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## FIGHTING ${ }_{\text {vith }}$ FIGURES

PREPARED BYTHE CENTRAL STATISTICAL OFFICE

Foreword by Anthony Montague Brówn
Text by Peter Howlett

## INTRODUCTION AND GENERAL NOTES

he Statistical Digest of the War was first printed in
1951 as part of the United Kingdom Civil Series of 195 I as part of the United Kingdom Civil Series of
war histories. Prepared by the Central Statistical Office, its purpose was to effort, which previously had been scattered amongst many historical volumes and Command papers.

Following a call by Sir Winston Churchill for regular and comprehensive statistics, the Economic Information Service was split into two sections, the Economics Section and the Central Statistical Office.

Under the direction of Harry Campion, the function of the CSO was to collect from Government departments of the war effort in Britain.

This year marks the 50th anniversary of the end of the Second World War. In coniunction with this important occasion, the Central Statistical Office has published a revised edition of the orisinal Statistical Digest of the evised edition of the onginal Statistical Digest of the Second World War. Retitled 'Fighting with Figures', the foreword has been written by Anthony Montague Brown who was Winston Churchill's private secretary from 1952 to 1965. Text for each chapter has been written by Dr. Peter Howlett, the economics lecturer from the London School of Economics.

## FOREWORD

## Memorandum from the Prime Minister to Sir Edward Bridges [Secretary to the War Cabinet] $8 / 1 / / 40$

"Many of the executive departments naturally have set up and developed their own statistical branches...I have my own statistical branch under Professor Lindemann ..... It is essential to consolidate and make sure that agreed figures only are used. The utmost confusion is caused when people argue a different statistical data:I wish all statistics to be concentrated in my own branch as Prime Minister and Minister of Defence, from which alone the final authoritative working statistics will issue.

Pray look into this and advise me how my wish can be most speedily and effectively achieved.

## W.S.C."

I. Area covered. Except where otherwise stated all statistics relate to the United Kingdom of Great Britain and Northern Ireland.
2. Period covered. In general the figures given in the Digest cover the period from September 1939 to August 1945. In some tables, however, figures for a pre-war year or years have been given where the comparison seems particularly valuable.
3. Time series. The Digest has no standard time series. Where possible annual totals are given throughout, but in many cases these are supplemented by quarterly totals, monthly averages and weekly averages according to the type of series dealt with. Except where it is stated to the contrary all statistics are for calendar years ended 3I December.
4. Change of basis. A line drawn across a column between two consecutive figures normally indicates that the figures above and below the line have been compiled on different bases and are not strictly comparable. In each case a footnote is added indicating the nature of the difference.
5. Consumption and stocks. Statistics of consumption 5. Consumption and stocks. Statistics of consumption
and stocks should be used with particular caution. Figures given under the heading of "consumption" or "total disposals" are usually derived from statistics of releases
from stocks by controls or manufacturers.
Figures of stocks may be affected to some degree by seasonal influences. Moreover, these figures often relate to only part of the total stocks in the country.
6. Definitions. In order to make this Digest as selfcontained as possible a Definition Section is included at pages 242 to 277 . The purpose of the notes and definitions given in this Section is to supplement the various footnotes given in the tables and to make it possible to interpret the figures fully without reference back to the basic sources of the statistics. It is important that each table should read in conjunction not only with footnotes appended to it but also with the appropriate paragraphs in the Definitions Section.
7. Rounding of figures. Where necessary, each figure tas been rounded off to the nearest final digit. For this reason there may be in some tables an apparent slight discrepancy between the sum of the constituent items and the total as shown
8. Symbols employed. The following symbols have been used throughout the Digest.

## $=$ not available

= nil or negligible (less than half the final digit shown)
orrect figures are the elusive raw material of effective overnment, and none was more aware of this tha Winston Churchill in both his Administrations. To me, Churchill's memoranda, sometimes but not over-frequently adorned with a red "Action this day" label are the most interesting and significant part of his monumental six volumes "The Second World War". These fiery and imaginative missives analyse, criticise, encourage and directand rest for their effectiveness on correct data.

Churchill was well aware of the significant role that those responsible for collating, sifting and verifying the raw material were playing and he relied on them with justified confidence.
our casualties in both World Wars had, as I remember it, arisen from a discussion that Churchill had with Robert Menzies, the Prime Minister of Australia, over a dinner at which I was present, Churchill was agreeably surprised that the global total for World War II was not higher, but then fastened on the unknown figure for China, which would have increased the melancholy sum very substantially.

