or nationality, masterpieces of all the arts. The National Gallery presents paintings by almost all the greatest European masters. The Tate Gallery embodies two collections (*a*) the British school from the eighteenth century onwards, with a few earlier works, and (*b*) modern foreign schools since 1850. Both sections include modern sculpture.

Other important collections are at the National Portrait Gallery, the Imperial War Museum, the National Maritime Museum at Greenwich, the London Museum (reopened in Kensington Palace during 1951), and Hertford House, in London, where the famous Wallace Collection (furniture, *objets d'art* and paintings, mainly French of the seventeenth and eighteenth centuries) is housed. Many of the national institutions in London suffered war damage to their buildings, and the financial stringency of the post-war years combined with lack of space and staff has resulted in these great museums and art galleries being still unable to do justice to the wealth of material they possess.

There are five national museums and art galleries in Edinburgh: the National Museum of Antiquities of Scotland, the National Gallery of Scotland, the Royal Scottish Museum, the National Portrait Gallery of Scotland, and the Scottish United Services Museum; and in Cardiff is the National Museum of Wales with its branch at St. Fagans Castle where the Welsh Folk Museum is housed.

Almost every city and large town has a museum devoted to art, archæology and natural history, usually owned by the municipal authority, but sometimes by a local learned society or privately by individuals or trustees to whom some rich collector in the past has bequeathed his treasures. A notable example in the last category is the Bowes Museum at Barnard Castle, containing one of the finest art collections outside the capital cities. Both Oxford and Cambridge are rich in museums—the Ashmolean Museum at Oxford, founded in 1683 is the oldest in the country, and the Fitzwilliam Museum at Cambridge has fine art galleries and a notable collection of engravings, manuscripts and books bequeathed by its founder on his death in 1861. Other universities have important collections, primarily for teaching purposes but also open to the public. The Municipal Museum and Art Gallery at Belfast

¹ For information on the British Museum (Natural History), the Science Museum and the Geological Museum see p. 352.

serves unofficially as a national institution for the whole of Northern Ireland; other cities with important museums and art galleries are Birmingham, Bristol, Glasgow, Leeds, Leicester, Liverpool (although the museum building destroyed in the war has not yet been rebuilt), Manchester, Norwich, Southampton, and York where the Castle Museum, with its complete reconstruction of an eighteenth-century street of shops, offers one of the most interesting historical displays in the world. In recent years there has been a notable development of 'period-house museums', in which outstanding examples of the private residences of former times have been taken over by national and municipal authorities for this purpose.

Temporary exhibitions, particularly on art subjects, including circulating exhibitions produced by the Arts Council, the Art Exhibitions Bureau, and the Circulation Department of the Victoria and Albert Museum, are a regular feature of many museums.

The Museums Association, founded in 1889, is an independent organization to which museums and art galleries and members of their staffs throughout the country belong; there are also many oversea members. The Association serves as the central body for the collection of information and the discussion of matters relating to museum administration and practice, and as a training and examining body for professional qualifications. It also produces directories, a monthly periodical, and other publications.

Financial assistance for improving the displays of the smaller museums is among the activities of the Carnegie United Kingdom Trust, which has done much to encourage the growth of the museum movement during the past twenty-five years, and at present expends an average of £10,000 a year in this field.

LITERATURE

A knowledge of literature is fostered in the United Kingdom by the schools, colleges and universities of the country, in all of which English literature is taught either as part of a general course or as a specialist subject. Interest in the subject is thereafter maintained by the very large number of private literary societies (both national and local), by the libraries (see pp. 363-4), and by the numerous periodicals concerned in whole or in part with literature, of which the best known critical weekly is the *Times Literary Supplement*. Recognition of outstanding literary merit is given in the form of literary prizes, a number of which are awarded annually, e.g., the two James Tait Black Memorial prizes for biography and literature, the John Llewellyn Rhys Memorial prize for young writers of promise, the Hawthornden prize for imaginative writing, and the Somerset Maugham award for young writers. State support for literature is given through the Arts Council, which supports poetry readings throughout the British Isles, and through the British Council, which is active in encouraging a knowledge of English literature abroad.

Literary Societies and Institutions

Societies and institutions concerned with the promotion of literature in its various forms include: the National Book League (13,000 members), which encourages the reading of and an interest in books, and which holds exhibitions, including the widely popular annual exhibitions of book design; the English Association (3,000 members), which aims at upholding the standard of English writing and speech; the Royal Society of Literature (250 members and 250 fellows), which is concerned with the advancement of literature; the Royal Society of Edinburgh (790 fellows), which promotes science and literature; and the British Academy, which is an organization concerned with humanistic studies and has a section dealing with literature and philology.

Interest in poetry is encouraged by the Poetry Society (3,000 members); by the annual National Eisteddfod—the bardic festival held in Wales, the origins of which date back to the seventh century; and by the Apollo Society which, supported by the Arts Council, presents a number of poetry readings in which music as well as poetry forms part of the programme.

Among the specialist literary societies are the Early English Text Society, the Bibliographical Society, the Edinburgh Bibliographical Society, and several societies devoted to particular authors, of which the largest is the Dickens Fellowship (10,000 members).

There are also a number of clubs and societies, such as the Book Society (about 19,000 members), which exist to distribute selected new books to their members. The most recently established is the Poetry Book Society (500 members), which was set up in 1954 under the auspices of the Arts Council.

Books

The output of new books in Britain amounts to some 13,000 new titles a year—in 1953, for example, British publishers issued a total of 18,257 separate titles, of which only 5,523 were reprints or new editions. In that year, the annual figures for new titles under literary subject headings were: bibliography and literary history, 262; biography, 433; essays, 98; fiction, 2,583; poetry and drama, 497.

Some classes of books are produced as Government publications by Her Majesty's Stationery Office, which is the largest publishing organization in Britain; the great majority of books, however, are produced by commercial publishers, including the university presses, notably the Clarendon Press (Oxford) and the Cambridge University Press, which publish many outstanding literary works. Leading organizations representing the interests of those concerned with book production are the Publishers' Association, the Booksellers' Association, and the Society of Authors.

Libraries

The largest library in Britain is that of the British Museum in London (more than 6 million printed books). The National Library of Scotland (nearly 2 million volumes) is in Edinburgh and that of Wales in Aberystwyth (more than 1 million volumes). Together with the Bodleian Library in Oxford (about 2 million volumes) and the Cambridge University Library (which has over 2 million volumes) these comprise the 'copyright' libraries of the country and are entitled to receive a copy of each new book published in Britain.

Other great libraries are¹: the London Library (the largest public subscription Library, 500,000 volumes); the University of London Central Library (547,000)²; Edinburgh University Library (608,000); Glasgow University Library (418,000); St. Andrews University Library (511,000); the John Rylands Library, Manchester (over 500,000); the Science Library of the Science Museum (380,000); the Patent Office Library (350,000); the Victoria and Albert Museum Art Library (300,000); the National Library for the Blind (300,000—Braille and Moon types); the British Library of Political and Economic Science (about 300,000); the British Museum (Natural History) Library (250,000); Queen's University Library, Belfast (225,000); the Royal Institute of International Affairs Library (100,000); the Royal Geographical Society Library (100,000); the Imperial Institute Library (100,000); the

¹ This list provides only an arbitrary selection of some of the largest libraries. Unless otherwise stated these libraries are situated in London where there are more than 500 libraries.

² The total holding of all the libraries (college and special) of London University is over 2½ million volumes.

Public Record Office Library (which contains the National Archives); the Royal College of Music Library (160,000); the British Drama League Library (80,000); the Library of the Royal Institute of British Architects (65,000); the Royal Academy of Music Library (60,000); the Central Music Library (29,000). The Arts Council has recently founded a reference library of modern English poetry, which is housed at the National Book League.

The most important aspect of librarianship in Britain is the co-operation within the closely knit network of libraries which greatly increases the value of the service. Library co-operation is organized regionally in the first instance, through Regional Library Bureaux, and is finally centralized in the National Central Library with its widespread system of outlier libraries (public, university and special) giving access to a total bookstock of 21 million books.

The public libraries of Britain are maintained by 580 public library authorities in every county and county borough and in many boroughs and urban districts. Together, these authorities provide more than 30,000 service points; they hold over 56 million books and make more than 359 million loans a year. A feature of the service in rural areas is the travelling van, which is an itinerant library.

In addition to lending books, and providing special libraries for children, public libraries engage in many kinds of extension activities, such as play readings, lectures, film shows, music circles and University Extension co-operation in adult education.

The two principal professional bodies to which librarians belong are the Library Association and the Association of Special Libraries and Information Bureaux (ASLIB). Whereas the Library Association, with a membership of 10,000, attempts coverage of the whole field of library work—public, university and special—ASLIB, which is a documentation centre and is financed by the Department of Scientific and Industrial Research, operates in a more specialized field. One of its activities, for example, is the maintenance of an index of translations, especially from Russian and German, which have been or are being made in Britain.

MUSIC, OPERA AND BALLET

In Britain today, music in all its forms is drawing large audiences; and orchestral concerts, choral singing, music festivals, opera and ballet are important features of British cultural life.

Music

Seasons of orchestral concerts are promoted every year in all the large towns and cities, some of which have well-known concert halls. In London, the principal concert halls are the Royal Festival Hall on the South Bank of the Thames, which was opened in 1951 in connection with the Festival of Britain; the Royal Albert Hall, Kensington; and Wigmore Hall, which is the premier recital centre of the metropolis. Queen's Hall, famous before the second world war for orchestral concerts, was destroyed by enemy action and has not yet been rebuilt.

Among the leading British orchestras are the London Symphony Orchestra, the BBC Symphony Orchestra, the London Philharmonic, the Royal Philharmonic, the Philharmonia, the Hallé (Manchester), the Liverpool Philharmonic, the City of Birmingham Orchestra, the Bournemouth Symphony Orchestra, the Yorkshire Symphony Orchestra, the Scottish National Orchestra and the BBC Scottish Orchestra. There are also the highly specialized string orchestras such as the Boyd Neel Orchestra and the Jacques Orchestra; and a number of new orchestras which have been formed during the past few years. Many of these orchestras receive

financial aid from the Arts Council, whose aim is to provide them with the opportunity of presenting new works, new conductors and new soloists, and of improving the standard of performance generally.

The principal choral societies in Britain are the Royal Choral, the BBC Choral, the Huddersfield Choral, the Hallé Choir, the Liverpool Philharmonic Choir, the London Philharmonic Choir, and the Bach Choir. These and many other choral societies are associated with famous orchestras in major choral works; most of them, together with hundreds of similar choral and orchestral societies and music clubs, are affiliated to the National Federation of Music Societies.

Music Festivals in Britain, originating with the Three Choirs Festival held annually at Gloucester, Worcester and Hereford in rotation, have been in existence for over 200 years. The festival idea has developed considerably in recent years, and festivals of music and other arts are now held annually in many cities and towns. They range from the famous Edinburgh International Festival of Music and Drama, which lasts three weeks and attracts many thousands of visitors, to small-scale festivals (such as the Aldeburgh Festival) lasting a week or less. Among the better known are the Llangollen International Eisteddfod; the National Eisteddfod of Wales; the National Gaelic Mod held at a different place in Scotland each year; the Cheltenham Festival, devoted to contemporary British music; and the Leeds and Norwich Festivals of choral music, which are held on a triennial basis. An annual international festival of folk song and dancing is also held by the English Folk Dance and Song Society.

Professional organizations, which look after the interests of music and musicians, include the Musicians' Union, the Incorporated Society of Musicians, the Composers' Guild, and the Songwriters' Guild. Specialized education in music is given at Colleges of Music, of which the most prominent are the Royal Academy of Music and the Royal College of Music in London, the Royal Manchester College, and the Royal Scottish Academy in Glasgow, all of which receive grants-in-aid. There are also the Trinity College of Music and the Guildhall School of Music and Drama in London. Youth orchestras are strongly encouraged, and children's concerts, given by symphony orchestras directed by prominent conductors, are a regular feature of the country's musical activities and have helped to develop among the youth of the community an appreciation of the world's greatest music. The National Youth Orchestra, made up of the most promising of the younger musicians, is noted for its high standard of performance.

The British Council has done much to make British music more widely known throughout the world. Tours of British orchestras, soloists and opera are arranged, recordings of work by British composers are sponsored, and libraries of British music (recorded and in printed score) are maintained in 57 countries overseas. At the Council's headquarters in London, a central music reference library of music literature, scores and recorded music is maintained for the use of visitors. Distinguished musicians from overseas are invited to Britain as guests of the Council to experience, at first-hand, something of British music and musicians, and extensive arrangements are made to cover each individual interest.

Opera and Ballet

Regular seasons of opera and ballet are given at the Royal Opera House, Covent Garden, which is leased by the Government¹ to the Covent Garden Opera Trust, which was formed in 1944 to make the famous opera house the home of a national opera and ballet, and which receives a Government grant through the Arts Council.

¹ The Ministry of Works acquired a 42-year lease from Covent Garden Properties Ltd. in 1949.

The Royal Opera House has its own resident opera company and ballet company (the Sadler's Wells Ballet) which give performances both in London and elsewhere. The opera company, which numbers about 200 and has a permanent orchestra, makes an annual tour of provincial centres; and the Sadler's Wells Ballet has a high international reputation gained during its visits to Canada and the United States in 1949, 1950 and 1953 and through its European tours, arranged by the British Council.

Seasons of opera and ballet are also given at the Sadler's Wells Theatre in London, which, like the Royal Opera House, Covent Garden, has its own opera company and ballet company (the Sadler's Wells Theatre Ballet); and at Glyndebourne in Sussex, an opera season, for which a company is specially assembled, is held every year. Other opera companies include the Carl Rosa, one of the oldest opera organizations in Britain; the English Opera Group, formed in 1947, and noted for its performances of chamber music; and Intimate Opera, which tours the provinces, giving performances in any hall available and introducing opera to those who have hitherto been unfamiliar with it. There are also a number of amateur opera clubs both in London and in the provinces, including the City Opera Club (of London) and the Welsh National Opera Company, which is an amateur society reinforced with professional soloists. Among the ballet companies are the Ballet Rambert, the Festival Ballet and the recently established Ballet Comique. Training in ballet is given at the Sadler's Wells Ballet School, which has played a large part in raising British ballet to its present high standard.

XIII. SOUND AND TELEVISION BROADCASTING

THE BRITISH BROADCASTING CORPORATION

Sound broadcasting services in the United Kingdom are undertaken solely by the British Broadcasting Corporation, which was created as a public corporation by Royal Charter in 1927. At present, the British Broadcasting Corporation is also solely responsible for the television transmission services; although, in due course, an alternative television service will be provided under the ægis of the Independent Television Authority (see pp. 371-2).

Policy and Constitution

The policy of the BBC is governed by its Charter, granted for successive limited periods, which establishes the BBC as a corporate body and requires that the broadcasting services should be a means of information, education and entertainment and should be developed to the best advantage and in the national interest. Under the current charter, which came into force on 1st July 1952 and will be due for renewal in 1962, the Corporation consists of nine Governors (including a chairman, vice-chairman and national governors for Scotland, Wales and Northern Ireland) appointed for a five-year period on a part-time basis by Orders-in-Council on the advice of the Prime Minister. The Governors are responsible as a corporate body for taking all final decisions regarding both sound and television broadcasting. In the discharge of this duty the Governors are advised by the Director-General, who is the chief executive officer of the Corporation and with whom they must discuss all major matters of policy and finance. The BBC's Board of Management is made up of the Director-General and six Directors (for Home Sound Broadcasting; Television Broadcasting; External Broadcasting; the Spoken Word; Technical Services; and Administration), who are responsible under the Director-General for the whole work of the Corporation. The number of staff employed at 30th June 1954 was 13,153 (including 656 part-time personnel).

The BBC derives its legal powers to maintain broadcasting stations from its Licence and Agreement with the Postmaster-General. The Agreement contains financial clauses and also certain general provisions as to the manner in which the broadcasting service should be operated.

It has from the first been the agreed policy of Parliament that the BBC should be free from control in the daily conduct of its business, including both the planning of programmes and general administration. Thus, although Parliament retains ultimate control of the British Broadcasting Corporation, and the Postmaster-General, as the responsible Minister, is answerable to Parliament on broad questions of policy, the Corporation has, so far as is practicable, full freedom and responsibility for its work. The BBC studies the needs and reactions of its listeners through its Audience Research system; it is assisted by 32 advisory bodies and is constantly consulting outside authorities and experts, but its decisions are its own. In its various activities the BBC devolves responsibility at all levels to the greatest extent consistent with agreed policy and with its high standards of quality.

Finance

The services of the BBC are financed from (1) annual grants from the Exchequer related wholly or partly to revenue derived from the sale (by the Post Office) of

wireless receiving licences; (2) a grant-in-aid from the Exchequer for the External Services; (3) profits from the BBC publications, mainly the *Radio Times*, which has a weekly sale of over 8 million copies and attracts a large advertising revenue.

The annual licence for the reception of sound broadcasting costs £1 (except in the case of registered blind persons whose licences are free); the licence for 'sound' and television together costs £3. One licence covers all the receiving sets in a household, but a separate licence is required for a set fitted in a motor car. Before the second world war all the BBC's operations were financed out of its proportion of licence income. During the war it was completely financed by grant-in-aid; but, as from 1st January 1947 the pre-war system of financing out of licence income was restored for all home broadcasting services including television.

In March 1954 the Government announced that the Exchequer would retain £2 million each year from the licence revenue in the next three years and the Post Office would receive a proportion estimated at £1,600,000 a year to cover the cost of collecting fees and dealing with interference. In addition, £750,000 a year would be given to the Independent Television Authority (see pp. 371-2) in each of its first two years of operation. The remainder would be given to the BBC.

The gross revenue from the sale of broadcast receiving licences during the year ended 31st March 1954 amounted to £16,474,081, from which the Corporation received a net income of £12,963,451. The number of current receiving licences in the United Kingdom in March 1954 was: sound 10,187,901 (including 62,389 free to blind persons, and 226,667 for sets fitted in cars), television 3,248,892, making a total of 13,436,793. By end-November 1954 the total was 13,794,195, of which 3,999,624 licences were for television sets, and 250,256 for sound sets fitted in cars.

Net revenue from publications in the year ended 31st March 1954 amounted to £1,354,691 and grant-in-aid receipts were £4,905,000.

THE SOUND SERVICES

Since 15th March 1950 the BBC has operated on the wavelengths allocated in the Copenhagen Agreement.¹ Plans are, however, on foot to reinforce existing long-wave and medium-wave services (which are increasingly suffering from interference from high-power transmitters on the Continent) through a system of VHF transmitters. The BBC estimates that it will need more than 50 of these transmitters, placed at 20 stations to cover areas where local interference is high. Work on the first nine of these stations, each of which will carry the Home, Light and Third Programmes, has been authorized by the Postmaster-General.