It is most fitting that the story of the Central Statistical Office should now be made public. It is an important and far from dull addition to the knowledge of our affairs.

Anthony Montague Browne

Private Secretary to Winston Churchill
1952-1965

Dear Robertson,
Some time ago when I was at Chartwell I telephoned your Office and through the Statistical Branch you gave me, for Sir Winston's information, the rough estimate of the total dead in the two World Wers. (These included all those who might be said to have lost their lives through the Var, whether civilian or military). The figures were something like 63 million for the Second World Har, and 20 million for the First.

The se flgures were given to me orally over the telephone, and Sir Winston has recently reverted to the subjeot and asked me if I will find out for him a ilttle nore deteiled breakdown.

If the Statistical Branch can readily supply these figures I would be grateful for them, but as this is purely a matter of interest I know that Sir Minston would not wish anybody to be diverted from more important things to supply the figures.

Incidentally if you are able to give me the flgures, could you let me know if they are confidential or not?

I shall not expect an answer to this letter for a long time! Tours sincerely,
(Sgd.) ARIHONI MONTAGUE BROWNE
J.H. Robertson, Fsq.

## Tar onobuitios

You gave re Montague Exome's letter to Robartion asking for a breakdown of the numbers kdiled in the two Vorld Ears; the letter quoted estimates of somothing like 63 millions, oivilion and military, for the Second World Wer and 20 allilions for the First.

I have assumed that the kind of analyais Sir Winston has in mind is the division botween oivilian and alitary and the distribution of casualtios by country. Mnolosures 1 and 2 provide estinates in this form. I cannot vouch for their acoureoy but I have given tho sources in each case. Clearly the 21 cures for the U.K. Will be more reliable then for the rest of the world and those for "milltary" probably more reliable then those for "oivilien".

Enclosure 3 shows a furthar breakdown, for Europe only, distinguiahing between "norral" deathe and war losses. The flegres are taken from yot anothor souree ("Popuiation Changes in Burope since 1939" by Gregory Frumbin) but square up quite well with those in the othor tables. This analysis and snoak's (Enolosure 1, reforence 5) are of course the resulte of private researohes, but I understand that they wore carried out very carefully; Prumkin was in faot the ditor of the "Statistical Year Book of the League of Nations" throughout its existence.

I an also enalosing Xontague Brown's lettor.
(H. E. BISHOP)

## ENCLOSURE 1

## Cagualtice in tho 1914-18 and 1939-4.5 Mrx

| United Kingaion | 412itesx | captuen | Totar |
| :---: | :---: | :---: | :---: |
| 1914-18 | 743,702 ${ }^{1}$ | 8,389 ${ }^{2}$ | 752,091 |
| 2939-45 | $270,687^{3}$ | $63.635^{3}$ | 369,405 |
| Hoxid |  |  |  |
| 1944-18 | 8,500,000 ${ }^{4}$ | 23,000,000 ${ }^{4}$ | 2,500,000 |
| 1939-45 | 25,916,580 ${ }^{5}$ | 23,252,197 ${ }^{5}$ | 29,168,777 |

1. Hengard, Karah 9 th 1923.
2. Greenrood. British loss of Life in the wars of 1794-1825 and in 1914-18. Journal of the Royal Statistioel Sooioty, Vol.CF, 1942. Includos 6,330 sea passongars aromed.
3. Statiatioal Digest of the War. Ho M.S.O. 1951. Figure for Armod Foreas incIudes 6,244 still lissing at 28 Pebrvary, 1946.
4. mayolopaedia Britannioa, Vol. 23. 1947 ed. Fleure for aivilians is a global ostimate of wioh no dotails ant shom.
5. AsG. Kncek. This Wer Business. 1952.

## BNCLOSURS 2

Whitahall 9400 sxt 15

Dear SIr,
Your letter of 19th Kovenbor, 1958, enquiring obout easualtios in Forla Wars I and II, has been paseed to no for mply.

I am acilosing with this lettor detills of the numbers kdiled and nissing as they are at prosent knom, in a form in whioh I think you will find the answers to your questions; I was not cortain if you meant to inolude Britis figures in your "allied" aumbers, and I have, therefore, sot these out
soparately so that you ean select the itoms you requiro. I have also taken "servicomen" to 2nolude both offleens and Othor Penke of all the throe Sorvious. Uafortunately, I can find ne sigures for oiviliens for World War I.

You may like to know the sources from whith wo have compiled these figures and whioh wr find the most userul for answaxing enquiries of this idind. There are many verietios and dieoropanoles in most of them, and it is usually only posoible to find approxdiate figuses in moet oaves. They are as fallowsi-

1. WAR OFPICR. Statistios of the valitary Bffort of the Byitish Rapixt during the Great War, 2914-1920. 1922 (H.M.8.O.)
2. WAR OFFICE. General Ammal Reporta the Britioh Army ... 1913-1929. 1921. (Cma,2193). (H. H.S.O.)

3 MINISTRX OF DESENCR. Strongths and Camuel ties of the Arwed Foroes and Aurediliary Sorvions of the Undted Kingdion, 2939 to 2945. 1946.

 Operations, Pranee and Bolgive, 1918. Vol. $\nabla$ (pace 597) 1947

5. FYOCK, Axthur Guy. This Wer Business. 1951. (The Bodley Bead).

I hope that this information dill holp you with your researah.
Youre faithfully,
(D.T. SITE)

Librarian.

Theodore H. MeoDonald, Eaq. Dopartmont of Eoology The Toilversity,
Griscory

## KLLLRD TV ACTION, DIED OR ROUADS AID OTHIRR CAUSES

 HORLD MAR I1. Britich (including India, Dominions and Colonios)
2. Aluted

3. Fneny
$\begin{array}{llll}\text { Gerraany } . . & \ldots & . . & 2,050,466 \\ \text { Austria-Hungary } & \because . & \because & 1,200,000\end{array}$



MORLD WAR II
TOTAL $\quad-\frac{3,751,466}{8,705,529}$

1. British
(i) U.K. Armed Forces
(i.e., oxcluaing omen's durdiary Sorvices)
Home Guard, Merohant Niavy, etc.
(ii) Dominions, India and Colonios
2. Allied

3. Bneay

Gormany Austria
Bul gran
Italy Italy
Jappen
Polend Poland Yugoninvie

$\qquad$
/Crivlians

## CIVILIANS

(a) Forzis Ter I - Not morm
(b) Horid Fer II

Allied

nemy
Gemmany .. .. .. .. 800,000
$\begin{array}{ll}\text { Austric .. ... .. } \\ \text { Itely } & 125,000\end{array}$
$\begin{array}{lll}\text { Itely } & \cdots \quad \cdots \quad 280,000 \\ \text { Japar } & \cdots 00,000\end{array}$
$\begin{array}{llll}\text { Japan } \\ \text { Poland } & . . & . . & . . \\ 6,000,000 \\ \end{array}$

$6,705,000$



| Groups |
| :--- |

UNITS OF MEASUREMENT

| British unit |  | Metric equivalent |
| :---: | :---: | :---: |
| Length |  |  |
| 1 inch (in.) |  | 2.54 centimetres |
| 1 foot (tt.) | $=12$ inches | 30.48 centimetres |
| 1 yard (yd.) | $=3$ feet | 91.44 centimetres |
| 1 mile | $=1,760$ yards | 1.60934 kilometres |
| Surface |  |  |
| I square foot (sq.ft) |  | 0.09290 square metres |
| 1 square yard (sq.ft) | $=9$ square feet | 0.83613 square metres |
| 1 acre | $=4,480$ square yards | 40.47 ares |
| I square mile (sq.miles) | $=640$ acres | 258.99 hectares |
| Capacity |  |  |
| 1 imperial gallon (gall.) | $=4$ quarts | 4.546 litres |
| 1 bulk barrel | $=36$ gallons | 1.63655 |
| I cubic foot (cu.f.) |  | 0.02832 cubic metres |
| 1 cubic yard (cu.yd.) | $=27$ cubic feet | 0.76456 cubic metres |
| Weight |  |  |
| 1 ounce avoirdupois (oz.) |  | 28.35 grammes |
| 1 pound avoirdupois (lb.) | $=16$ ounces | 453.59 grammes |
| 1 hundredweight (cwt) | $=112$ pounds | 50.80 kilogrammes |
| 1 long ton | $=2,240$ pounds | 1.01605 kilogrammes |
| 1 short ton | $=2,000$ pounds | 0.90718 metric tons |
| II. Miscellaneous units |  |  |
| Food and drink: | Butter | 5,600 gallons milk $=1$ ton butter (average) |
|  | Cheese | 2,240 gallons milk $=1$ ton cheese |
|  | Condensed milk | 600 gallons milk $=1$ ton full cream condensed milk |
|  |  | 600 gallons skimmed milk $=1$ ton skimmed condensed milk |
|  | Dried egs | 81,000 eggs $=1$ ton dried egg |
|  | Eggs | 17,400 eggs $=1$ ton |
|  |  | 1 million gallons $=4,600$ tons |
|  |  | 1,800 gallons milk $=$ Iton full cream milk powder 2,400 gallons skimmed milk $=1$ ton skimmed |
|  |  | milk powder |
|  | Sugar | 100 tons raw sugar $=93$ tons refined sugar |
| Fuel and power: | British thermal unit (B.Th.U.) | The amount of heat required to raise I lb . of water through I degree Fahrenheit at or near 39.1 degree Fahrenheit. |
|  | Therm | 100,000 British thermal units |
|  | Unit of electricity | An output of I kilowatt over I hour |
| Shipping: | Deadweight tonnage Gross tonnage Net tonnage Standard displacement War load displacement |  |
|  |  | These terms are defined in the Definitions Section |
|  |  | (pages 263 and 267) |
|  |  |  |
| Timber: | Softwood Pitwood | 1 standard = 165 cubic feet |
|  |  | 1 standard $=180$ piled cubic feet |