Services provided are as follows:

i. For Home Listeners

The BBC provides three main services for home listeners:

- (a) *The Home Service*, running continuously from 6.30 a.m. to 11.8 p.m., is a carefully balanced programme designed to appeal to all sections of the community. It is the vehicle for the majority of the BBC's most important talks, for plays, concerts, documentary features and religious broadcasts, and also

¹ A European Regional Conference held in Copenhagen in 1948 produced a plan to minimize interference between medium and long wave broadcasting stations by allocating wavelengths to individual transmitters in such a way that stations sharing wavelengths, or using adjacent wavelengths, were so far from each other that interference with reception in their respective service areas should be negligible. The maximum power of each transmitter and the precision with which its allotted frequency must be maintained are also specified in the Plan, which came into operation on 15th March 1950.

for all the educational broadcasts to schools (see p. 312). It includes controversial discussions, and time is allotted for political party broadcasts in the ratio of each party's poll at the last General Election. Many national and sporting events are broadcast from the scene of action.

Linked with this basic Home Service are the six Regional Home Services covering Scotland, Wales, and Northern Ireland, and the North, Midlands, and West of England. These services carry many of the major items of the basic Home Service but also include their own programmes produced within the region. Material is freely interchangeable over this network.

- (b) *The Light Programme*, running continuously from 9.0 a.m. to midnight, is devoted to entertainment in the widest sense, and includes commentaries on every form of sport. It contains also a more serious element including book reviews, discussions, and some classical music.
- (c) *The Third Programme*, running continuously from 6.0 p.m. to 11.30 p.m. (and from 3 p.m. to 11.30 p.m. on Sundays during the winter months), is a cultural programme especially designed for the serious listener. It broadcasts, without regard to length or difficulty, programmes of music, art and letters (including lesser known works) likely to be of particular interest to such listeners, and it provides series of lectures by eminent speakers. It has been in operation since 29th September 1946.

News. There are eight news broadcasts daily in the Home and Light programmes: Home Service at 7 a.m., 8 a.m., 1 p.m., 6 p.m., 9 p.m., and a summary at 11 p.m. Light Programme at 9 a.m., 7 p.m., 10 p.m., and a summary at 11.56 p.m. For its sources of news the Corporation relies on the leading news agencies, the BBC's correspondents at home and abroad, and the monitoring service.

The BBC's Audience Research organization estimates that, at any one time on a winter evening, about 1 in 4 of the adult population of Britain may be expected to listen to one of the three main programmes. It is calculated that the average winter evening audience for the Light Programme is nearly 5,670,000, for the Home Service 3,240,000, and for the Third Programme in the neighbourhood of 90,000.

2. External Services

The general purpose of the BBC, in all its broadcasts to listeners within the Commonwealth or in other lands, is to form a link of information, culture and entertainment; to give news of world-wide importance as it is known in Britain; to show what the British nation as a whole is thinking about the news; and to reflect the British way of life.

The relevant Government Departments prescribe the extent of the External Services but have entrusted to the BBC the responsibility for their content.

The External Services of the BBC include:

- (a) *The General Overseas Service in English* (the descendant of the original 'Empire Service', begun in 1932), which is designed for British communities all over the world as well as for English-speaking listeners in foreign countries. It includes many programmes taken from the BBC's home services, and is on the air for 21 hours in every 24.
- (b) *Special Services directed to the Commonwealth* in English and other languages.
- (c) *Services directed to foreign countries*, mainly broadcast in the language of the country addressed. The BBC's news services have established a great reputation for objectivity and integrity. Every day nearly 100 news broadcasts are directed to oversea listeners in some 40 languages.

- (d) *The Transcription Service*, which provides recorded programmes in English (talks, drama, features, music, etc.), distributed principally to radio organizations throughout the Commonwealth and in the United States, and to broadcasting stations of the Armed Forces overseas. It also produces programmes in foreign languages.

Overseas Offices

The BBC maintains overseas offices in Berlin, Cairo, New Delhi, New York, Paris, Singapore, Sydney, Toronto and Ottawa. Their purpose is to meet the programme requirements of the Home and External Services, to encourage local stations to rebroadcast BBC transmissions and transcription recordings and to disseminate information about the BBC External Services.

Apart from the overseas offices, the BBC maintains a high-power short wave relay station for South-East Asia, at Singapore (Tebrau).

BBC TELEVISION SERVICES

Development

Experiments in television broadcasting started in Britain in the autumn of 1929, and in November 1936 the BBC began to give from Alexandra Palace the first public service of high definition television in any part of the world. By September 1939 (when the Alexandra Palace station was closed down for military reasons) the programme technique had made considerable progress and the number of receiving sets was approximately 20,000.

The Television Service from Alexandra Palace was reopened in June 1946 and a second transmitter at Sutton Coldfield, near Birmingham, came into action in December 1949, relaying the Alexandra Palace programmes. By December 1952 five high-power transmitting stations were in operation: Alexandra Palace covering London and the Home Counties; Sutton Coldfield covering the Midlands; Holme Moss covering the North of England; Kirk o' Shotts covering Central Scotland; and Wenvoe covering South Wales and parts of the West of England. These stations, with the addition of four temporary low-power stations, had by 1953 made television accessible to some 85 per cent of the population of the United Kingdom and form the main part of the BBC's plan for a national television coverage.

Further measures contemplated to extend national coverage include completing five medium-power stations (Aberdeen, Belfast, Pontop Pike, South Devon and the Isle of Wight)¹; rebuilding the London station with higher power; and erecting eight permanent low-power transmitters in East Anglia, the Isle of Man, the Channel Islands and at Dover, Inverness, Londonderry, Towyn (West Wales), and Carlisle, for which Government approval has already been given. This will result in effective television coverage for 97 per cent of the population of the United Kingdom.

The BBC is building, on a 13-acre site at Shepherds Bush in London, a set of studios and accompanying accommodation which will, it is hoped, be the 'best television centre in the world'.

Programmes

Regular television programmes are broadcast daily between 3.0 p.m. and 10.45 p.m. on weekdays, and between 4 p.m. and 10.45 p.m. on Sundays. There are intervals in each programme, and actual viewing time averages five hours a day. In

¹ The first of these five medium-power stations, at Rowridge, Isle of Wight, was opened in November 1954.

addition, the Outside Broadcasting Department of the Television Service televises national occasions, public events and sporting fixtures, and there is a daily television programme for children. Television for schools is in the experimental stage.

Research

Constant research during 1952-53 resulted in developments in the design of measuring equipment and television cameras, in the reduction of the effects of interference, and in improvements in the technical quality of the pictures transmitted. Technically Britain is committed for some years to the present 405-line standard, but preliminary experiments are being made on systems using higher standards of definition, and on television in colour. To facilitate work of this kind, a flexible television channel, which can be operated at will on standards of definition from 400 to 1,000 lines, has been designed and constructed for use in the laboratories.

INDEPENDENT TELEVISION SERVICES

The development of the broadcasting services has from the outset been assisted by the recommendations of successive independent committees of inquiry set up by the Government, e.g., the Crawford Committee (1926) which recommended the establishment of the BBC; the Selsdon Committee (1935) which recommended the establishment of a high definition public television service to be run by the BBC; and the Beveridge Committee (1951) which made recommendations designed to guard against the evils of monopoly, but was in favour of maintaining the BBC in much its present form as 'something of which the country might be proud'. The idea of the public corporation as the most suitable administrative device for the sound broadcasting services has, in fact, hardly ever been challenged; but since the issue in May 1952 of the *Memorandum on Broadcasting* (Cmd. 8550) which contained Government proposals for introducing competition in television, discussions on the pros and cons of an alternative system for television services have frequently been held in Parliament, in the press and by the general public.

In the 1952 Memorandum no details were published of the terms and conditions under which competitive television would operate; and although it was stated that safeguards would be established against possible abuses and that a 'controlling body would be required for regulating the conduct of the new stations, for exercising a general oversight of the programmes and for advising on appropriate matters', a considerable body of opinion feared that the introduction of private enterprise into a sphere of activity hitherto controlled by a public corporation might lead to a debasing of entertainment standards.

On the other hand, there were many people who welcomed the idea of competition, agreeing with the Government that 'as television has great and increasing power in influencing men's minds, its control should not remain in the hands of a single authority, however excellent that authority may be'.

The proposals outlined by the Government in the *Memorandum on Television Policy* (Cmd. 9005), published in November 1953, were designed to reconcile these two opposing viewpoints by combining effective control with greater freedom; and, at the same time, to reduce to a minimum the financial commitments of the State. In July 1954 they were incorporated into the Television Act, which provides for the setting up of an Independent Television Authority, consisting of a chairman, a deputy chairman and five to eight part-time members (three of whom have special responsibilities for Scotland, Wales and Monmouthshire, and Northern Ireland respectively) appointed by the Postmaster-General to provide television services

additional to those provided by the BBC for a period of ten years or longer if Parliament so decides at a later date. These appointments were made in August 1954, and in September a Director-General was appointed to head an executive staff.

The programmes broadcast by the Authority are in general to be provided by 'programme contractors', who on the one hand will receive revenue from firms which advertise in the intervals of their programmes and on the other will pay the Authority for the time allotted to them. The Authority will also be financed by (a) an annual Exchequer grant not exceeding £750,000 and (b) advances which may be made by the Postmaster-General, with the consent of the Treasury, for the purpose of defraying initial expenses and capital expenditure and of providing the Authority with working capital. The advances are limited to £1 million in the first year from the passing of the Act, and £2 million in all. Sponsored programmes, e.g., programmes provided by advertising agencies, will not be allowed.

The Authority hopes to begin operation of its first services, for the London, Birmingham and Manchester-Liverpool areas, by the autumn of 1955.

XIV. THE PRESS

The British Press caters for all political views, many different levels of education and a wide range of interests. It is free from Government censorship and interference.

The British public buys more newspapers per person than any other in the world. For every 1,000 inhabitants of the United Kingdom 611 copies of daily papers are sold every day. Next on the list comes Sweden with 490 per 1,000 inhabitants; in the United States the figure is 353. Circulation figures of individual newspapers are proportionately high. The *Sunday News of the World* has the world record circulation of over eight million copies, and at least six of the daily newspapers have circulations in the millions. These high figures are largely explained by the fact that the London morning papers have 'national' circulations, i.e. they are distributed throughout the British Isles, being available on the day of publication everywhere except in a few outlying islands.

Britain is, however, less well served in the size of newspapers because of the shortage of newsprint due to the fact that most of it has to be imported and so involves the expenditure of foreign exchange, especially dollars. This has meant restriction of supplies in recent years when the balance of payments has been under pressure. But there has been some improvement: from an average of four to six pages in the war and immediate post-war period daily papers have risen to an average of 8 to 12 pages. This still falls short of the pre-war figure which was 24 pages or more.

Prices of daily newspapers vary from 1½d. for the popular papers to 4d. for *The Times*.

There are over 150 daily and Sunday newspapers: 15 London mornings, 3 London evenings, 10 London Sundays; 26 mornings, 67 evenings and 4 Sundays in England and Wales outside London; 8 mornings, 9 evenings and 3 Sundays in Scotland; 4 mornings and 1 evening in Northern Ireland; 1 Isle of Man daily and 3 Channel Islands evenings.

There are about 1,350 weekly papers which are published in Greater London and almost every sizable town in the rest of the country. These papers deal mainly with news of interest to the region where they are sold. There are also the sporting papers, papers in foreign languages for groups of nationals of other lands resident in Britain, and religious papers.

In 1947 a Royal Commission on the Press was appointed to inquire into the finance, control, management and ownership of the British Press. Its report was issued in June 1949 (*Cmd. 7700*) and has been recognized as a comprehensive and authoritative analysis. Among other recommendations it suggested the establishment of a General Council of the Press and this was set up in 1953 (see p. 378).

The Commission found that the British Press 'is completely independent of outside financial interests and that its policy is the policy of those that conduct it'; there was evidence that the direct influence of advertisers on policy was 'negligible'. After studying management and ownership, the Commission concluded that 'there is nothing approaching monopoly in the press as a whole, or . . . in any class of newspaper'.

Ownership

As Table 51 shows, several companies or groups own a number of newspapers. The five largest press groups are: Associated Newspapers Limited, which, with three London papers, owns through subsidiary companies linked under the

management of Northcliffe Newspapers Group Limited a total of eleven dailies (with an interest in two more), nine weeklies and one Sunday; Kemsley Newspapers Limited, which owns twelve dailies, five weeklies and six Sundays and has interests in five other newspapers; Westminster Press Group which controls thirteen dailies, 33 weeklies and one Sunday; Provincial Newspapers Limited, which owns four dailies and twelve weeklies; and the Harmsworth Group, which runs four dailies and eleven weeklies in the West country.

TABLE 51

'NATIONAL' NEWSPAPERS (AND LONDON EVENINGS)

Title	General Political Tendency	Owner or Controller	Circulation average January-June (inc.) 1954
Dailies <i>The Times</i>	Independent	Times Publishing Co. Ltd.	220,834
<i>Daily Telegraph</i>	Conservative	Lord Camrose and members of his family	1,041,613
<i>Manchester Guardian</i>	Liberal	The Scott Trust	146,242
<i>Daily Express</i>	Independent conservative. Stresses importance of British Empire.	Beaverbrook Newspapers Ltd.	4,069,211
<i>Daily Mail</i>	Conservative	Associated Newspapers Ltd.	2,127,227
<i>Daily Herald</i>	Labour	Daily Herald Ltd. 51% of shares owned by Odhams Press Ltd., 49% by Trades Union Congress	1,810,911
<i>News Chronicle</i>	Liberal	Daily News Ltd. Two-thirds of trustees members of Cadbury family	1,315,771
<i>Daily Worker</i>	Communist	People's Press Printing Society Ltd. Shares owned by large number of small shareholders. Editorial executives members of Communist Party	83,376
<i>Daily Mirror</i>	Left-wing	Daily Mirror Newspapers Ltd.	4,664,919
<i>Daily Sketch</i>	Conservative	Associated Newspapers Ltd.	825,829

TABLE 51 (contd.)

Title	General Political Tendency	Owner or Controller	Circulation average January-June (inc.) 1954
London Evenings <i>Evening News</i> <i>Star</i>	As for <i>Daily Mail</i> As for <i>News Chronicle</i>	As for <i>Daily Mail</i> As for <i>News Chronicle</i>	1,430,862 1,102,546
<i>Evening Standard</i> Sundays <i>Observer</i>	As for <i>Daily Express</i> Independent	As for <i>Daily Express</i> The Observer Ltd. All shares owned by The Observer Trust	761,292 534,752
<i>Sunday Times</i>	Conservative	Kemsley Newspapers Ltd.	577,869
<i>News of the World</i>	General political sympathies conservative	News of the World Ltd.	8,134,826
<i>People</i>	Independent	Odhams Press Ltd.	5,167,445
<i>Sunday Express</i> <i>Sunday Dispatch</i> <i>Reynolds News</i>	As for <i>Daily Express</i> As for <i>Daily Mail</i> Supports the Co-operative Movement and the Labour Party	As for <i>Daily Express</i> As for <i>Daily Mail</i> Co-operative Press Ltd. Shareholders, co-operative societies	3,243,489 2,676,037 627,834
<i>Sunday Chronicle</i>	Conservative	Kemsley Newspapers Ltd.	863,462
<i>Sunday Empire News</i>	Conservative	Kemsley Newspapers Ltd.	1,961,230
<i>Sunday Pictorial</i>	As for <i>Daily Mirror</i>	Sunday Pictorial Newspapers Ltd.	5,446,255
<i>Sunday Graphic</i>	Conservative	Kemsley Newspapers Ltd.	1,174,491

Groups also exist in the periodical press; among the best known are the Amalgamated Press, which publishes 70 trade, technical, women's and children's papers; Odhams Press, which (in addition to two newspapers) publishes about 25 periodicals, including some with very high circulations; George Newnes and C. Arthur Pearson Limited, which publishes about 30 periodicals besides technical books and papers for many branches of industry; Hulton Press Limited, which publishes fewer titles but whose magazines have very large circulations (e.g., *Picture Post*, *Lilliput*, *Housewife*, the *Farmers' Weekly*); and the Thomson-Leng group, the largest publishers of magazines in Scotland.

Certain newspapers and periodicals are controlled by trustees whose aim is to preserve the character and traditions of the paper and prevent control from falling into unsuitable hands. Various forms of trust govern the direction of *The Times*, *Manchester Guardian*, *News Chronicle* and *Star*, *Observer*, *Economist* and *Spectator*.

The 'National' Press

Nine morning papers with headquarters in London, and one in Manchester, are 'national' in the sense of circulating throughout the British Isles, and there are eleven 'national' Sunday papers (see Table 51). In addition, the leading Scottish papers (see below) circulate widely, and certain specialized daily papers also have a circulation not limited by region, e.g., *The Financial Times* (circulation 65,599). The three London evening papers each have affiliations with one of the national dailies, but they draw their readership very largely from people living within fifty miles of London.

Other Newspapers of England and Wales

The provincial newspapers, numbering nearly a hundred morning or evening dailies and Sunday papers and about 1,160 weeklies provide the general and local news expected by readers whose daily life and interests are known to and shared by the newspaper staff. Some 60 provincial papers still in existence were founded before 1800; the oldest being *Berrow's Worcester Journal*, dating back to 1709. With a few exceptions (e.g., *Yorkshire Post*, *Newcastle Journal*, *Sheffield Telegraph*, *Western Mail*) they reflect no definite political tendency. The total circulation of the dailies is estimated at about 9 million and of the weeklies at about 12 million. The provincial newspaper, often read far more thoroughly than the national daily, is a valuable medium for national and local advertising.

In Wales some of the papers are printed in Welsh, some in English, others in Welsh and English.

London suburban weeklies, of which there are about 60, are closer to the provincial weeklies than to the national dailies in readership and appeal.

Ownership of the provincial press is varied: it includes individual owners, two or more partner proprietors, local printing and publishing firms, newspaper companies owning between one and half-a-dozen papers or press groups controlling a chain of newspapers in different parts of the country.

Scotland

Scotland has eight morning, nine evening and three Sunday papers. There are also about 120 weeklies. *The Scotsman*, Edinburgh (founded in 1817), and the *Glasgow Herald* (founded in 1783), published daily, have national reputations and regular subscribers overseas. The average circulation (January to June 1954) of *The Scotsman* is 54,484 and of the *Glasgow Herald* 75,851. Dundee and Aberdeen papers also have more than regional circulation. The largest group owners of newspapers and periodicals are the Thomson-Leng group of Dundee, which distributes about 10 million weekly periodicals and magazines to all parts of the world. There are four monthly illustrated periodicals—*The Scottish Field*, *Scotland's Magazine*, *The Scots Magazine* (founded 1779) and *Scotland*; and two weeklies, devoted to farming interests—*The Farming News* and *The Scottish Farmer*.

Northern Ireland

Northern Ireland has four mornings and one evening, all printed in Belfast. In addition to three newspapers in Londonderry which are each published three times a week, there are 48 weekly papers. The majority are published by individual companies and all the counties have good coverage of local papers. Weekly, monthly and quarterly publications cover farming, the linen industry, building, motoring and politics. There are no Sunday newspapers.