. POPULATION AND VITAL STATISTICS

> Population of the United Kingdom
> Age distribution of the population
> Births
> Reproduction rates
> Infantile mortality
> Deaths analysed by age and sex
> Marriages

OCIAL CONDITIONS
Publichealth

> Deaths analysed by age and cause
> Infectious diseases
> Venereal diseases

## National insurance

National health insurance
Unemployment insurance
Pensions
War pension

Justice and crime
Offences known to the police and persons found guilty
uvenile delinquenc
Prison population
Divorce proceedings
Housing and building
Houses built
Construction
MANPOWER
Distribution of manpower
Armed forces and auxiliary services
Strength
3.4

Age distribution
Age distribution
Releases

Casualties
Home Guard and Royal Observer Corps
Civil Defence services
Police services
3.10

Civilian employment
Agriculture
Engineering, metals, explosives, chemicals and shipbuilding
Iron and steel
Textiles
Clothing
Woodworking and furniture
Paper and printing
Leather and rubber
Glass and pottery
Railway staff
Civil Service
Government building programme
Government training centres
Industrial stoppages
4. AGRICULTURE AND FOOD

Agriculture
$\begin{array}{ll}\text { Area of crops and grassland } & \text { 4.3-4.4 }\end{array}$

Crops and grass harvested
Yield per acre
Cattle, sheep, pigs and poultry
Horses grazed on agricultural land
Agricultural machinery in use
Food
Movement off farms of cereals, potatoes and sugar beet
Animals purchased for slaughter
Milk sales
Processed food: Production
Food and animal feeding-stuffs: Consumption
Estimated food supplies per head of civilian population
Arrivals of lend-lease foodstuffs
Losses of food and feeding-stuffs at sea
5. FUEL AND POWER

Coa
Production, consumption and stocks
Inland consumption
Distributed stocks
Productivity

Coke: Production, consumption and stocks

Arrivals of petroleum products and crude and process oils
Production of finished products from imported crude and process oils
Production from indigenous materials of petroleum products and substitutes
Deliveries into consumption of petroleum products

## 6. RAW MATERIALS

Iron ore and manganese ore
Pig iron
Iron and steel scrap and steel ingots and castings
Semi-finished and finished iron and steel
Semi-finished and finished iron
Chrome ore and ferr
Non-ferrous metals
Non-ferrous metals
Aluminium
Timber
Hides, skins and finished leather
Rubber
Chemicals
Fertilizers, ammonia and molasses
Plastics. and materials for plastics
Paper and paper-making materials
Raw cotton, cotton waste and cotton linters
Cotton yarn
Rayon, rayon yarn and woven fabrics
Wool and silk
Jute, flax and hemps
Losses of raw materials at sea
7. PRODUCTION

Shipbuilding

> Naval vessels: Major combat

Naval vessels: Ocean and coastal convoy, etc.
Merchant vessels built in the United Kingdom
Merchant vessels awaiting repair and repaired
Munitions
Index of munitions production
Artillery equipment
Naval guns
Aircraft and light guns
Other weapons
Small arms
Ammunition and explosives
Armoured fighting vehicles