Channel Islands and Isle of Man

The Channel Islands have three evening papers, one twice-weekly and two weeklies. The Isle of Man has one daily of which a special weekly edition comes out on Saturday, and four other weeklies.

Periodicals

Weekly, monthly and quarterly journals cover an enormous field. A salient feature of the last twenty-five years has been the development of periodicals with a mass appeal on the one hand, and the growth of the trade press on the other. There are over 3,500 periodical publications: general magazines with circulations ranging up to over a million; women's magazines, which also have large circulations; numerous publications for children; religious periodicals of various denominations; magazines dealing with sports, hobbies, fiction and humour; periodicals specializing in various subjects such as politics, finance and economics, science, the professions, the arts; the large body of trade and technical publications whose circulations often are not confined to the United Kingdom; and lastly, the journals of learned societies, trade unions, business houses, regiments, universities, colleges, schools, and other associations.

At the high circulation end of the scale are the popular periodicals, of which five have circulations of over a million: *Illustrated*, *John Bull*, *Tit-Bits*, *Reveille for the Week End* and *Week-End Mail*. Three women's weeklies (*Woman*, *Woman's Own* and *Woman's Weekly*) and one women's monthly (*Woman and Home*) also have circulations in the millions.

Of considerable influence, although their circulations are only in the tens of thousands, are the weeklies dealing with political, social and economic affairs: *The Economist*, which covers topics of the day from a far wider angle than its title would indicate and is politically independent; *The New Statesman and Nation*, a review of politics, literature and the arts with an independent socialist political tendency; *The Spectator*, which covers much the same subjects and is non-party; *Time and Tide*, which has a right wing tendency; *Tribune*, with a left wing but strongly anti-communist bias; and *Truth*, which is extreme right wing in its political outlook. Other papers whose circulations are in the tens of thousands are the illustrated weeklies such as *The Illustrated London News*, *Sphere*, *Field* and *Country Life*, while *Punch* is the leading humour periodical. The readership of all these weeklies is greater than is apparent from their circulation figures, since they are widely read in libraries, clubs and other institutions.

Monthly and quarterly journals, generally speaking, appeal to the more serious type of reader, particularly the literary and political journals and those specializing in international and Commonwealth affairs.

News Agencies

There are three principal British news agencies:

Reuters Ltd., a world agency with offices in many countries, which distributes foreign and Commonwealth news to British newspapers and foreign and British news to over 3,000 papers outside Britain. It is owned by the British Press and three Commonwealth news agencies. All profits are used to develop the service.

Press Association Ltd., which distributes home news. It is owned by British provincial newspapers. All profits are used to develop the service.

Exchange Telegraph Company Ltd., which is a public company which distributes home and foreign news, mainly to British papers.

Two other agencies supply a general service of oversea news:

Associated Press, which is a branch of the Associated Press of America.

British United Press, which is a Canadian subsidiary of the United Press of America.

There are more than 20 smaller agencies in London, specializing in commercial or sports news, photographs, features, and so on.

Press Institutions

Both employers and employees in the industry are well organized. On the employers' side, the most important organizations are the Newspaper Proprietors' Association, whose members are proprietors of London (national) daily and Sunday newspapers, the Newspaper Society, whose members are proprietors of provincial daily and weekly newspapers in England, Wales and Northern Ireland, the Scottish Daily Newspaper Society, the Scottish Newspaper Proprietors' Association, and the Periodical Proprietors' Association. On the employees' side there are the National Union of Journalists and the Institute of Journalists. The National Union of Journalists has a membership of about 12,650 working journalists; editors who have powers of dismissal are excluded. The Institute of Journalists, which has a membership of some 2,800, admits editors. Free-lance journalists may belong to the NUJ or IoJ. The aims of these organizations are the improvement of wages and working conditions of journalists and of the status of the Press.

The aims of the Guild of British Newspaper Editors are, *inter alia*, to sustain the dignity of editorship, to raise and safeguard the professional status of editors, to protect the rights and freedom of the Press, and to improve the education and training of junior journalists.

The largest of other organizations directly connected with the Press is the National Society of Operative Printers and Assistants (NATSOPA), which has a varied membership connected with the production of newspapers and periodicals; in addition to the groups indicated by the title of the society, its membership includes clerical workers, dispatch hands and similar personnel.

The General Council of the Press

Following the recommendations of the Royal Commission on the Press, a Press Council representative of the various Press organizations was set up in 1953. Its aims are:

- to preserve the established freedom of the British Press;
- to maintain the character of the British Press in accordance with the highest professional and commercial standards;
- to keep under review any developments likely to restrict the supply of information of public interest and importance;
- to promote and encourage methods of recruitment, education and training of journalists;
- to promote a proper functional relation among all sections of the profession;
- to promote technical and other research;
- to study developments in the British Press which may tend towards greater concentration or monopoly;
- to publish periodical reports recording its own work and reviewing from time to time the various developments in the British Press and the factors affecting them.

The Council consists of eight editorial representatives, four nominees of the National Union of Journalists, three nominees of the Institute of Journalists, and ten managerial representatives.

APPENDIX I

BRITISH CURRENCY, WEIGHTS AND MEASURES, AND CONVERSION TABLES

BRITISH CURRENCY

4 farthings = 1 penny	2 shillings and 6 pence = 1 half-crown
12 pence = 1 shilling	20 shillings = 1 pound
2 shillings = 1 florin	21 shillings = 1 guinea

Coins in common use are: half-penny, penny, threepenny-piece, sixpence, shilling two-shilling piece (florin), and half-crown.

Notes in common use are: ten-shillings, pound, and five-pounds.

£1 = 2·80 United States dollars.

BRITISH WEIGHTS AND MEASURES AND THEIR METRIC EQUIVALENTS

MEASURES OF LENGTH

		<i>Metric equivalent</i>
	1 inch =	2·54 centimetres
12 inches = 1 foot =		30·48 centimetres
3 feet = 1 yard =		·914 metre
220 yards = 1 furlong =		201·168 metres
8 furlongs = 1 mile =		1·609 kilometres

SQUARE OR SURFACE MEASURES

		<i>Metric equivalent</i>
	1 square inch =	6·451 square centimetres
144 square inches = 1 square foot =		929·03 square centimetres
9 square feet = 1 square yard =		·836 square metres
4,840 square yards = 1 acre =		0·404 hectares
640 acres = 1 square mile =		2·589 square kilometres

LIQUID OR CORN MEASURES

1 gill =	·142 litre	2 gallons = 1 peck =	9·092 litres
4 gills = 1 pint =	·568 litre	4 pecks = 1 bushel =	36·37 litres
2 pints = 1 quart =	1·136 litres	8 bushels = 1 quarter =	2·099 hectolitres
4 quarts = 1 gallon =	4·546 litres		

MEASURES OF WEIGHT (AVOIRDUPOIS)

	1 ounce (oz.) =	28·350 grams
16 oz.	= 1 pound (lb.) =	0·453 kilograms
14 lb.	= 1 stone (st.) =	6·35 kilograms
28 lb.	= 1 quarter (qtr.) =	12·7 kilograms
4 quarters (112 lb.) =	1 hundredweight (cwt.) =	50·8 kilograms
20 cwt. (2,240 lb.) =	1 long ton =	1·016 metric tons
	1 short ton (2,000 lb.) =	0·907 metric tons

THERMOMETRICAL TABLE

	<i>Fahrenheit</i>	<i>Centigrade</i>
	0°	-17·8°
Water boils	212°	100°
Water freezes	32°	0°
Blood heat	98·4°	36·9°

The conversion factor from Fahrenheit to Centigrade is $\frac{5}{9}$, thus: to convert Fahrenheit into Centigrade subtract 32, multiply by 5 and divide by 9; to convert Centigrade into Fahrenheit multiply by 9, divide by 5 and add 32.

DOUBLE CONVERSION TABLES FOR WEIGHTS AND MEASURES

(Note: the central figures represent either of the two columns beside them, as the case may be—e.g., 1 centimetre = 0·394 inch, and 1 inch = 2·540 centimetres)

Centi- metres		Inches	Metres		Yards		Kilo- metres		Miles		Hec- tares		Acres
2·540	1	0·394	0·914	1	1·094	1·609	1	0·621	0·404	1	2·471		
5·080	2	0·787	1·829	2	2·187	3·219	2	1·243	0·809	2	4·942		
7·620	3	1·181	2·743	3	3·281	4·828	3	1·864	1·214	3	7·413		
10·160	4	1·575	3·658	4	4·374	6·437	4	2·485	1·619	4	9·884		
12·700	5	1·969	4·572	5	5·468	8·047	5	3·107	2·023	5	12·355		
15·240	6	2·362	5·486	6	6·562	9·656	6	3·728	2·428	6	14·826		
17·780	7	2·756	6·401	7	7·655	11·266	7	4·350	2·833	7	17·298		
20·320	8	3·150	7·315	8	8·749	12·875	8	4·971	3·237	8	19·769		
22·860	9	3·543	8·230	9	9·843	14·484	9	5·592	3·642	9	22·240		
25·400	10	3·937	9·144	10	10·936	16·094	10	6·214	4·047	10	24·711		
Kilo- grams		Av. Pounds	Litres		Pints		Litres		Gallons		Hecto- litres per Hectare	English Bushels per Acre	
0·454	1	2·205	0·568	1	1·760	4·546	1	0·220	0·898	1	1·113		
0·907	2	4·409	1·136	2	3·520	9·092	2	0·440	1·796	2	2·226		
1·361	3	6·614	1·705	3	5·279	13·638	3	0·660	2·695	3	3·340		
1·814	4	8·818	2·273	4	7·039	18·184	4	0·880	3·593	4	4·453		
2·268	5	11·023	2·841	5	8·799	22·730	5	1·100	4·491	5	5·566		
2·722	6	13·228	3·409	6	10·559	27·276	6	1·320	5·389	6	6·679		
3·175	7	15·432	3·978	7	12·319	31·822	7	1·540	6·287	7	7·793		
3·629	8	17·637	4·546	8	14·078	36·368	8	1·760	7·186	8	8·906		
4·082	9	19·842	5·114	9	15·838	40·914	9	1·980	8·084	9	10·019		
4·536	10	22·046	5·682	10	17·598	45·460	10	2·200	8·982	10	11·132		

APPENDIX II

CHRONOLOGY : SOME IMPORTANT DATES

November 1953 — December 1954

THE MONARCHY

- 19th November 1953 Regency Bill received Royal Assent. The Act makes provision for the Duke of Edinburgh and thereafter the Princess Margaret to act as Regent in the event of the Heir Apparent or the Heir Presumptive acceding to the throne when under the age of eighteen.
- 23rd November 1953 Her Majesty the Queen and the Duke of Edinburgh left London on the first stage of their Commonwealth tour taking them to the West Indies, the Pacific Islands, New Zealand, Australia, the Cocos-Keeling Islands, Ceylon, Aden, Uganda, Tobruk, Malta and Gibraltar. The tour lasted until 15th May 1954.

GOVERNMENT DEPARTMENTS

- 16th August 1954 Ministry of Materials ceased to exist and its few remaining functions were transferred to the Board of Trade.
- 18th October 1954 Ministry of Agriculture and Fisheries and Ministry of Food placed under a single minister as a preliminary step towards merging the two Departments.
- 18th November 1954 The Prime Minister announced the Government's acceptance of the recommendations of the Royal Commission on Scottish Affairs involving transfer to the Secretary of State for Scotland from the Minister of Transport and Civil Aviation, the Minister of Agriculture and Fisheries, and the Lord Chancellor their responsibilities in Scotland for roads, piers and ferries, animal health (other than control of infectious diseases of animals), and the appointment of justices of the peace.

DEFENCE

- 9th September 1954 South-East Asia Defence Treaty signed at Manila by the United Kingdom, Australia, France, New Zealand, Pakistan, the Philippine Republic, Thailand, and the USA.
- 27th September 1954 The Home Secretary announced the appointment of a Director-General of Civil Defence (General Sir Sidney Kirkman).
- 29th September 1954 During the Nine-Power London Conference on the integration of the German Federal Republic into the Western defence system, the United Kingdom undertook (subject to agreements being concluded) to maintain on the mainland of Europe the forces then assigned to the Supreme Allied Commander, Europe (NATO)—four Army divisions and the Second Tactical Air Force.

- 19th October 1954 Anglo-Egyptian Agreement on the Suez Canal Base signed ; it provided for the withdrawal of United Kingdom forces from Egyptian territory within 20 months.
Headquarters, Middle East Land Forces and Middle East Air Forces were transferred to Cyprus on 1st December 1954.
- 25th November 1954 Civil Defence (Armed Forces) Bill received Royal Assent. The Act makes provision for civil defence training to be given to reservists doing part-time National Service.

INDUSTRY

- 13th July 1954 Lord Privy Seal announced the Government's intention to move the appointment of a House of Commons Select Committee on the Nationalized Industries in the next session of Parliament.
- 10th November 1954 End of licensing controls over building.

AGRICULTURE AND FOOD

- 5th November 1953 A White Paper, *Decontrol of Food and Marketing of Agricultural Produce*, announced Government's decision to end food rationing in 1954 and its policy for marketing produce after decontrol.
- 1st April 1954 Government trading in milk ended and marketing powers restored to Milk Marketing Board.
- 3rd July 1954 Food rationing system (introduced in 1939) ended with derationing of meat and bacon.

FUEL AND POWER

- 25th November 1954 Electricity Reorganization (Scotland) Bill received Royal Assent. The Act provides for the setting up of a Board to take over from the British Electricity Authority the responsibility for the generation, transmission and supply of electricity in the south of Scotland.

TRANSPORT

- 15th June 1954 First passenger service by a helicopter designed and built in Britain started when a *Bristol 171* helicopter of British European Airways opened a service between Southampton and London.
- 25th November 1954 Order-in-Council embodying British Transport Commission's scheme for reorganizing the administration of British Railways by setting up area authorities in the existing six regions.
- 30th November 1954 Plans for an expanded programme of road construction and improvement were announced in the Queen's speech at the opening of the new Parliamentary session.

TELECOMMUNICATIONS

- 1st December 1953 Agreement signed in London between the Post Office and Canadian and United States telecommunication companies for the provision of the first transatlantic telephone cable. The cable is to be laid between Scotland and Canada and is to be completed in 1956.

- 15th November 1954 New telex (teleprinter) service inaugurated linking subscribers in Britain with many oversea countries.

LABOUR AND MANAGEMENT

- 9th March 1954 Industrial Diseases (Benefit) Bill received Royal Assent. The Act extends the existing provisions for payment of benefit to certain further cases of disablement from industrial diseases not previously covered.
- 25th November 1954 Mines and Quarries Bill received Royal Assent. The Act consolidated and revised the legislation relating to safety and health in mines and quarries.

FINANCE

- 8th-15th January 1954 Commonwealth Finance Ministers' Conference at Sydney, Australia.
- 22nd March 1954 Sterling Transferable Accounts area extended to cover virtually all non-sterling countries outside the dollar area.
- 5th October 1954 Basic foreign travel allowance—applying to all non-sterling countries outside the dollar area—increased from £50 to £100 for year beginning 1st November 1954.

TRADE

- 1st December 1953 Liverpool wheat futures market, closed since 1939, reopened.
- 3rd February 1954 British Industries Fair Limited formed to carry on the London section of the British Industries Fair from 1955.
- 22nd March 1954 London gold market reopened.
- 18th May 1954 Liverpool cotton futures market, closed since 1941, reopened.
- 31st August 1954 Raw Cotton Commission dissolved.

SOCIAL WELFARE

- 1st December 1954 Bill presented to Parliament providing for increases in both benefits and contributions payable under the National Insurance and National Insurance (Industrial Injuries) Acts. At the same time the Minister of Pensions and National Insurance announced increases in war pensions and in national assistance rates.

HOUSING AND PLANNING

- 30th July 1954 Housing Repairs and Rents Bill and Housing Repairs and Rents (Scotland) Bill received Royal Assent. These Acts make further provisions for the clearance and replacement of slums; for the improvement or conversion of structurally sound houses; and for permitting a 'repairs increase' in controlled rents to enable houses to be kept in good repair.
- 25th November 1954 Town and Country Planning Bill and Town and Country Planning (Scotland) Bill received Royal Assent. The Acts amended the financial provisions of the Town and

Country Planning Acts, 1947, concerning the payment of compensation where permission to develop land is refused or where land is purchased compulsorily.

PROMOTION OF THE SCIENCES

- 4th June 1954 Atomic Energy Authority Bill received Royal Assent; the United Kingdom Atomic Energy Authority set up under the Act took over responsibility for atomic energy research and development on 1st August 1954.
- 27th September 1954 Reactor school opened at the Atomic Energy Research Establishment, Harwell; its main purpose is to train staff from industry to participate in the atomic energy project.

SOUND AND TELEVISION BROADCASTING

- 21st July 1954 The Postmaster-General announced that the British Broadcasting Corporation had been authorized to proceed with the construction of nine stations for very high frequency sound broadcasting.
- 30th July 1954 Television Bill received Royal Assent. The names of the members of the Independent Television Authority set up under the Act to provide television services additional to those of the BBC were announced on 3rd August 1954.

BIBLIOGRAPHY

This bibliography is in no sense comprehensive: it is only intended to be a short guide to further reading on the subjects covered in this Handbook.

Readers in the United Kingdom are asked to remember that the Central Office of Information reference documents listed as free of charge are not available in this country except for visitors from overseas. These documents are, however, available at United Kingdom Information Offices overseas, except in the United States where equivalent free material can be supplied by British Information Services, 30 Rockefeller Plaza, New York 20, N.Y.

Acts of Parliament referred to in the text can be obtained at varying prices from H.M. Stationery Office and its Agents overseas (postage extra, as on all H.M.S.O. publications if ordered direct).

Publications for which no price is given are known to be out of print.