Signal equipment

Aircraf
Production by main groups
Production by structure weigh
Aircraft awating repair and repaired
Aircraft engines: Production, imports and repairs
Arrivals of aircraft in the United Kingdom from North America
Arrivals of aircraft overseas from North America

## Manufactured goods

Machine tools
Agricultural machinery
Locomotives and motor vehicles
Woven cloth, household textiles, hosiery and footwear
Pottery, hollow-ware and brushes
8. TRANSPORT

Merchant shipping
Merchant shipping under British control
Merchant shipping: Analysis by employment
Gains and losses of merchant shipping
Losses from enemy action
Shipping movement: Entrances and clearances in the foreign trade
Arrivals of shipping at UK ports
Imports under Departmental programmes

## Inland transport

Rail:
Repair and availability of rolling stock
Passenger and goods traffic
Operating statistics
Operating statistís
Traffic receipts
Road:
Vehicles with licences current
New vehicle registrations
Canal traffic originating
Coasting trade
TERNALTRADE
Value and volume of external trade
Value of retained imports
Value of exports
Value of imports: Analysis by source
Value of exports: Analysis by destination
Quantity of imports
Quantity of exports

## CONTENTS

10. PUBLIC FINANCE

Floating debt
Currency circulation and bank clearings
Prices and yields of British Government securities
External disinvestment
United States lend-lease aid to the British Empire
$\begin{array}{lr}\text { United Kingdom reciprocal aid } & 10.10\end{array}$
II. NATIONAL INCOME

National income, depreciation and expenditure
Revenue account of persons
Revenue account of public authorities
Combined capital account
Central government revenue
Central government revenue
The finance of the central go
The finance of the central government deficit on current account
Personal expenditure on consumers' goods and services
WAGES AND PRICES
Average weekly earnings and hours worked
Wage rates and working-class cost of living index
Agricultural price indices
Stock and fertilizer price indices
Wholesale prices

actually increased by about three per cent during the war (table I.3). Changes in the size of the population reflect changes in the rates of birth and death (that is the number of births per 1000 population). The birth rate of the UK for the civilian population fell in the first two years of the war but then rose to reach a peak of 17.9 in 1944 , which represented an increase of almost a fith on the 1939 rate. The death rate increased sharply in 1940 but then fell back again and was stable between 1942 and 1945 at 11.4 (with the exception of 1943 when it rose slightly to 11.8 ). The rate of natural increase (the difference between the birth rate and the death rate) fell from 3 per 1000 population in 1939 to a mere 0.8 in 1940 but thereafter increased to reach a peak of 6.5 in 1944; initially the dominant factor in changes in the rate of natural increase were changes in the death rate but after 1941 changes in the birth rate came dominate population growth (tables I.3, 1.6 and 1.9).

The bulk of the excess deaths due to the war were accounted for by the Armed Forces: 264,443 members of the Armed Forces were killed during the war (over half of these were in the Army, about a quarter in the Royal Air
I. Changes in the United Kingdom civilian population


Force, and about a fifth in the Royal Nay) which, compared to the wartime peak size of the Armed Forces of 4.65 million in 1945, gives a rate of attrition of 5.7 per cent (tables 3.8 and 3.3). The Merchant Navy also experienced a heavy loss of life with more than 30,000 members killed during the war (Behrens 1955: 181-3; table 3.3). Civilian casualties due to the war were virtually all incurred due to the German bombing campaign: almost incurred due to the German bombing campaign: a most
70,000 tons of bombs were dropped on the UK during the war, the bulk of them between mid-1940 and mid-1941 (Titmuss 1950: 322-4). The total number of civilian deaths due to the operations of war were 67,635 (giving a war related rate of attrition among the civilian population of about 0.15 per cent), two-thirds of whom were killed in 1940 and 1941 (tables 2.3-2.4: Titmuss 1950:325).

Turning to other causes of death among civilians we find that most initially experienced rising rates of incidence between 1939 and 1940 but thereafter, declined. For the most vulnerable group in society, those under 15 years of age, the reduction in the death rates per million population for many of these diseases was remarkable: scarlet fever fell from over 40 in the 1930s to 7 by 1945, diphtheria fell from almost 300 to 70 , whooping cough from almost 200 to 85, and measles from over 200 to 21 (Stevenson 1984: 204; tables 1.4-1.5 and 2.3-2.4). This experience was in contrast to that of many other European countries: in the case of diphtheria, for example, whist the number of child deaths from this disease in the UK fell from 3,000 in 1938 to 721 in 1945, countries such as Germany and Sweden were experiencing their worst epidemics for fifty years (Ferguson and Fitzgerald 1954: 163-4). An important exception to the large reductions in deaths from diseases during the war was tuberculosis (whose treatment was
hampered by increased waiting lists for hospital beds and by a shortage of nursing staff) which experienced only a small decline between 1939 and 1945 (and in Scotland actually increased by 11 per cent between 1938 and 1945) (Ferguson and Fitzgerald 1954: 251-88;Titmuss 1950: 5245; tables 2.3-2.4).