I. THE BRITISH ISLES

Physical Background

			s.	d.
MANLEY, G. Climate and the British Scene	<i>Collins</i>	1952	25	0
MILLER, T. G. Geology and Scenery in Britain	<i>Batsford</i>	1953	18	0
STAMP, L. DUDLEY. Britain's Structure and Scenery.	<i>Collins</i>	1947	21	0
———The Face of Britain				
	For the British Council, <i>Longmans</i>	1940	1	0
———The Land of Britain: Its Use and Misuse	<i>Longmans</i>	1950	50	0
——— <i>and</i> BEAVER, S. H. The British Isles: a Geographic and Economic Survey.	<i>Longmans</i>	1954	42	0
STEERS, J. A. The Coastline of England and Wales	<i>Cambridge University Press</i>	1946	55	0
———The Sea Coast	<i>Collins</i>	1953	25	0
TANSLEY, Sir ARTHUR. The British Islands and their Vegetation. 2 vols	<i>Cambridge University Press</i>	1939	84	0
British Regional Geology Handbooks.	<i>HMSO</i>	1946	2	6
		to	to	
		1954	5	0
Coastal Flooding: Report of the Departmental Committee	<i>HMSO</i>	1954	2	6

Demographic Background

CAUTER, T., <i>and</i> DOWNHAM, J. S. The Communication of Ideas: A Study of Contemporary Influences in Urban Life				
	For <i>The Reader's Digest</i> , <i>Chatto & Windus</i>	1954	25	0
NATIONAL COUNCIL OF SOCIAL SERVICE. Scotland's Changing Population	<i>NCSS</i>	1950	3	6
POLITICAL AND ECONOMIC PLANNING. Population Policy in Great Britain	<i>PEP</i>	1948	15	0
TREVELYAN, G. M. English Social History	<i>Longmans</i>	1944	25	0
ZWEIG, F. Labour, Life and Poverty	<i>Gollancz</i>	1948	7	6
Annual Reports				
Registrar-General, Northern Ireland				
	For 1953 Belfast, <i>HMSO</i>	1954	3	6
Registrar-General, Scotland	For 1953 <i>HMSO</i>	1954	11	0

			s.	d.
Census Reports of Great Britain 1801-1931 (Guides to Official Sources No. 2)	HMSO	1951	3	6
Census 1951. England and Wales. Preliminary Report				
County Reports: ¹ London	HMSO	1951	5	0
Census 1951. Great Britain. One Per Cent Sample Tables	HMSO	1953	22	6
Part I. Ages and Marital Conditions, Occupations, Industries, Housing of Private Households				
Part II. Characteristics and Composition of Private Households, Non-Private Households, Education, Birthplace and Nationality, Fertility, Welsh and Gaelic Languages, Conurbation Supplement	HMSO	1952	17	6
Census of Northern Ireland 1951. Preliminary Report				
Belfast, Belfast County Borough ¹	HMSO	1951	1	6
Census of Scotland 1951. Preliminary Report	HMSO	1953	7	6
Report Vol. I. City and County Reports ¹	HMSO	1951	3	0
Part 1. City of Edinburgh	HMSO	1952	7	6
Part 2. City of Glasgow	HMSO	1952	10	0
Report Vol. II. Population of Towns and Larger Villages (excluding Burghs) and of Urban and Rural Areas				
Report Vol. III. Population, Age, Sex and Conjugal Condition, Birthplace and Nationality, Gaelic-Speaking Population and Housing	HMSO	1952	4	0
External Migration: A Study of the available Statistics 1815-1950, by N. H. Carrier and J. R. Jeffery	HMSO	1955	32	6
Internal Migration: Some Aspects of Population Movement within England and Wales, by Mary Newton and J. R. Jeffery	HMSO	1953	8	6
Matters of Life and Death [<i>prepared by the General Register Office</i>] rev. edn	HMSO	1951	1	6
Registrar-General's Statistical Review of England and Wales				
Part I. Medical: Tables 1953	HMSO	1951		9
Text 1950	HMSO	1954	10	0
Part II. Civil: Tables 1952	HMSO	1954	6	6
Text 1946-50	HMSO	1954	5	0
Report of the Royal Commission on Population				
Cmd 7695	HMSO	1954	6	6
The British Household [<i>mimeographed</i>] <i>Social Survey, COI</i>		1949	7	6
The Population of the United Kingdom		1948	5	0
Reference Paper R.2550 <i>COI</i>		1954		free

II. GOVERNMENT AND ADMINISTRATION

CAMPION, Lord, and others. British Government since 1918				
Allen & Unwin	1950	16	0	
CLARKE, J. J. Outlines of Central Government, including the Judicial System of England. 11th edn	Pitman	1950	12	6

¹ Series of reports are being issued comprising statistics of predominantly local interest.

		s.	d.
JENNINGS, Sir IVOR. The British Constitution. 3rd edn	<i>Cambridge University Press</i>	1950	15 0
———The Law and the Constitution. 4th edn	<i>University of London Press</i>	1952	12 6
———The Queen's Government	<i>Penguin Books</i>	1954	2 0
KEITH, A. BERRIEDALE. The Constitution of England, from Queen Victoria to George VI. 2 vols	<i>Macmillan</i>	1940	
LE MAY, G. British Government 1914-1953: Select Documents	<i>Methuen</i>	1954	25 0
MORRISON, HERBERT. Government and Parliament: A Survey from Inside	<i>Oxford University Press</i>	1954	21 0
ROBSON, W. A. The British System of Government. 4th edn For the British Council,	<i>Longmans</i>	1952	2 0
STOUT, HIRAM. British Government	New York, <i>Oxford University Press</i>	1953	40 0
WADE, E. C. S., and PHILLIPS, G. G. Constitutional Law. 4th edn	<i>Longmans</i>	1950	35 0
The Monarchy			
CHURCHILL, RANDOLPH S. They Serve the Queen: A New and Authoritative Account of the Royal Household	<i>Hutchinson</i>	1953	12 6
FLETCHER, IFAN KYRLE. The British Court, Its Traditions and Ceremonial	<i>Cassell</i>	1953	7 6
LEGG-BOURKE, Major HENRY. The Brigade of Guards on Ceremonial Occasions. 2nd edn	<i>Macdonald</i>	1952	10 6
———The Household Cavalry on Ceremonial Occasions. 2nd edn	<i>Macdonald</i>	1952	10 6
MARSHALL, HOWARD. Coronation Day 1953	<i>Hutchinson</i>	1953	10 6
NICOLSON, Sir HAROLD. King George the Fifth: His Life and Reign	<i>Constable</i>	1952	42 0
SIMON, Viscount. Crown and Commonwealth	<i>Oxford University Press</i>	1953	2 0
TANNER, LAWRENCE E. The History of the Coronation	<i>Pitkin</i>	1952	17 6
British Constitutional Monarchy, by Sir Ernest Barker. rev. edn	<i>COI</i>	1952	free
Most Excellent Majesty, by Dermot Morrah	For COI, <i>HMSO</i>	1953	2 0
The Monarchy and the Commonwealth [under revision]	Reference Pamphlet RF.P.2452 <i>COI</i>	1953	free
Royal Ceremonial	Reference Paper R.2551 <i>COI</i>	1953	free
Parliament			
BAILEY, SYDNEY D., Editor. The British Party System. 2nd edn	<i>Hansard Society</i>	1953	12 6
———Future of the House of Lords	<i>Hansard Society</i>	1954	10 6
BULMER-THOMAS, IVOR. The Party System in Great Britain	<i>Phoenix House</i>	1953	25 0
BUTLER, D. E. British General Election of 1951	<i>Macmillan</i>	1952	21 0
———The Electoral System in Britain 1918-51	<i>Oxford University Press</i>	1953	21 0

		s.	d.
CAMPION, <i>Lord</i> . An Introduction to the Procedure of the House of Commons. 2nd edn	<i>Macmillan</i>	1947	
— <i>and others</i> . Parliament: A Survey	<i>Allen & Unwin</i>	1952	22 6
GORDON, STRATHEARN. Our Parliament. 4th edn	<i>Hansard Society</i>	1953	15 0
HANSARD SOCIETY. Lords and Commons: How Parliament Began and How it Works. 2nd edn	<i>Hansard Society</i>	1954	2 0
—Papers on Parliament	<i>Hansard Society</i>	1949	6 0
—Parliamentary Government in Britain:	<i>Hansard Society</i>	1949	6 0
JENNINGS, <i>Sir IVOR</i> . Parliament [<i>new edn in preparation</i>]	<i>Cambridge University Press</i>	1939	
MACKENZIE, K. R. The English Parliament	<i>Penguin Books</i>	1950	2 0
MCKENZIE, R. T. British Political Parties: The Distribution of Power within the Conservative and Labour Parties	<i>Heinemann</i>	1955	30 0
NICHOLAS, H. G. The British General Election of 1950	<i>Macmillan</i>	1951	21 0
SCHOFIELD, A. N. Parliamentary Elections	<i>Shaw</i>	1950	54 0
—Supplement 1951	<i>Shaw</i>	1953	25 0
'THE TIMES'. The House of Commons 1951	<i>'The Times'</i>	1951	10 6
—Supplement 1951-1954	<i>'The Times'</i>	1954	2 0
Report of Select Committee on Delegated Legislation, with Minutes of Evidence	<i>HMSO</i>	1953	8 6
The British Parliament Reference Pamphlet RF.P.2661	<i>COI</i>	1953	free
The Organization of Political Parties in Britain	Reference Paper R.2884	<i>COI</i>	1954
Parliamentary Elections in Britain [<i>in preparation</i>]	Reference Paper R.2865	<i>COI</i>	1955
			free
The Privy Council, Her Majesty's Government, Government Departments			
BRIDGES, <i>Sir EDWARD</i> . Treasury Control	<i>Athlone Press</i>	1950	2 0
FINER, S. E. A Primer of Public Administration	<i>Muller</i>	1950	6 0
JENNINGS, <i>Sir IVOR</i> . Cabinet Government. 2nd edn	<i>Cambridge University Press</i>	1951	37 6
KEITH, A. BERRIEDALE. The British Cabinet System. 2nd edn rev. by N. H. Gibbs	<i>Stevens</i>	1952	37 6
NEILL, DESMOND G., <i>Editor</i> . Devolution of Government: The Experiment in Northern Ireland	For the Royal Institute of Public Administration,		
	<i>Allen & Unwin</i>	1953	6 0
NEWSAM, <i>Sir FRANK</i> . The Home Office. For the Royal Institute of Public Administration,	<i>Allen & Unwin</i>	1954	15 0
Handbook on Scottish Administration	<i>HMSO</i>	1950	1 6
Her Majesty's Ministers and Heads of Public Departments [6 issues a year]	<i>HMSO</i>		1 0
How Northern Ireland is Governed: Central and Local Government in Northern Ireland, by Hugh Shearman	Belfast, <i>HMSO</i>	1951	6

Overseas Information Services. Summary of the Report of the Independent Committee of Enquiry (Drogheda Report)	Cmd 9138 <i>HMSO</i>	1954	1	9	s. d.
Report of the Royal Commission on Scottish Affairs 1952-54	Cmd 9212 <i>HMSO</i>	1954	4	0	

The Civil Service

BRIDGES, Sir EDWARD. Portrait of a Profession: The Civil Service Tradition	<i>Cambridge University Press</i>	1950	2	6	
CRITCHLEY, T. A. The Civil Service Today	<i>Gollancz</i>	1951	12	6	
MONCK, BOSWORTH. How the Civil Service Works	<i>Phoenix House</i>	1952	25	0	
MUNRO, C. K. The Fountains in Trafalgar Square	<i>Heinemann</i>	1952	12	6	
WHEARE, K. C. The Civil Service in the Constitution	<i>Athlone Press</i>	1954	2	6	
British Civil Service 1854-1954, by Wyn Griffith	<i>HMSO</i>	1954	1	0	
The British Civil Service	Reference Paper R.2553 <i>COI</i>	1953	free		

Local Government

BURTON, J. H. Local Rates	<i>Stevens</i>	1950	4	0	
CHESTER, D. N. Central and Local Government: Financial and Administrative Relations	<i>Macmillan</i>	1951	30	0	
CLARKE, J. J. Outlines of Local Government of the United Kingdom. 17th edn	<i>Pitman</i>	1954	15	0	
The Corporation of London: Its Origin, Constitution and Duties	<i>Oxford University Press</i>	1950	7	6	
DRUMMOND, J. M. The Finance of Local Government: England and Wales	<i>Allen & Unwin</i>	1952	20	0	
HADFIELD, E. C. R., and MACCOLL, J. E. British Local Government	<i>Hutchinson</i>	1948	7	6	
JACKSON, W. ERIC. The Structure of Local Government in England and Wales. 2nd edn	<i>Longmans</i>	1955	18	0	
JESSUP, FRANK. Problems of Local Government in England and Wales	<i>Cambridge University Press</i>	1949	5	0	
MAUD, Sir JOHN, and FINER, S. E. Local Government in England and Wales. 2nd edn	<i>Oxford University Press</i>	1953	6	0	
MORRISON, HERBERT. How London is Governed. 2nd edn	<i>James Barrie</i>	1949	8	6	
SCHOFIELD, A. N. Local Government Elections. 3rd edn	<i>Shaw</i>	1954	65	0	
TILLET, N. R. Town Hall and Shire Hall	<i>Harrap</i>	1949	8	6	
WARREN, J. H. The Local Government Service	<i>Allen & Unwin</i>	1952	18	0	
———The English Local Government System. 3rd edn	<i>Allen & Unwin</i>	1953	12	6	
Local Government in Britain	Reference Pamphlet RF.P.2698 <i>COI</i>	1954	free		
Notes on the Work of the County Council and its Principal Officers and Departments	Reference Papers R.1856, R.1860 and R.1904 <i>COI</i>	1949-50	free		

The Law

DENNING, Sir ALFRED. The Changing Law	<i>Stevens</i>	1953	10	0
———Freedom under the Law	<i>Stevens</i>	1949	10	0
EDDY, J. P. The Justices' Handbook: A Guide to Law, Evidence and Procedure in Magistrates' Courts. 3rd edn	<i>Stevens</i>	1953	18	0
GILES, F. T. The Criminal Law	<i>Penguin Books</i>	1954	2	6
———The Magistrates' Courts	<i>Penguin Books</i>	1949	2	6
GLOAG, W. M., and HENDERSON, A. D. Introduction to the Laws of Scotland. 5th edn	<i>William Green</i>	1952	63	0
HANBURY, H. G. English Courts of Law. 2nd edn	<i>Oxford University Press</i>	1953	6	0
JACKSON, R. M. The Machinery of Justice in England. 2nd edn	<i>Cambridge University Press</i>	1953	30	0
JAMES, PHILIP S. Introduction to English Law. 2nd edn	<i>Butterworth</i>	1953	15	0
JENKS, EDWARD. The Book of English Law, 5th edn rev. by D. J. L. Davies	<i>John Murray</i>	1953	21	0
JOYCE, J. A. Justice at Work: The Human Side of the Law	<i>Chapman & Hall</i>	1952	12	6
RUBINSTEIN, RONALD. John Citizen and the Law. 3rd edn	<i>Penguin Books</i>	1952	3	6
TILLET, N. R. The Law and the People	<i>Harrap</i>	1950	8	6
Criminal Statistics for England and Wales <i>Annual</i> For 1953 Cmd 9199 <i>HMSO</i>		1954	5	6
Criminal Statistics, Scotland <i>Annual</i> For 1953 Cmd 9134 <i>HMSO</i>		1954	2	6
Treatment of Offenders				
FOX, LIONEL W. English Prison and Borstal Systems	<i>Routledge</i>	1952	30	0
FRY, MARGERY. Arms of the Law	<i>Gollancz</i>	1951	8	6
Annual Reports				
Commissioners of Prisons	For 1953 Cmd 9259 <i>HMSO</i>	1954	6	0
Prisons in Scotland	For 1953 Cmd 9144 <i>HMSO</i>	1954	1	9
Prisons and Borstals. rev. edn	<i>HMSO</i>	1954	3	6
The Probation Service, Its Objects and Its Organisation. rev. edn	<i>HMSO</i>	1952	1	0
Report of the Committee on Discharged Prisoners' Aid Societies	Cmd 8879 <i>HMSO</i>	1953	1	9
Report of a Committee to Review Punishments in Prisons, Borstal Institutions, Approved Schools and Remand Homes				
Parts I and II. Prisons and Borstal Institutions	Cmd 8256 <i>HMSO</i>	1951	3	6
Parts III and IV. Approved Schools and Remand Homes	Cmd 8429 <i>HMSO</i>	1952	2	6
Report of the Royal Commission on Capital Punishment 1949-53	Cmd 8932 <i>HMSO</i>	1953	12	6

s. d.

The Police Service

- HART, J. M. *The British Police* *Allen & Unwin* 1951 15 0
- HOWARD, GEORGE. *Guardians of the Queen's Peace: The Development and Work of Britain's Police* *Odhams* 1953 15 0
- MARTIENSSSEN, ANTHONY. *Crime and the Police*¹ *Secker & Warburg* 1951 10 6
- REITH, CHARLES. *A Short History of the British Police* *Oxford University Press* 1948
- SCOTT, Sir HAROLD. *Scotland Yard* *Andre Deutsch* 1954 16 0
- THOMAS, T. LEWIS. *Police Administration* *Police Review Publishing Co.* 1952 3 6
- Annual Reports
- Commissioner of the Police of the Metropolis
For 1953 *Cmd 9236 HMSO* 1954 3 6
- H.M. Inspector of Constabulary, Scotland
For 1953 *Cmd 9148 HMSO* 1954 6
- H.M. Inspectors of Constabulary (Counties and Boroughs in England and Wales)
For 1952-53 *HMSO* 1954 1 0
- The Police Service in Britain
Reference Pamphlet RF.P. 2695 *COI* 1953 free

The Fire Service

- EYRE, FRANK, and HADFIELD, E. C. R. *The Fire Service To-day*. 2nd edn *Oxford University Press* 1953 9 6
- Annual Reports
- Fire Research Board
For 1952 and survey of first six years 1947-52 *HMSO* 1953 3 0
For 1953 *HMSO* 1954 2 6
- H.M. Chief Inspector of Fire Services (England and Wales)
For 1953 *Cmd 9227 HMSO* 1954 9
- H.M. Inspector of Fire Services for Scotland
For 1953 *Cmd 9140 HMSO* 1954 6
- Fire Services. Report of Select Committee on Estimates Session 1953-54 *HMSO* 1954 8 0
- Fire Services in Britain [*in preparation*]
Reference Paper R.2915 *COI* 1955 free

III. DEFENCE

- Brassey's Annual: *The Armed Forces Year Book 1954*, edited by Rear-Admiral H. G. Thursfield *Clowes* 1954 63 0
- Jane's *All the World's Aircraft 1954-55*, edited by Leonard Bridgman *Sampson Low* 1954 84 0
- Jane's *Fighting Ships 1954-55*, edited by Raymond Blackman *Sampson Low* 1954 84 0
- KEMP, Lt.-Cdr. P. K. *Fleet Air Arm* *Jenkins* 1954 16 0
- LEWIS, M. *The Navy of Britain* *Allen & Unwin* 1948 30 0
- LIPSCOMB, Cdr. F. W. *The British Submarine* *Black* 1954 25 0
- SHEPPARD, E. W. *A Short History of the British Army*. 4th edn *Constable* 1950 30 0

¹ Also a Penguin Edition 1953, price 2s. od.

			s.	d.
Annual Estimates for the Services				
Air Estimates 1954-55	<i>HMSO</i>	1954	8	0
Memorandum by the Secretary of State for Air				
Cmd 9076	<i>HMSO</i>	1954		6
Army Estimates 1954-55	<i>HMSO</i>	1954	8	0
Memorandum of the Secretary of State for War				
Cmd 9072	<i>HMSO</i>	1954	1	9
Navy Estimates 1954-55	<i>HMSO</i>	1954	10	0
Statement of the First Lord of the Admiralty				
Cmd 9079	<i>HMSO</i>	1954		6
Ministry of Defence Estimate <i>Annual</i> 1954-55	<i>HMSO</i>	1954		9
Statement on Defence <i>Annual</i> 1954	Cmd 9075 <i>HMSO</i>	1954	1	0
Central Organisation for Defence	Cmd 6923 <i>HMSO</i>	1946		6
Civil Defence Manual of Basic Training [<i>series of pamphlets</i>]	<i>HMSO</i>	1949	1	0
		to		to
		1953	1	9
Britain and Defence	Reference Paper R.2846 <i>COI</i>	1954		free
Civil Defence in Britain [<i>under revision</i>]				
	Reference Paper R.2534 <i>COI</i>	1953		free
National Service in Britain	Reference Paper R.2423 <i>COI</i>	1952		free
The Territorial Army and the Army Emergency Reserve				
	Reference Paper R.2578 <i>COI</i>	1953		free
IV. THE NATIONAL ECONOMY				
CAIRNCROSS, A. K., <i>Editor</i> . The Scottish Economy: A Statistical Account of Scottish Life by members of the staff of Glasgow University	<i>Cambridge University Press</i>	1954	30	0
CARTER, C. F., and ROY, A. D. British Economic Statistics	<i>Cambridge University Press</i>	1954	21	0
CROSLAND, C. A. R. Britain's Economic Problems	<i>Cape</i>	1953	12	6
JONES, G. P., and POOL, A. G. A Hundred Years of Economic Development in Great Britain 1840-1940. 2nd edn	<i>Duckworth</i>	1948	21	0
ROBERTSON, Sir DENNIS. Britain in the World Economy	<i>Allen & Unwin</i>	1954	7	6
SEERS, DUDLEY. The Levelling of Incomes since 1938	<i>Blackwell</i>	1951	5	0
WORSWICK, G. D. N., and others. The British Economy, 1945-50	<i>Oxford University Press</i>	1952	35	0
Annual Abstract of Statistics				
No. 88, 1938-50	<i>HMSO</i>	1954	21	0
No. 91, 1954	<i>HMSO</i>	1954	21	0
Economic Survey <i>Annual from</i> 1947				
For 1954	Cmd 9108 <i>HMSO</i>	1954	1	6
EUROPEAN ECONOMIC CO-OPERATION ORGANISATION.				
Economic Conditions in the United Kingdom	<i>HMSO</i>	1954	2	0
National Income and Expenditure of the United Kingdom <i>Annual</i> 1938-46	Cmd 7099 <i>HMSO</i>	1947	1	0
1946-53 (prepared by the Central Statistical Office)	<i>HMSO</i>	1954	6	0

			s.	d.
Recovery Record: The Story of Marshall Aid in Britain				
	<i>HMSO</i>	1951	2	6
Digest of Scottish Statistics <i>Twice yearly from April 1953</i>	<i>HMSO</i>		4	0
Digest of Statistics: Northern Ireland <i>Twice yearly from March 1954</i>	Belfast, <i>HMSO</i>		5	0
Digest of Welsh Statistics <i>Annual from 1954</i>	<i>HMSO</i>		6	0
Economic Trends. <i>Monthly from November 1953</i>	<i>HMSO</i>		2	0
Monthly Digest of Statistics	<i>HMSO</i>		4	6
Relaxations of Controls	Reference Paper R.2857 <i>COI</i>	1954		free

V. INDUSTRY

Organization and Production

ALLEN, G. C. British Industries and their Organization. 3rd edn	<i>Longmans</i>	1951	17	6
BRITISH PRODUCTIVITY COUNCIL. The British Productivity Council: Policy and Programme	<i>BPC</i>	1953		6
———Progress Report 1953-54	<i>BPC</i>	1954	1	0
CHESTER, D. N. The Nationalised Industries: An Analysis of the Statutory Provisions. 2nd edn				
For the Royal Institute of Public Administration,	<i>Allen & Unwin</i>	1951		
GOODMAN, EDWARD. Forms of Public Control and Ownership	<i>Christophers</i>	1951	8	6
HOULDSWORTH, Sir HUBERT, and others. Efficiency in the Nationalised Industries				
For the Royal Institute of Public Administration,	<i>Allen & Unwin</i>	1952		
HUTTON, GRAHAM, and others. We Too Can Prosper: The Promise of Productivity	<i>Allen & Unwin</i>	1953	12	0
OAKLEY, C. A., <i>Editor</i> . Scottish Industry: An account of what Scotland makes and where she makes it	<i>Scottish Council</i>	1953	25	0
POLITICAL AND ECONOMIC PLANNING. Government and Industry: A Survey of the Relations between Government and Privately-Owned Industry	<i>PEP</i>	1952	21	0
ROBSON, W. A. Problems of Nationalized Industry	<i>Allen & Unwin</i>	1952	25	0
Distribution of Industry	Cmd 7540 <i>HMSO</i>	1948	1	9
Industry and Employment in Scotland <i>Annual</i>				
For 1953	Cmd 9102 <i>HMSO</i>	1954	2	6
The Regional Boards for Industry	<i>Treasury and COI</i>	1951		free
Reports from Select Committee on Nationalised Industries				
Session 1951-52	<i>HMSO</i>	1952	6	6
Session 1952-53	<i>HMSO</i>	1953	5	6
Industrial Development in Scotland				
	Reference Paper R.2531 <i>COI</i>	1953		free
Productivity in the United Kingdom				
	Reference Paper R.2205 <i>COI</i>	1951		free
Recent Industrial Developments in the United Kingdom				
[<i>under revision</i>]	Reference Paper R.2415 <i>COI</i>	1952		free

			s.	d.
United Kingdom Development Areas	Reference Paper R.2692 <i>COI</i>	1953	free	
United Kingdom Monopolies Commission	Reference Paper R.2545 <i>COI</i>	1953	free	
Supplement	Reference Paper R.2807 <i>COI</i>	1954	free	

Agriculture

EASTERBROOK, L. F. British Agriculture. 4th edn	For the British Council, <i>Longmans</i>	1950	1	0
ERNLE, Lord. English Farming Past and Present	<i>Longmans</i>	1936		
ORWIN, C. S. A History of English Farming	<i>Nelson</i>	1949	12	6
WATSON, Sir JAMES SCOTT, and MORE, J. A. Agriculture: The Science and Practice of British Farming. 9th edn [<i>new edn in preparation</i>]	<i>Oliver & Boyd</i>	1950		
Agricultural Research Service	<i>HMSO</i>	1953	2	6
Agricultural Statistics, United Kingdom				
Part I. Acreage and Production of Crops, Numbers of Livestock, etc., 1952	<i>HMSO</i>	1954	2	6
Part II. Output and Utilisation of Farm Produce, 1943-50	<i>HMSO</i>	1953	2	6
Agricultural Survey of Scotland	Edinburgh, <i>HMSO</i>	1946	8	6
Annual Reports				
Animal Health Services in Great Britain	For 1953 <i>HMSO</i>	1954	3	0
Department of Agriculture for Scotland				
Agriculture in Scotland 1953	Cmd 9113 <i>HMSO</i>	1954	3	6
Annual Review and Determination of Guarantees				
For 1954	Cmd 9104 <i>HMSO</i>	1954		9
British Farming, by W. B. Mercer	<i>HMSO</i>	1951	3	6
Decontrol of Food and Marketing of Agricultural Produce	Cmd 8989 <i>HMSO</i>	1953		4
Development Commission Survey of Agricultural, Forestry and Fishery Products and their Utilisation, 1951	<i>HMSO</i>	1953	7	6
Farm Incomes in England and Wales 1952-53 <i>Annual</i>	<i>HMSO</i>	1955	6	0
Agriculture: Journal of the Ministry of Agriculture and Fisheries <i>Monthly</i>	<i>HMSO</i>			9
Scottish Agriculture: Journal of the Department of Agriculture for Scotland <i>Quarterly</i>	<i>HMSO</i>		1	0
County Agricultural Executive Committees	Reference Paper R.2687 <i>COI</i>	1953	free	

Fisheries

Annual Reports				
Fisheries of Scotland	For 1953 Cmd 9128 <i>HMSO</i>	1954	2	6
Herring Industry Board	For 1953 Cmd 9149 <i>HMSO</i>	1954	1	3
White Fish Authority (and Accounts)				
	For 1953-54 <i>HMSO</i>	1954	1	6
Annual Statistical Tables				
Scottish Sea Fisheries	For 1953 <i>HMSO</i>	1954	3	6
Sea Fisheries	For 1953 <i>HMSO</i>	1954	2	6

s. d.

Forestry

- CHAMPION, H. G. *Forestry* *Oxford University Press* 1954 6 0
- TAYLOR, W. LING. *Forests and Forestry in Great Britain*
Crosby Lockwood 1945 12 6
- Annual Reports
- Forestry Commissioners For 1952-53 *HMSO* 1954 3 0
- Forest Research For 1952-53 *HMSO* 1954 5 0
- Britain's Forests [13 *booklets*] *HMSO* 1948 6
to to
1953 1 3
- Census of Woodlands 1947-49: Summary Report
HMSO 1951 9
- Dedication of Woodlands: Principles and Procedure. 3rd edn
HMSO 1953 2 0
- The Forestry Commission in Scotland *Forestry Commission* 1953 free
- National Forest Park and Forestry Commission Guides
[9 *booklets*] *HMSO* 1946 1 6
to to
1954 5 0
- Post-War Forest Policy Cmd 6447 *HMSO* 1943 3 0
- Private Woodlands Cmd 6500 *HMSO* 1944 6
- The Role of State, Communities and Private Enterprise, in
the National Forest Policy of Great Britain, by W. H.
Guillebaud *Forestry Commission* 1952 free.
- Statement presented by the Forestry Commission of Great
Britain to the Sixth Commonwealth Forestry Conference,
Canada, 1952 *Forestry Commission* 1952 free

Fuel and Power

- POLITICAL AND ECONOMIC PLANNING. The British Fuel and
Power Industries *PEP* 1947 30 0
- Fuel and the Future. Proceedings of a Conference under the
Auspices of the Fuel Efficiency Committee. 3 vols.
HMSO 1948 15 6
- Ministry of Fuel and Power Statistical Digest *Annual*
For 1953 *HMSO* 1954 21 0
- Report of the Committee on National Policy for the Use of
Fuel and Power Resources [Ridley Report]
Cmd 8647 *HMSO* 1952 6 6

Coal

- NATIONAL COAL BOARD. Fifty Questions and Answers on
British Coal *NCB* 1952 free
- Plan for Coal *NCB* 1950 2 6
- Some Notes on the British Coal Industry *NCB* 1952 free
- POLITICAL AND ECONOMIC PLANNING. Report on the British
Coal Industry *PEP* 1936
- TOWNSHEND-ROSE, H. The British Coal Industry
Allen & Unwin 1951 12 6
- Annual Reports and Accounts
National Coal Board For 1953 *HMSO* 1954 8 0

		s.	d.
Coal, by W. H. B. Court (Official Histories of Second World War, Civil Series)	<i>Longmans and HMSO</i>	1951	21 0
Coal Mining: Report of the Technical Advisory Committee [Reid Report]	Cmd 6610 <i>HMSO</i>	1945	3 6
United Kingdom Coal Industry [<i>in preparation</i>]	Reference Paper R.2916 <i>COI</i>	1955	free
<i>Petroleum</i>			
KING, A. L. Statistics Relating to the Petroleum Industry, with Particular Reference to the United Kingdom	<i>Royal Statistical Society</i>	1952	2 0
UNITED KINGDOM PETROLEUM INDUSTRY ADVISORY COMMITTEE. UK Petroleum Industry Statistics Relating to Consumption and Refinery Production <i>Annual</i>			
For 1952 and 1953 <i>Petroleum Information Bureau</i>		1954	free
<i>Electricity and Gas Supply</i>			
BRITISH ELECTRICITY AUTHORITY. Power and Prosperity	<i>BEA</i>	1954	1 0
BRITISH GAS COUNCIL. The Rise of the Gas Industry in Britain	<i>Gas Council</i>	1949	15 0
MACKENZIE, COMPTON. The Vital Flame			
For the British Gas Council, <i>Muller</i>		1947	
POLITICAL AND ECONOMIC PLANNING. Report on the Gas Industry in Great Britain	<i>PEP</i>	1939	13 0
————— Report on the Supply of Electricity in Great Britain	<i>PEP</i>	1936	
SELF, Sir HENRY, and WATSON, ELIZABETH M. Electricity Supply in Great Britain	<i>Allen & Unwin</i>	1952	20 0
Annual Reports and Accounts			
British Electricity Authority	For 1953-54 <i>HMSO</i>	1954	9 0
Gas Council	For 1953-54 <i>HMSO</i>	1954	6 6
North of Scotland Hydro-Electric Board			
For 1953 <i>HMSO</i>		1954	2 6
The Gas Industry: Report of the Committee of Enquiry [Heyworth Report]	Cmd 6699 <i>HMSO</i>	1945	2 0
Report of the Committee on Hydro-Electric Development in Scotland	Cmd 6406 <i>HMSO</i>	1942	9
Water Supply			
INSTITUTION OF WATER ENGINEERS. Manual of British Water Supply Practice. 2nd edn	<i>Heffer</i>	1954	55 0
METROPOLITAN WATER BOARD. London's Water Supply 1903-53: A Review of the Work of the Metropolitan Water Board	<i>Staples Press</i>	1953	15 0
VEAL, T. H. P. The Supply of Water. 2nd edn			
<i>Chapman & Hall</i>		1950	25 0
WALTERS, R. C. S. The Nation's Water Supply			
<i>Nicholson & Watson</i>		1936	31 6
Annual Reports			
Water Pollution Research Board	For 1953 <i>HMSO</i>	1954	2 6
National Water Policy	Cmd 6515 <i>HMSO</i>	1944	6

			s.	d.
River Boards: A Guide to their Power and Functions	<i>HMSO</i>	1950	3	0
Some Manufacturing Industries				
ASSOCIATION OF BRITISH CHEMICAL MANUFACTURERS. Report on the British Chemical Industry 1949	<i>Association of British Chemical Manufacturers</i>	1949	5	0
———Supplement 1953	<i>Association of British Chemical Manufacturers</i>	1953	1	0
BRITISH PRODUCTIVITY COUNCIL. Reviews of Productivity:				
The Building Industry	<i>BPC</i>	1954	2	3
The Diesel Locomotive Industry	<i>BPC</i>	1954	2	0
The Fertilizer Industry	<i>BPC</i>	1954	2	0
The Pressed Metal Industry	<i>BPC</i>	1954	2	0
The Valves Industry	<i>BPC</i>	1954	2	0
CASTLE, H. G. Britain's Motor Industry	<i>Clerke & Cockeran</i>	1950		
POLITICAL AND ECONOMIC PLANNING. Locomotives: A Report on the Industry	<i>PEP</i>	1951	12	6
———Motor Vehicles: A Report on the Industry	<i>PEP</i>	1950		
'The Times' Survey of the British Motor Car Industry	<i>'The Times'</i>	1954	2	6
Annual				
WILLIAMS, T. I. The Chemical Industry: Past and Present	<i>Penguin Books</i>	1953	2	0
Report of the Hydrocarbon Oil Duties Committee	Cmd 6615 <i>HMSO</i>	1945		3
Reports of Working Parties				
Boots and Shoes	<i>HMSO</i>	1946	3	6
China Clay	Cmd 6748 <i>HMSO</i>	1948		3
Cotton	<i>HMSO</i>	1946		
Jewellery and Silverware	<i>HMSO</i>	1946	3	0
Jute	<i>HMSO</i>	1948	2	6
Pottery	<i>HMSO</i>	1946	1	3
Wool	<i>HMSO</i>	1947	3	6
British Aircraft: Progress and Achievement	<i>COI</i>	1953		free
British Aircraft: Types shown by the Society of British Aircraft Constructors at Farnborough 1952	<i>COI</i>	1953		free
The British Electrical Engineering Industry	Reference Paper R.2295 <i>COI</i>	1952		free
The British Plastics Industry	Reference Paper R.2386 <i>COI</i>	1952		free
Growth of New Export Industries in the United Kingdom	Reference Paper R.2847 <i>COI</i>	1954		free
United Kingdom Agricultural Machinery Industry	Reference Paper R.2818 <i>COI</i>	1954		free
United Kingdom Aircraft Industry	Reference Paper R.2457 <i>COI</i>	1952		free
Supplement	Reference Paper R.2676 <i>COI</i>	1953		free
Second Supplement	Reference Paper R.2922 <i>COI</i>	1954		free
United Kingdom Chemical Industry	Reference Paper R.2633 <i>COI</i>	1953		free

			s.	d.
United Kingdom Motor Vehicle Industry [<i>in preparation</i>]				
	Reference Paper R.2917 COI	1955	free	
United Kingdom Office Equipment Industry				
	Reference Paper R.2630 COI	1953	free	
United Kingdom Pharmaceutical Industry				
	Reference Paper R.2516 COI	1952	free	
United Kingdom Prefabricated Buildings Industry				
	Reference Paper R.2588 COI	1953	free	
The United Kingdom Textile Industries				
Introductory	Reference Paper R.2275 COI	1952	free	
Cotton	Reference Paper R.2277 COI	1952	free	
Jute	Reference Paper R.2279 COI	1952	free	
Linen	Reference Paper R.2278 COI	1952	free	
Rayon and Synthetic Fibres	Reference Paper R.2281 COI	1952	free	
Silk	Reference Paper R.2280 COI	1952	free	
Wool	Reference Paper R.2276 COI	1952	free	

VI. TRANSPORT AND COMMUNICATIONS

Shipping

BLAKE, G. British Ships and Shipbuilders	<i>Collins</i>	1946		
BOWN, A. H. J., and DOVE, C. A. Port Operation and Administration	<i>Chapman & Hall</i>	1950	21	0
CHAMBER OF SHIPPING OF THE UNITED KINGDOM. Annual Report 1953-54				
	<i>Chamber of Shipping of the United Kingdom</i>	1954	25	0
CORPORATION OF LLOYD'S. Lloyd's List Annual Review 1954				
	<i>Corporation of Lloyd's</i>	1954		6
DOCKS AND INLAND WATERWAYS EXECUTIVE. Review of Trade Harbours 1948-50				
	<i>Docks and Inland Waterways Board of Management</i>	1951	2	0
DUFF, PETER. British Ships and Shipping	<i>Harrap</i>	1949		
FORD, P., and BOUND, J. A. Coastwise Shipping and the Small Ports	<i>Blackwell</i>	1951	10	6
HARDY, A. C. The Book of the Ship	<i>Sampson Low</i>	1949		
Lloyd's Register of Shipping 1954-55 Annual [<i>and supplements</i>]	<i>Lloyd's Register of Shipping</i>	1954	12	gns.
MEAD, Cdr. HILARY P. Trinity House	<i>Sampson Low</i>	1947		
Merchant Ships: British Built . . . 1953				
	<i>Adlard Coles/Harrap</i>	1954	25	0
OWEN, Sir DAVID J. The Origin and Development of the Ports of the United Kingdom. 2nd edn	<i>Allman</i>	1949	30	0
PORT OF LONDON AUTHORITY. 45th Annual Report 1953-54				
	<i>PLA</i>	1954	1	0
'Shipping World' Year Book and Who's Who 1954-55, edited by Sir Archibald Hurd	<i>'Shipping World'</i>	1954	60	0
THORNTON, R. H. British Shipping				
	<i>Cambridge University Press</i>	1939		
Ports of the United Kingdom	Reference Paper R.2292 COI	1952	free	

s. d.

Inland Transport

- WALKER, G. Road and Rail: An Enquiry into the Economics of Competition and State Control. 2nd edn
Allen & Unwin 1947 18 0
- Annual Reports and Accounts
British Transport Commission
Vol. I Report For 1953 *HMSO* 1954 3 6
Vol. II Financial and Statistical Accounts For 1953 *HMSO* 1954 6 6
- Transport Policy Cmd 8538 *HMSO* 1952 3
- Railways*
- BRITISH TRANSPORT COMMISSION. Facts and Figures about British Railways. rev. edn *BTC* 1954 free
- DOW, GEORGE. British Steam Horses *Phoenix House* 1950 12 6
- GREENLEAF, HORACE, and TYERS, G. The Permanent Way
Winchester Publications 1948 21 0
- NOCK, O. S. British Trains: Past and Present *Batsford* 1951 16 0
- The Railways of Britain: Past and Present. 2nd edn
Batsford 1950 15 0
- ST. JOHN, JOHN, *Editor*. Britain's Railways Today
Naldrett Press 1954 15 0
- WARD, Sir MICHAEL BARRINGTON, and others. Unification of British Railways: Administrative Principles and Practice
'Modern Transport' 1951
- WILLIAMSON, JOHN W. Railways To-day. 2nd edn
Oxford University Press 1951 9 6
- Railways Reorganisation Scheme Cmd 9191 *HMSO* 1954 9
- Roads*
- JEFFREYS, REES. The King's Highway: An Historical and Autobiographical Record of the Development of the Last Sixty Years
Batchworth Press 1949 18 0
- PILCHER, R. S. Road Passenger Transport *Pitman* 1947
- TRIPP, Sir ALKER. Road Traffic and its Control. 2nd edn
Edward Arnold 1950 40 0
- Annual Reports
Road Research Board For 1953 *HMSO* 1954 5 0
- The Highway Code. New edn *HMSO* 1955 1
- Report of the Committee on the Licensing of Road Passenger Services *HMSO* 1953 3 6
- Road Traffic Census 1950 *HMSO* 1952 5 0
- Roads: Report from the Select Committee on Estimates
Session 1952-53 *HMSO* 1953 7 0
- London Transport*
- LONDON TRANSPORT EXECUTIVE. London Travel Survey 1949
LTE 1950 7 6
- PASSINGHAM, W. J. The Romance of London's Underground
Sampson Low 1933

		s.	d.
London Traffic Congestion: Report by the London and Home Counties Traffic Advisory Committee	<i>HMSO</i>	1951	
Report of the Committee on the Taxicab Service	Cmd 8804 <i>HMSO</i>	1953	1 3
<i>Inland Waterways</i>			
DOCKS AND INLAND WATERWAYS EXECUTIVE. British Waterways	<i>Docks and Inland Waterways Board of Management</i>	1951	2 6
HADFIELD, CHARLES. British Canals: An Illustrated History	<i>Phoenix House</i>	1950	16 0
ROLT, L. T. C. The Inland Waterways of England	<i>Allen & Unwin</i>	1950	21 0
<i>Ulster Transport Authority</i>			
Annual Reports			
Ulster Transport Authority	For 1952-53 Belfast, <i>UTA</i>	1954	1 0
Civil Aviation			
BRITISH INDEPENDENT AIR TRANSPORT ASSOCIATION. Annual Report	For 1953-54 <i>BIATA</i>	1954	free
DUKE, NEVILLE, and LANCHBERY, EDWARD. Sound Barrier: The Story of High Speed Flight. 2nd edn	<i>Cassell</i>	1954	8 6
VEALE, S. E. Airliners and Airways of To-day	<i>Pilot Press</i>	1948	
Annual Reports			
Air Transport Advisory Council (and Statement by the Minister of Civil Aviation)	For 1953-54 <i>HMSO</i>	1954	1 3
British European Airways Corporation (and Accounts)	For 1953-54 <i>HMSO</i>	1954	5 0
British Overseas Airways Corporation (and Accounts)	For 1953-54 <i>HMSO</i>	1954	3 6
Gatwick Airport	Cmd 9296 <i>HMSO</i>	1954	3
London Airport; Northolt Airport; Prestwick Airport; Renfrew Airport	<i>HMSO</i>	1948-49	ea. 1 0
London Airport: Developments in the Central Terminal Area	<i>HMSO</i>	1954	2 6
London's Airports	Cmd 8902 <i>HMSO</i>	1953	6
Report of the Committee on Certification of Civil Aircraft and Approval of Equipment and Memorandum by the Minister of Civil Aviation	Cmd 7705 <i>HMSO</i>	1949	6
Report of the Committee on Recruitment, Training and Licensing of Personnel for Civil Aviation and Memorandum by the Minister of Civil Aviation	Cmd 7746 <i>HMSO</i>	1949	9
The Post Office			
KAY, F. G. Royal Mail	<i>Rockliff</i>	1951	10 6
ROBINSON, HOWARD. Britain's Post Office	<i>Oxford University Press</i>	1953	21 0
Annual Accounts			
Cable and Wireless Ltd. (with Report of Directors)	For 1953-54 Cmd 9234 <i>HMSO</i>	1954	9
Post Office Commercial Accounts	For 1953-54 <i>HMSO</i>	1954	2 6
Monarchs of All They Surveyed: The Story of the Post Office Surveyors	<i>HMSO</i>	1952	2 6
Post Office 1951: A Review of the Year's Activities	<i>HMSO</i>	1952	

VII. LABOUR AND MANAGEMENT

- COLE, G. D. H. *An Introduction to Trade Unionism*
Allen & Unwin 1953 18 0
- COURTAULD, SAMUEL. *Ideals and Industry*
Cambridge University Press 1949 15 0
- FLANDERS, ALLAN. *Trade Unions* *Hutchinson* 1952 8 6
- and CLEGG, H. *The System of Industrial Relations
in Great Britain* *Blackwell* 1954 30 0
- HEGINBOTHAM, H. *The Youth Employment Service*
Methuen 1951 8 6
- INTERNATIONAL LABOUR OFFICE. *National Employment
Services: Great Britain* *ILO* 1952 6 0
- MORTON, F. J. BURNS. *The New Foremanship*
Chapman & Hall
- Vol. I 2nd edn 1946 16 0
- Vol. II 1949 12 6
- NATIONAL INSTITUTE OF INDUSTRIAL PSYCHOLOGY. *Joint
Consultation in British Industry* *Staples* 1952 21 0
- NORTHCOTT, C. H. *Personnel Management: Its Scope and
Practice*. 3rd edn *Pitman* 1952 21 0
- POLITICAL AND ECONOMIC PLANNING. *British Trade
Unionism*. rev. edn *PEP* 1949
- SHARP, IAN G. *Industrial Conciliation and Arbitration in
Great Britain* *Allen & Unwin* 1951 25 0
- TAYLOR, GORDON RATTRAY. *Are Workers Human?*
Falcon Press 1950 10 6
- WEBB, SIDNEY and BEATRICE. *A History of Trade Unionism*.
2nd edn *Longmans* 1920 25 0
- Annual Reports
- Chief Inspector of Factories For 1953 Cmd 9330 *HMSO* 1954 6 6
- Ministry of Labour and National Service
- For 1953 Cmd 9207 *HMSO* 1954 5 0
- For 1939-46 Cmd 7225 *HMSO* 1947 7 0
- Directory of Employers' Associations, Trade Unions, Joint
Organisations, etc. *HMSO* 1948 3 6
- Employment Policy Cmd 6527 *HMSO* 1944 1 0
- Human Relations in Industry: First Report of the Joint
Committee of DSIR and Medical Research Council
1953-54 *HMSO* 1954 1 0
- Industrial Relations Handbook. rev. edn *HMSO* 1953 4 6
- Report of the National Advisory Committee on the Employ-
ment of Older Men and Women Cmd 8963 *HMSO* 1954 2 0
- Report of the National Youth Employment Council on the
Work of the Youth Employment Service 1950-53 *HMSO* 1954 2 0
- A Short Guide to the Factories Acts 1937 and 1948 *HMSO* 1949 6
- The Worker in Industry (Ministry of Labour Centenary
Lectures 1951) *HMSO* 1952 3 6
- Ministry of Labour Gazette *Monthly* *HMSO* 1 6
- The Employment of Older Men and Women
Reference Paper R.2377 *COI* 1952 free

			s.	d.
Supplement: First Report of the National Advisory Committee	Reference Paper R.2724	COI	1953	free
Labour Relations and Working Conditions in Britain	Reference Pamphlet RF.P.2662	COI	1953	free
Rehabilitation and Care of the Disabled in Britain	Reference Paper R.2879	COI	1954	free
The Trade Unionist in Britain	Reference Pamphlet RF.P.2442	COI	1952	free
Vocational Education and Training	Reference Paper R.1903	COI	1950	free
Women in Britain [<i>under revision</i>]	Reference Paper R.2433	COI	1952	free

VIII. FINANCE

ARMSTRONG, F. E. The Book of the Stock Exchange. 4th edn	<i>Pitman</i>		1947	30	0
CHUBB, B. The Control of Public Expenditure: Financial Committees of the House of Commons.	<i>Oxford University Press</i>		1952	25	0
HICKS, U. K. British Public Finances: Their Structure and Development, 1880-1952	<i>Oxford University Press</i>		1954	6	0
HOBSON, OSCAR. How the City Works	<i>News Chronicle</i>		1954	6	0
HORNE, H. O. A History of Savings Banks	<i>Oxford University Press</i>		1947	21	0
KING, W. T. C. A History of the London Discount Market [<i>new edn in preparation</i>]	<i>Routledge</i>		1936		
LAVINGTON, F. The English Capital Market	<i>Methuen</i>		1934		
RAYNES, H. E. A History of British Insurance	<i>Pitman</i>		1950	35	0
SAYERS, R. S. Modern Banking	<i>Oxford University Press</i>		1951	17	6
YOUNG, E. HILTON (<i>Lord Kennet</i>). The System of National Finance. 3rd edn	<i>Murray</i>		1936		
Annual Reports					
Commissioners of Customs and Excise					
For 1952-53	Cmd 9031	HMSO	1954	6	0
Commissioners of Inland Revenue					
For 1952-53	Cmd 9030	HMSO	1954	5	0
Finance Accounts of the United Kingdom for the Financial Year	<i>Annual</i>				
For 1953-54	HMSO		1954	2	6
Financial Statement	<i>Annual</i>				
For 1954-55	HMSO		1954	1	3
National Debt	<i>Annual</i>				
For 1938-54	Cmd 9297	HMSO	1954	1	3
United Kingdom Financial Institutions					
	Reference Paper R.2346	COI	1952	free	

IX. TRADE

External Trade

GILLETT BROTHERS DISCOUNT COMPANY. The Bill on London	<i>Chapman & Hall</i>		1952	15	0
INSTITUTE OF BANKERS. The Sterling Area [<i>nine pamphlets</i>]	<i>Institute of Bankers</i>		1949	ea.1	0
POLITICAL AND ECONOMIC PLANNING. Britain and World Trade	<i>PEP</i>		1947	18	0

—————The Sterling Area: History and Mechanism	<i>PEP</i>	1951	s. d.
SMITH, J. G. Organized Produce Markets	<i>Longmans</i>	1926	
SWISS BANK CORPORATION. British Exports and Exchange Restrictions Abroad. 8th edn	<i>Swiss Bank Corporation</i>	1954	free
Annual Statement of Trade of the United Kingdom with British and Foreign Countries 1952			
Vol. I. Summaries of the Import and Export Trade	<i>HMSO</i>	1954	35 0
Vol. II. Detailed Statements respecting Articles Imported and Re-exported, and of Imports and Exports of Gold and Silver Bullion and Coin	<i>HMSO</i>	1954	60 0
Supplement	<i>HMSO</i>	1944	5 0
Vol. III. Details of Exports of the Produce and Manufactures of the United Kingdom	<i>HMSO</i>	1954	70 0
Vol. IV. Details of Trade with Individual Countries	<i>HMSO</i>	1954	30 0
Assistance to Exporters. Thirteenth Report from the Select Committee on Estimates, Session 1952-53	<i>HMSO</i>	1953	5 0
Commonwealth Trade in 1953-54. A Memorandum prepared in the Intelligence Branch of the Commonwealth Economic Committee	<i>Annual HMSO</i>	1954	1 3
United Kingdom Balance of Payments	<i>Annual</i>		
1946-1954	Cmd 9291 <i>HMSO</i>	1954	2 6
Accounts Relating to the Trade and Navigation of the United Kingdom	<i>Monthly HMSO</i>		12 6
Board of Trade Journal	<i>Weekly HMSO</i>		9
Report on Overseas Trade	<i>Monthly HMSO</i>		2 6
United Kingdom Trade Fairs and Exhibitions			
Reference Paper R.2833	<i>COI</i>	1954	free
Internal Trade			
CHISHOLM, C., <i>Editor</i> . Marketing Survey of the United Kingdom. 5th edn	<i>Business Publications</i>	1951	5 gns.
JEFFERYS, J. B., <i>and others</i> . Distribution of Consumer Goods. A Factual Study of Methods and Costs in the United Kingdom in 1938	<i>Cambridge University Press</i>	1950	40 0
—————Retail Trading in Britain 1850-1950	<i>Cambridge University Press</i>	1954	50 0
SMITH, HENRY. Retail Distribution: A Critical Analysis. 2nd edn	<i>Oxford University Press</i>	1948	18 0
Britain's Shops: A Statistical Summary of Shops and Service Establishments	<i>HMSO</i>	1952	3 6
Census of Distribution and Other Services 1950			
Vol. I. Retail and Service Trades: Area Tables	<i>HMSO</i>	1953	7 6
Vol. II. Retail and Service Trades: General Tables	<i>HMSO</i>	1954	22 6
Vol. III. Wholesale Trades	<i>HMSO</i>	1955	15 0
The Co-operative Movement in Britain			
Reference Paper R.2524	<i>COI</i>	1953	free

X. SOCIAL WELFARE**State and Voluntary Services**

AMULREE, <i>Lord</i> . Adding Life to Years For the National Council of Social Service, <i>Bannisdale Press</i>	1951	8 6
BEVERIDGE, <i>Lord</i> . Voluntary Action <i>Allen & Unwin</i>	1948	16 0
— and WELLS, A. F., <i>Editors</i> . The Evidence for Volun- tary Action <i>Allen & Unwin</i>	1949	16 0
COLE, G. D. H. British Social Services. rev. edn For the British Council, <i>Longmans</i>	1949	1 0
FAMILY WELFARE ASSOCIATION. Guide to the Social Services, 1954: A Year Book of Information respecting the Statu- tory and Voluntary Means of Assistance. 45th edn <i>Staples Press</i>	1954	5 0
HALL, M. PENELOPE. The Social Services of Modern England. 2nd edn <i>Routledge & Kegan Paul</i>	1953	25 0
MORRIS, C., <i>Editor</i> . Social Case-Work in Great Britain <i>Faber & Faber</i>	1950	12 6
NATIONAL COUNCIL OF SOCIAL SERVICE. Voluntary Social Services: Handbook of Information and Directory of Organisations <i>NCSS</i>	1951	6 0
WICKWAR, H. and M. The Social Services: An Historical Survey. rev. edn <i>John Lane</i>	1949	12 6
YOUNGHUSBAND, E. L. Social Work in Britain: Supplemen- tary Report on the Employment and Training of Social Workers Dunfermline: <i>Carnegie United Kingdom Trust</i>	1951	free
Social Service: A Quarterly Survey <i>NCSS</i>	p.a.	10 0
Social Work: A Quarterly Review of Family Casework <i>Family Welfare Association</i>	p.a.	6 0
Children in Britain Reference Paper R.2548 <i>COI</i>	1953	free
Social Services in Britain [<i>in preparation</i>] Reference Pamphlet RF.P.2935 <i>COI</i>	1955	free
Social Work and the Social Worker in Britain Reference Pamphlet RF.P.2238 <i>COI</i>	1951	free

National Insurance and Related Services

MARSH, DAVID C. National Insurance and Assistance in Great Britain <i>Pitman</i>	1951	20 0
RATHBONE, ELEANOR. Family Allowances <i>Allen & Unwin</i>	1949	15 0
ROWNTREE, B. SEEBOHM, and LAVERS, G. R. Poverty and the Welfare State: A Third Social Survey of York <i>Longmans</i>	1951	7 6
Annual Reports Government Actuary, on the operation of The National Insurance (Industrial Injuries) Act, 1946 For 1952-53 <i>HMSO</i>	1954	4
Ministry of Pensions and National Insurance For 1953 Cmd 9159 <i>HMSO</i>	1954	4 6
National Assistance Board For 1953 Cmd 9210 <i>HMSO</i>	1954	2 0
War Pensioners. April to December 1953 <i>HMSO</i>	1954	4 0
Children in the Care of Local Authorities in England and Wales, November 1953 <i>Annual</i> Cmd 9145 <i>HMSO</i>	1954	4

			s.	d.
National Insurance Act, 1946: Report by the Government Actuary on the First Quinquennial Review	<i>HMSO</i>	1954	2	6
National Insurance Bill, 1954: Memorandum and Report by the Minister	Cmd 9338 <i>HMSO</i>	1954		4
Report by the Government Actuary on the Financial Provisions of the Bill	Cmd 9332 <i>HMSO</i>	1954		4
Report of the Care of Children Committee [Curtis Report]	Cmd 6922 <i>HMSO</i>	1946	4	6
Report of the Committee on the Economic and Financial Problems of the Provision for Old Age	Cmd 9333 <i>HMSO</i>	1954	4	0
Social Insurance and Allied Services [Beveridge Report]	Cmd 6404 <i>HMSO</i>	1942	6	0
Work of the Children's Department of the Home Office	<i>HMSO</i>	1951	5	0
National Insurance and Allied Social Security Services in Britain	Reference Pamphlet RF.P.2562 <i>COI</i>	1953		free
Health				
CLARKE, J. J. Introduction to Public Health Law	<i>Cleaver-Hume Press</i>	1949	7	6
CLEGG, HUGH. Medicine in Britain. 4th edn	For the British Council, <i>Longmans</i>	1951	2	0
ROSS, Sir JAMES STIRLING. The National Health Service in Great Britain	<i>Oxford University Press</i>	1952	30	0
Annual Reports				
Board of Control (Lunacy and Mental Treatment)	For 1953 <i>HMSO</i>	1954		6
Central Health Services Council	For 1953 <i>HMSO</i>	1954	1	6
Department of Health for Scotland and Scottish Health Services Council	For 1953 Cmd 9107 <i>HMSO</i>	1954	4	6
Ministry of Health	For 1953			
Part I. 1. National Health Service.				
2. Welfare, Food and Drugs, and Civil Defence	Cmd 9321 <i>HMSO</i>	1954	8	0
Part II. On the State of the Public Health	Cmd 9307 <i>HMSO</i>	1954	7	6
National Health Service Summarised Accounts <i>Annual</i>	For 1952-53 <i>HMSO</i>	1954	2	0
National Health Service (Scotland) Summarised Accounts <i>Annual</i>	For 1952-53 <i>HMSO</i>	1954	1	6
Report of Committee on General Practice within the National Health Service [Cohen Report]	<i>HMSO</i>	1954	2	6
Report of the Committee on Social Workers in the Mental Health Services	Cmd 8260 <i>HMSO</i>	1951	1	6
Health Services in Britain	Reference Pamphlet RF.P.2796 <i>COI</i>	1954		free
Rehabilitation and Care of the Disabled in Britain	Reference Paper R.2879 <i>COI</i>	1954		free
Education				
ALEXANDER, W. P. Education in England: The National System, How It Works	<i>Newnes</i>	1954	12	6

		s.	d.
BARKER, Sir ERNEST. <i>British Universities</i> . rev. edn For the British Council, <i>Longmans</i>	1949	1	0
BRITISH COUNCIL. <i>Higher Education in the United Kingdom: A Handbook for Students from Overseas</i> . rev. edn <i>Longmans</i>	1954	4	0
CURTIS, S. J. <i>History of Education in Great Britain</i> . 3rd edn <i>University Tutorial Press</i>	1953	18	6
DENT, H. C. <i>British Education</i> . rev. edn For the British Council, <i>Longmans</i>	1949	1	0
————— <i>Growth in English Education, 1946-1952</i> <i>Routledge</i>	1954	16	0
DONGERKERY, S. R. <i>Universities in Britain</i> <i>Oxford University Press</i>	1953	12	6
GARDNER, D. E. M. <i>Education under Eight</i> For the British Council, <i>Longmans</i>	1949	2	0
NATIONAL INSTITUTE OF ADULT EDUCATION. <i>Adult Education in the United Kingdom: A Directory of Organisations</i> <i>National Institute of Adult Education</i>	1952	3	6
Annual Reports			
Ministry of Education			
Education in 1953	Cmd 9155 <i>HMSO</i>	1954	6 0
Education 1900-1950	Cmd 8244 <i>HMSO</i>	1951	7 6
Scottish Education Department			
Education in Scotland in 1953	Cmd 9144 <i>HMSO</i>	1954	3 6
Curriculum and Examinations in Secondary Schools [Norwood Report]	<i>HMSO</i>	1943	3 0
Education for Commerce. Report of a Special Committee	<i>HMSO</i>	1949	1 6
Further Education (Ministry of Education Pamphlet No. 8)	<i>HMSO</i>	1947	2 0
Further Education: A Report of the Advisory Council on Education in Scotland	Cmd 8454 <i>HMSO</i>	1952	5 0
The Health of the School Child. Report of the Chief Medical Officer of the Ministry of Education for 1952 and 1953	<i>HMSO</i>	1954	5 0
Memoranda on the Ministry of Education Estimates	<i>Annual</i>		
For 1954-55	Cmd 9100 <i>HMSO</i>	1954	6
Ministry of Education Building Bulletins: Nos. 1-9	<i>HMSO</i>	1949	1 0
		to	to
		1953	4 0
The New Secondary Education (Ministry of Education Pamphlet No. 9)	<i>HMSO</i>	1947	2 6
Our Changing Schools: A Picture for Parents	<i>HMSO</i>	1950	2 0
Primary School in Scotland: Memorandum on the Curriculum	<i>HMSO</i>	1950	2 6
Public Education in Scotland	<i>HMSO</i>	1952	2 0
Public Schools and the General Educational System [Fleming Report]	<i>HMSO</i>	1944	3 6
Report of the Committee on Organisation and Finance of Adult Education	<i>HMSO</i>	1953	2 6
Secondary Education: A Report of the Advisory Council on Education in Scotland	Cmd 7005 <i>HMSO</i>	1947	6 0

			s.	d.
Training and Supply of Teachers: Report covering the period July 1949 to February 1951	<i>HMSO</i>	1951	1	0
University Grants Committee				
Annual Return from Universities and University Colleges				
For 1952-53	Cmd 9130 <i>HMSO</i>	1954	2	6
University Development 1947-52	Cmd 8875 <i>HMSO</i>	1953	3	6
Education in Britain [<i>under revision</i>]				
Reference Pamphlet RF.P.2285	<i>COI</i>	1952		free
Education in Britain's Armed Forces				
Reference Paper R.2390	<i>COI</i>	1952		free
Technological Education in Britain				
Reference Paper R.2652	<i>COI</i>	1953		free
Universities in Britain	Reference Paper R.2826 <i>COI</i>	1954		free
Vocational Education and Training				
Reference Paper R.1903	<i>COI</i>	1950		free

The Youth Service

JEPHCOTT, PEARL. Some Young People	<i>Allen & Unwin</i>	1954	12	6
KUENSTLER, P. H. K., <i>Compiler</i> . Youth Work in England: Extracts from Ministry of Education and other publications relating to Statutory and Voluntary Youth Work	<i>University of London Press</i>	1954	4	0
MORGAN, A. E. Youth Services				
For the British Council,	<i>Longmans</i>	1948	2	0
PERCIVAL, ALICIA C. Youth will be Led: The Story of the Voluntary Youth Organisations	<i>Collins</i>	1951	8	6
STANDING CONFERENCE OF NATIONAL VOLUNTARY YOUTH ORGANISATIONS. Youth in Britain 1953	<i>NCSS</i>	1953	1	0
Purpose and Content of the Youth Service	<i>HMSO</i>	1945		4
Youth Organizations in Britain [<i>under revision</i>]				
Reference Paper R.2196	<i>COI</i>	1951		free

XI. HOUSING AND PLANNING

Housing

Cost of Housebuilding: Reports of the Committee of Inquiry					
First	<i>HMSO</i>	1948	2	6	
Second	<i>HMSO</i>	1950	1	3	
Third	<i>HMSO</i>	1952	1	3	
Houses: The Next Step	Cmd 8996 <i>HMSO</i>	1953		9	
Housing Manual 1949	<i>HMSO</i>	1949	3	6	
———Supplement. Housing for Special Purposes	<i>HMSO</i>	1951	2	0	
———Supplement. Houses 1952	<i>HMSO</i>	1952	1	0	
———Supplement. Houses 1953	<i>HMSO</i>	1953	3	0	
Housing Policy, Scotland	Cmd 8997 <i>HMSO</i>	1953		6	
Housing Return, England and Wales					
Quarterly <i>Cmd Paper</i>	<i>HMSO</i>		1	3	
Housing Return, Scotland	Quarterly <i>Cmd Paper</i>	<i>HMSO</i>		1	0
Report of Working Party on Building Operations	<i>HMSO</i>	1950	2	6	
Housing in Britain	Reference Pamphlet RF.P.2797 <i>COI</i>	1954		free	

Town and Country Planning

ABERCROMBIE, Sir PATRICK. Town and Country Planning. 2nd edn <i>Oxford University Press</i>	1943	6	0
ASSOCIATION FOR PLANNING AND REGIONAL RECONSTRUCTION. Town and Country Planning Textbook <i>Architectural Press</i>	1950	42	0
BROWN, H. J., <i>Editor</i> . Practical Points on Planning Law <i>Sweet & Maxwell</i>	1951	15	0
GIBBERD, FREDERICK. Town Design <i>Architectural Press</i>	1953	73	6
HOWARD, EBENEZER. Garden Cities of To-morrow. [<i>New edn of To-morrow: A Peaceful Path to Real Reform, first published in 1898</i>] <i>Faber & Faber</i>	1946	8	6
KEEBLE, LEWIS. Principles and Practice of Town and Country Planning <i>Estates Gazette</i>	1952	47	6
NUFFIELD COLLEGE SOCIAL RECONSTRUCTION SURVEY. Britain's Town and Country Pattern: A Summary of the Barlow, Scott and Uthwatt Reports <i>Faber & Faber</i>	1943	2	6
PURDOM, C. B. The Building of Satellite Towns: A Contribution to the Study of Town Development and Regional Planning. 2nd edn <i>Dent</i>	1949	50	0
WILLIAM-ELLIS, CLOUGH. Town and Country Planning For the British Council, <i>Longmans</i>	1951	2	6
WOOD, W. A. Planning and the Law <i>Percival Marshall</i>	1949		
Annual Reports			
Development Corporations of the New Towns			
[England and Wales] For 1953-54 <i>HMSO</i>	1954	17	6
[Scotland] For 1953-54 <i>HMSO</i>	1954	3	0
National Parks Commission For 1953-54 <i>HMSO</i>	1954	3	6
Nature Conservancy For 1953-54 <i>HMSO</i>	1954	3	0
The Density of Residential Areas <i>HMSO</i>	1952	5	0
Design in Town and Village, by T. Sharp, F. Gibberd and W. G. Holford <i>HMSO</i>	1953	7	6
Development Plans Explained, by B. J. Collins <i>HMSO</i>	1951	2	0
National Parks and Access to the Countryside <i>HMSO</i>	1950		6
Programme of Highland Development Cmd 7976 <i>HMSO</i>	1950	1	0
Report of the Committee on Compensation and Betterment 1942 [Uthwatt Report] Cmd 6386 <i>HMSO</i>	1942	4	6
Report of the Committee on Footpaths and Access to the Countryside Cmd 7207 <i>HMSO</i>	1947	1	3
Report of the Committee on Land Utilisation in Rural Areas 1942 [Scott Report] Cmd 6378 <i>HMSO</i>	1942	4	0
Report of the Committee on National Parks (England and Wales) Cmd 7121 <i>HMSO</i>	1947	5	6
Report of the Royal Commission on the Distribution of the Industrial Population 1939 [Barlow Report] Cmd 6153 <i>HMSO</i>	1940	9	0
Town and Country Planning 1943-51: Progress Report Cmd 8204 <i>HMSO</i>	1951	6	0
Town and Country Planning in Britain [<i>in preparation</i>] Reference Pamphlet RF.P.2984 <i>COI</i>	1955	free	

XII. RELIGION, SCIENCE AND THE ARTS

Religion

- BAPTIST UNION. Baptist Handbook: edited and published under the direction of the Council of the Baptist Union of Great Britain and Ireland
 For 1954 *Carey Kingsgate Press* 1954 17 6
- CHURCH OF ENGLAND. Official Yearbook of the National Assembly of the Church of England
 For 1954-55 For the Church Assembly,
Society for the Promotion of Christian Knowledge 1954 20 0
- CHURCH OF IRELAND. The Irish Church Directory and Year Book
 For 1954 *Church of Ireland Printing & Publishing Company* 1954 7 6
- CHURCH OF SCOTLAND. Year Book
 For 1954 *Church of Scotland Committee of Publications* 1954 5 0
- CONGREGATIONAL UNION OF ENGLAND AND WALES. Congregational Year Book
 For 1954 *Congregational Union of England and Wales* 1954 17 6
- CONGREGATIONAL UNION OF SCOTLAND. Year Book
 For 1954-55 *Congregational Union of Scotland* 1954 2 6
- EPISCOPAL CHURCH IN SCOTLAND. The Scottish Episcopal Church Year Book and Directory
 For 1954-55 *Representative Church Council of the Episcopal Church in Scotland* 1954 6 6
- METHODIST CHURCH. Minutes of the Annual Conference of the Methodist Church, 1954
Methodist Publishing House 1954 12 6
- PRESBYTERIAN CHURCH OF ENGLAND. Official Handbook
 For 1954-55 *Presbyterian Church of England* 1954 5 0
- PRESBYTERIAN CHURCH OF WALES. Year Book
 For 1954 *Presbyterian Church of Wales* 1954 4 6
- SALVATION ARMY. Year Book
 For 1954 *Salvationist Publishing & Supplies* 1954 3 9
- UNITARIAN AND FREE CHRISTIAN CHURCHES. Year Book of the General Assembly For 1954 *The General Assembly* 1954 4 0
- UNITED FREE CHURCH OF SCOTLAND. Handbook
 For 1954 *United Free Church of Scotland* 1954 2 6
- Who's Who in the Free Churches (and other denominations) 1951, edited by L. G. Pine *Shaw Publishing Company* 1951

Science

- BAILEY, Sir EDWARD. Geological Survey of Great Britain
Thomas Murby 1952 22 6
- BRITISH COUNCIL. Scientific and Learned Societies of Great Britain: A Handbook compiled from Official Sources.
 57th edn *Allen & Unwin* 1951 30 0
- COMMONWEALTH AGRICULTURAL BUREAUX. Gazetteer of Agricultural and Forestry Research Stations in the British Commonwealth *CAB* 1952 30 0
- EDWARDS, R. S. Co-operative Industrial Research *Pitman* 1950 20 0

	s.	d.
FEDERATION OF BRITISH INDUSTRIES. Report of the Third Conference of Industrial Research Directors and Managers <i>Federation of British Industries</i>	1953	3 6
—Research and Development in British Industry: A Survey of Expenditure 1950-51 <i>Federation of British Industries</i>	1952	1 3
HEATH, Sir H. FRANK, and HETHERINGTON, A. L. Industrial Research and Development in the United Kingdom: A Survey <i>Faber & Faber</i>	1946	25 0
HILL, D. W. Co-operative Research in Industry <i>Hutchinson</i>	1947	10 6
HORDER, Lord. Fifty Years of Medicine <i>Duckworth</i>	1953	5 0
HUDSON, DEREK, and LUCKHURST, K. W. The Royal Society of Arts, 1754-1954 <i>Murray</i>	1954	30 0
JARAMILLO-ARANGO, Dr. JAIME. The British Contribution to Medicine <i>Livingstone</i>	1953	25 0
MARTIN, T. The Royal Institution For the British Council, <i>Longmans</i>	1948	1 6
ROYAL SOCIETY OF LONDON. Report of Empire Scientific Conference 1946. 2 vols. <i>Cambridge University Press</i>	1948	42 0
—The Year Book of the Royal Society of London <i>Royal Society</i>	1954	15 0
Annual Reports		
Advisory Council on Scientific Policy For 1953-54 Cmd 9260 <i>HMSO</i>	1954	1 0
Department of Scientific and Industrial Research For 1952-53 Cmd 9083 <i>HMSO</i>	1954	8 0
Medical Research Council For 1952-53 Cmd 9184 <i>HMSO</i>	1954	7 6
Meteorological Office For 1953-54 <i>HMSO</i>	1954	2 0
National Physical Laboratory For 1953 <i>HMSO</i>	1954	3 0
National Research Development Corporation For 1953-54 <i>HMSO</i>	1955	9
Britain's Atomic Factories: The Story of Atomic Energy Production in Britain <i>HMSO</i>	1954	5 0
A Description of the Work of the Department of Scientific and Industrial Research <i>HMSO</i>	1949	1 0
The Future Organisation of the U.K. Atomic Energy Project Cmd 8986 <i>HMSO</i>	1953	6
Government Scientific Organisation in the Civilian Field <i>HMSO</i>	1951	1 6
Harwell: The British Atomic Energy Research Establishment 1946-51 <i>HMSO</i>	1952	
Jubilee Book of the National Physical Laboratory, by John Langdon-Davies <i>HMSO</i>	1951	4 0
Scientific Research in British Universities, 1953-54 <i>HMSO</i>	1954	10 0
Atomic Energy Research Reference Paper R.2809 <i>COI</i>	1954	free
The British Contribution to Nuclear Research and the Development of Nuclear Energy Reference Paper R.2858 <i>COI</i>	1954	free
Commonwealth Scientific Research Reference Paper R.2873 <i>COI</i>	1954	free
Radioactive Isotopes Reference Paper R.2366 <i>COI</i>	1952	free

s. d.

The Arts

- ARTS COUNCIL OF GREAT BRITAIN. Public Responsibility for the Arts: Annual Report 1953-54 *Arts Council* 1954 2 6
- The Arts Council of Great Britain: What It Is and What It Does *Arts Council* 1954 free
- BRITISH COUNCIL. Annual Report 1953-54 *British Council* 1954 2 6
- CARNEGIE UNITED KINGDOM TRUST. Annual Report
Dunfermline: *Carnegie United Kingdom Trust* 1954 free
- Libraries, Museums and Art Galleries Year Book, 1954-55 *James Clarke* 1955 50 0
- Drama*
- TREWIN, J. C. Drama 1945-50
For the British Council, *Longmans* 1951 2 6
- The Stage Year Book, 1954 *Annual Carson & Comerford* 1954 7 6
- Who's Who in the Theatre, edited by John Parker *Pitman* 1952 80 0
- Films*
- BRITISH FILM INSTITUTE. Annual Reports
For 1953 *British Film Institute* 1954 1 0
- FIELD, MARY. Good Company: The Story of the Children's Entertainment Film Movement in Great Britain 1943-1950 *Longmans* 1952 12 6
- Children and Films
Dunfermline: *Carnegie United Kingdom Trust* 1954 10 6
- FORMAN, DENIS. Films 1945-50
For the British Council, *Longmans* 1952 2 6
- LOW, RACHEL. The History of the British Film.
Allen & Unwin
- Vol. I. 1896-1906 (with Roger Manvell) 1948
- Vol. II. 1906-1914 1949 25 0
- Vol. III. 1914-1918 1951 35 0
- POLITICAL AND ECONOMIC PLANNING. The British Film Industry: A Report on Its History and Present Organisation *PEP* 1952 18 0
- The Factual Film *PEP* 1947
- ROTHA, PAUL, and others. Documentary Film. 3rd edn *Faber & Faber* 1952 42 0
- Annual Reports
- Cinematograph Films Council For 1953-54 *HMSO* 1954 4
- National Film Finance Corporation (and Statement of Accounts) For 1953-54 Cmd 9166 *HMSO* 1954 1 3
- Films from Britain: 1,000 Films on Educational, Scientific and Cultural Subjects available for Sale Abroad *HMSO* 1952 7 6
- Fine Arts*
- Directory of Museums and Art Galleries in the British Isles [new edn in preparation] *Museums Association* 1948 21 0
- LAMB, Sir WALTER. The Royal Academy. 2nd edn *Bell* 1951 15 0
- LEES-MILNE, JAMES, Editor. The National Trust: A Record of Fifty Years' Achievement, 1895-1945. 3rd edn *Batsford* 1948 6 0

			s.	d.
Who's Who in Art. 7th edn	<i>Art Trade Press</i>	1954	50	0
Annual Reports				
Royal Fine Art Commission For 1953 Cmd 9177	<i>HMSO</i>	1954		6
Standing Commission on Museums and Galleries				
	For 1949-53	<i>HMSO</i>	1954	1 6
Tate Gallery	For 1953-54: Review 1938-53	<i>HMSO</i>	1954	3 6
<i>Architecture</i>				
Architects' Year Book	<i>Elek</i>	1953	42	0
MILLS, E. D. The New Architecture in Great Britain, 1946-1953	<i>Standard Catalogue Company</i>	1953	40	0
SUMMERSON, JOHN. Architecture in Britain, 1530-1830	<i>Penguin Books</i>	1953	42	0
Historic Buildings Council for England. First Annual Report, 1953	<i>HMSO</i>	1954		6
Historic Buildings Council for Scotland. First Annual Report, 1953	<i>HMSO</i>	1954		3
Historic Buildings Council for Wales. First Annual Report, 1953	<i>HMSO</i>	1954		3
<i>Literature</i>				
Annual Bibliography of English Language and Literature 1942, edited for the Modern Humanities Association by Angus Macdonald [1943-44 <i>in preparation</i>]	<i>Cambridge University Press</i>	1952	25	0
British National Bibliography <i>Annual</i>				
	<i>The Council of the British National Bibliography</i>	1953	160	0
Library Association Year Book 1954	<i>Library Association</i>	1954	21	0
PRYCE-JONES, ALAN. Prose Literature 1945-50				
	For the British Council, <i>Longmans</i>	1951	2	6
ROSS, ALAN. Poetry 1945-50				
	For the British Council, <i>Longmans</i>	1951	2	6
SCOTT-JAMES, R. A. Fifty Years of English Literature, 1900-1950	<i>Longmans</i>	1951	15	0
Sha espeare Survey, 7: An Annual Survey of Shakespearean Study and Production	<i>Cambridge University Press</i>	1954	18	0
The Year's Work in English Studies. Vol. 33: 1952, edited by Frederick S. Boas and Beatrice White	<i>Oxford University Press</i>	1954	21	0
<i>Music, Opera and Ballet</i>				
Ballet Annual 1955, edited by Arnold L. Haskell	<i>Black</i>	1954	21	0
British Federation of Music Festivals Year Book				
	<i>British Federation of Music Festivals</i>	1954	5	0
HASKELL, ARNOLD. Ballet 1945-50				
	For the British Council, <i>Longmans</i>	1951	2	6
Journal of the English Folk Dance and Song Society <i>Annual</i>				
	<i>The Society</i>	1953	10	6
Music Book	<i>Hinrichsen</i>	1952	25	0
SHAW, WATKINS. The Three Choirs Festival: The Official History . . . c. 1713-1953	<i>Baylis</i>	1954	12	6
WALKER, ERNEST. A History of Music in England. 3rd edn				
	<i>Oxford University Press</i>	1952	35	0

s. d.

XIII. SOUND AND TELEVISION BROADCASTING

- BEACHCROFT, T. O. *British Broadcasting*. 2nd edn
For the British Council, *Longmans* 1948 1 0
- BRITISH BROADCASTING CORPORATION. *British Broadcasting: A Bibliography* *BBC* 1954 1 0
——— *BBC Handbook 1955* *BBC* 1954 5 0
——— *The BBC Television Service: A Technical Description*. 3rd edn *BBC* 1952 2 6
- COASE, R. H. *British Broadcasting: A Study in Monopoly*
Longmans 1950 12 6
- GORHAM, MAURICE. *Broadcasting and Television since 1900*
Dakers 1952 18 0
- MANVELL, ROGER. *On the Air: A Study of Broadcasting in Sound and Television* *Andre Deutsch* 1953 16 0
- SIMON OF WYTHENSHAW, Lord. *The BBC from Within*
Gollancz 1953 16 0
- SWIFT, J. *Adventure in Vision: The First Twenty-Five Years of Television* *Lehmann* 1950
Television Annual 1955, edited by Kenneth Baily *Odhams* 1954 9 6
Annual Reports and Accounts
British Broadcasting Corporation
For 1953-54 *Cmd 9269 HMSO* 1954 4 6
- Copy of a New Charter of Incorporation Granted to the BBC *Cmd 8605 HMSO* 1952 9
- Copy of the Licence and Agreement between the Postmaster-General and the BBC *Cmd 8579 HMSO* 1952 6
- Draft Licence to be granted by H.M. Postmaster-General to the Independent Television Authority *Cmd 9106 HMSO* 1954 4
- Memorandum on Television Policy *Cmd 9005 HMSO* 1953 4
- Overseas Broadcasting: Report from the Select Committee on Estimates *HMSO* 1952 6 6
- Report of the Broadcasting Committee 1949
Cmd 8116 HMSO 1951 6 6
Appendix H. Memoranda Submitted to the Committee
Cmd 8117 HMSO 1951 10 6
- Television Advisory Committee
First Report 1952 *HMSO* 1953 1 6
Second Report 1953 *HMSO* 1954 1 0
- British Contributions to Television
Reference Paper R.2708 *COI* 1954 free

XIV. THE PRESS

- CAMROSE, Lord. *British Newspapers and their Controllers*
Cassell 1947 8 6
- GENERAL COUNCIL OF THE PRESS. *The Press and the People: First Annual Report* *The Council* 1954 1 0
- HERD, HAROLD. *The March of Journalism: The Story of the British Press from 1622 to the Present Day* *Allen & Unwin* 1952 21 0
- Hulton Readership Survey 1954 *Annual* *Hulton Press* 1954 42 0
- Kemsley Manual of Journalism. 2nd edn *Cassell* 1954 25 0

		s.	d.
MASS OBSERVATION. The Press and Its Readers			
	<i>Art & Technics</i>	1949	7 6
Newspaper Press Directory	<i>Benn Bros.</i>	1954	42 0
POLITICAL AND ECONOMIC PLANNING. Report on the British Press	<i>PEP</i>	1938	
SINCLAIR, ROBERT. The British Press: The Journalist and His Conscience	<i>Home & van Thal</i>	1949	
Willing's Press Guide 1954 <i>Annual</i>	<i>Willing's Press Service</i>	1954	21 0
Writers' and Artists' Year Book 1954. <i>Annual</i>	<i>Black</i>	1954	7 6
Report of the Royal Commission on the Press 1947-49			
	Cmd 7700 <i>HMSO</i>	1949	9 0
The British Press	Reference Paper R.2719 <i>COI</i>	1954	free

OFFICIAL HISTORIES OF THE SECOND WORLD WAR: UNITED KINGDOM

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British War Production, by M. M. Postan		1952	32 6
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Works and Buildings, by C. M. Kohan		1952	32 6

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Royal Naval Medical Service. Vol. I. Administration, by Surgeon-Cdr. J. L. S. Coulter		1954	50 0
Surgery, edited by Sir Zachary Cope		1954	80 0

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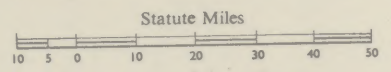
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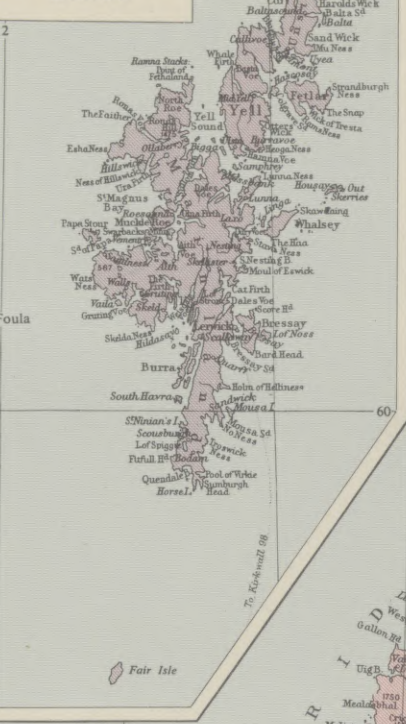


- Railways — Canals
- Shipping Routes (Distances in Nautical Miles)
- 2676 Heights in Feet





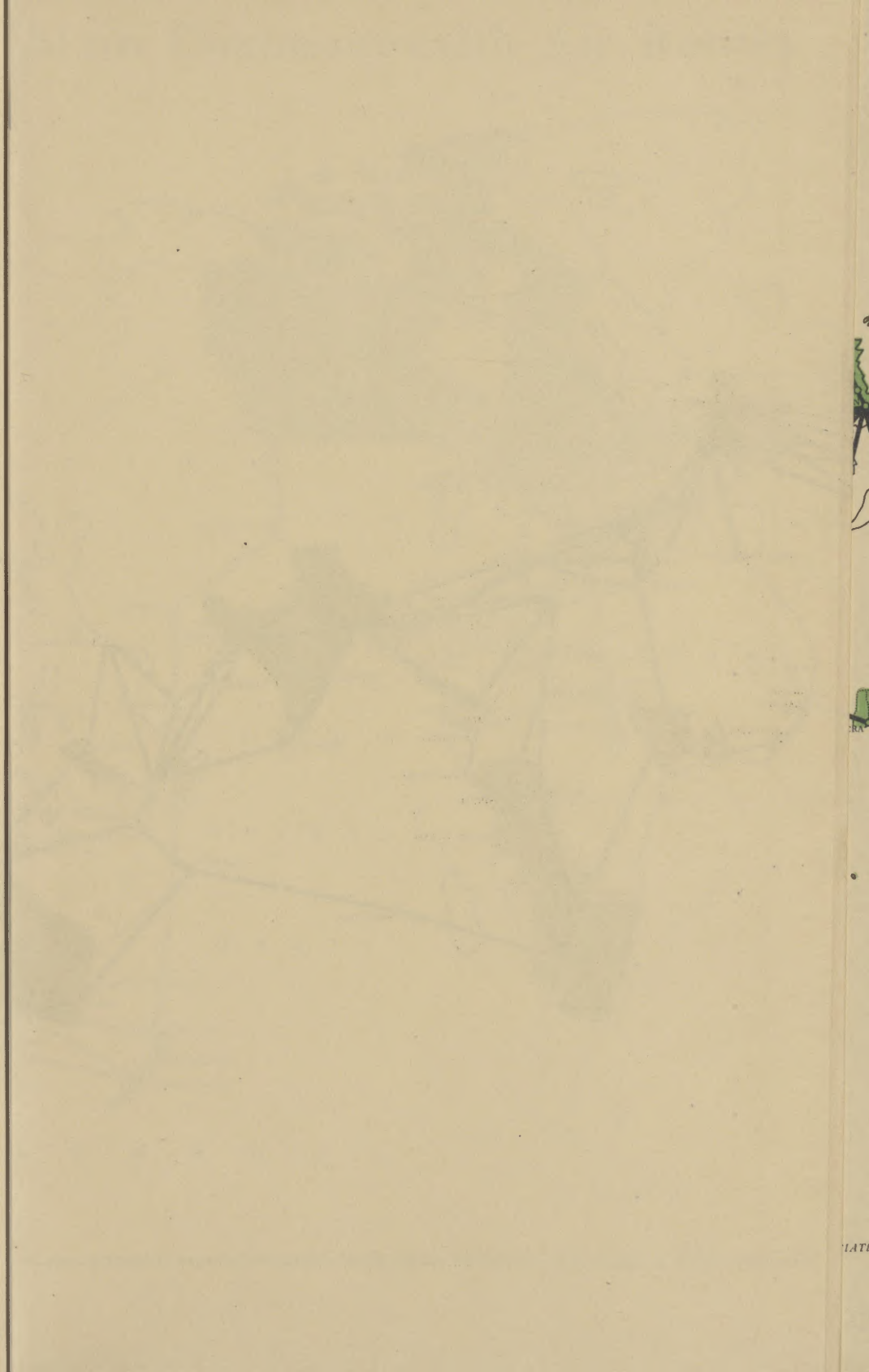
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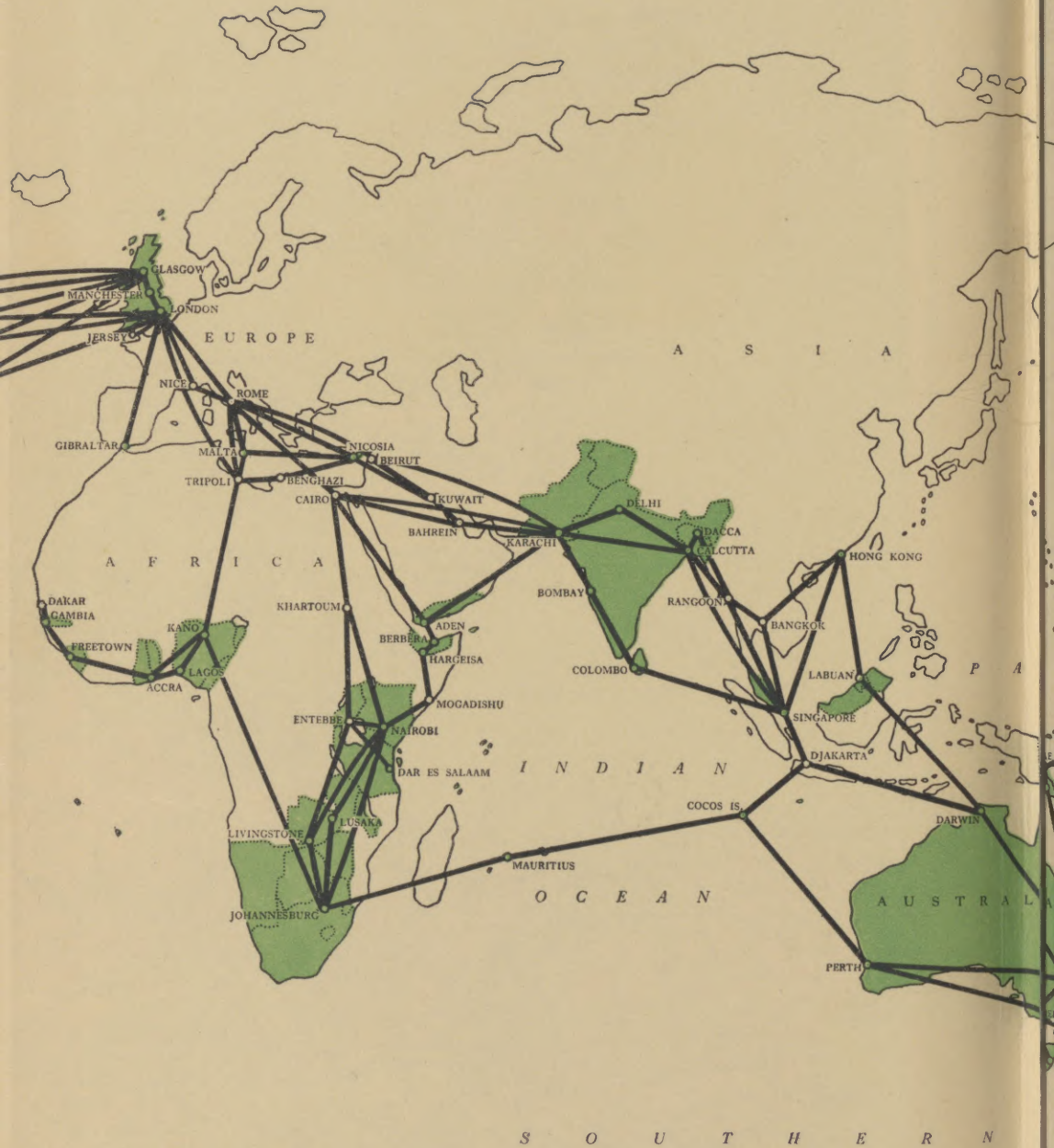


SCOTLAND AND NORTHERN IRELAND

Statute Miles

- Railways — Canals
- Shipping Routes (Distances in Nautical Miles)
- Heights in Feet

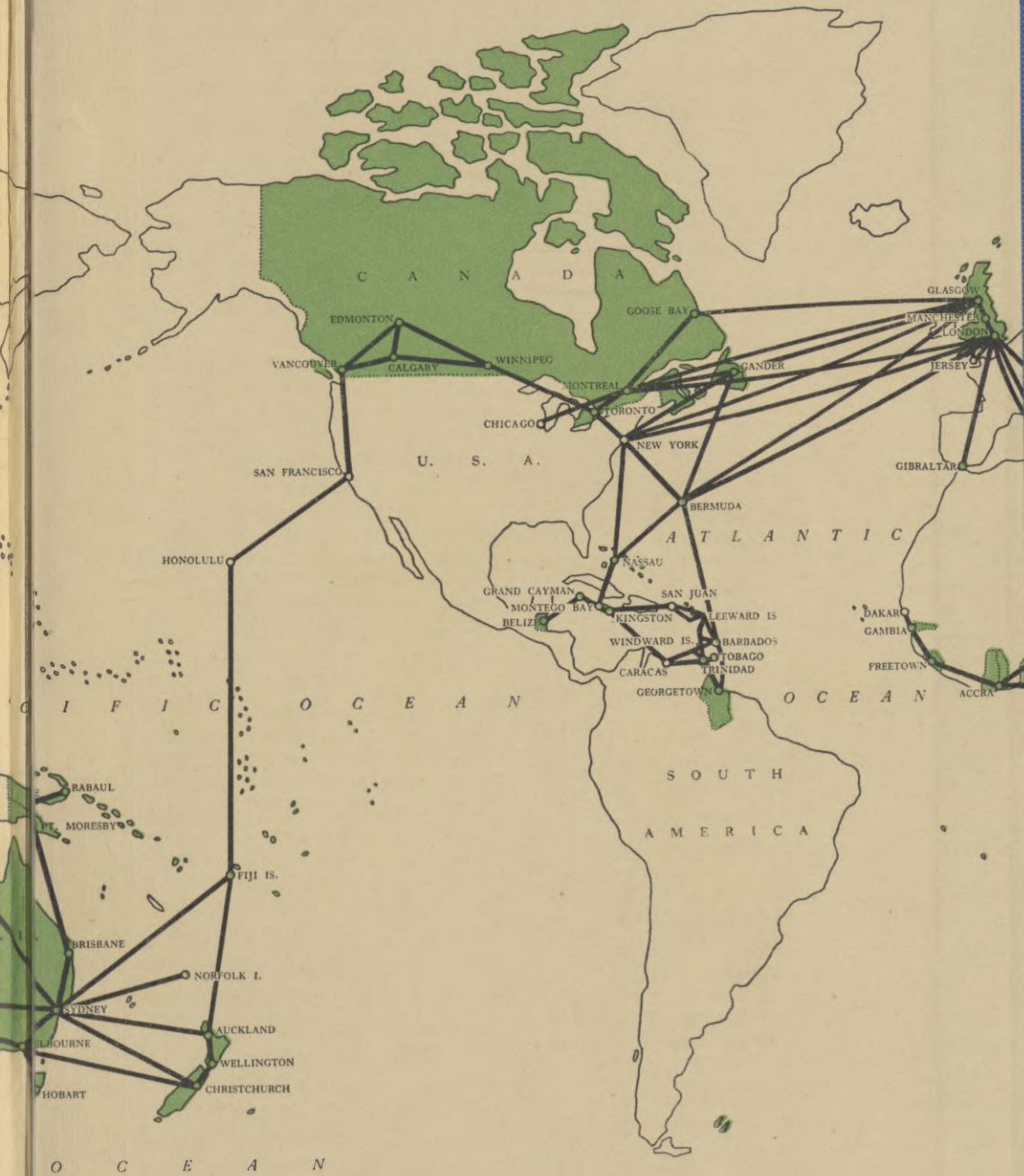




ROUTES OPERATED BY BRITISH OVERSEAS AIRWAYS·BRITISH EUROPEAN AIRWAYS·TRANS-CANADA AIR LINES·QANTAS EMPIRE AIRWAYS

Main Commonwealth Air Routes

August 1954



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