The chief reason for the decline in the number of deaths from many diseases in Britain was successful immunisation campaigns but other factors related to health and nutrition (such as the creation of the Emergency Medical Services, the introduction of school meals, the subsidised milk scheme for young children and expectant mothers, and the distribution of vitamins, orange juice and cod liver oil) all Contributed to the wartime improvement in the heath the nation (Ferguson and Fitzgerald 1954: 155-71; Titmuss the nation (Ferguson and Fitzgerald 1954: $155-71$; Titmuss
1950: $509-10,521$ ). These changes also helped to reduce the rate of infant mortality (the number of deaths of infants under one year of age per 1000 live births), in contrast to the situation in the First World War when it had increased steadiy (Ferguson and Fitzgerald 1954: 172). Infant mortality increased in 1940 and 1941 but thereafter declined and the level of infant mortality in 1945 in England and Wales was almost a fifth less than the average for 1935-8 (with a sharper reduction in Scotland of 27 per cent and a less sharp reduction in Northern Ireland of 14 per cent) (table I.8).

The pressures and changes wrought by the war (including evacuation and military and industrial mobilisation) placed great pressure on the family, with declining rates of marriage and increases in the number of divorces and illegitimate births (Ferguson and Fitzgerald 1954: $103-9$ Harris 1992: 26). An increase in the marriage rate (the

number of persons married per 1000 population) in England and Wales from 17.6 in 1938 to 22.5 in 1940 was followed by a decline to a low of 14.0 in 1943; Scotland experienced a similar trend although in Northern Ireland wartime marrige the the the the the 1938 figure of I3.4 (table I.10). At the same time the number of divorces in England and Wales rose from 7,197 in 1939 to 19,482 in 1945 (a rise of 171 per cent -in Scotland they rose by 154 per cent), amongst the reason divorces were filed, adultery increased its share from 56 per cent to 69 per cent of the total petitions and the
proportion filed by husbands rose from 45 per cent to 57 per cent (table 2.18). Finally, the ratio of illegitimate births to total live births rose from 4.2 per cent to 9.3 per cent in England and Wales, from 6.0 per cent to 8.7 per cent in Scotland and from 4.7 per cent to 5.4 per cent in
Northern Ireland (table I.6).
One reason for this increase Onillegitimate births was that in ilegitimate births was that wartime pressures prevented the marriage before the birth of their child of those women who conceived out of wedlock (in peacetime the 'regularisation' of such situations was fairly common) (Ferguson and Fitzgerald 1954:90-2).

## 1. 2 Divorce procedidigs in Engand and Wales

| 25 Millions |  | 25 |  |
| :---: | :---: | :---: | :---: |
| 20 |  | 20 |  |
| 15 |  | 15 |  |
| 10 |  | 1943 |  |
| 5 | 1940 | 1941 | 1944 |
| 1939 |  | 1945 |  |

### 1.3 Population of the United Kingdom

United Kingdom Mid-year estimates

|  | United Kingdom |  |  | Mid-year estimates |  |  |  |  |  | Thousands |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | United Kingdom |  |  | England and Wales |  |  | Scotland |  |  | Northern Ireland |  |  |
|  | Total | Males | Females | Total | Males | Females | Total | Males | Females | Total | Males | Females |
| Total population ${ }^{\prime}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 19392 | 47,762 | 22,962 | 24,799 | 41,460 | 19,920 | 21,540 | 5,007 | 2,412 | 2,594 | 1,295 | 630 | 665 |
| 1940 | 48,226 | 23,304 | 24,922 | 41,862 | 20,216 | 21,646 | 5,065 | 2,454 | 2,611 | 1,299 | 634 | 665 |
| 1941 | 48,216 | 23,266 | 24,950 | 41,748 | 20,141 | 21,607 | 5,160 | 2,492 | 2,668 | 1,308 | 633 | 675 |
| 1942 | 48,400 | 23,336 | 25,064 | 41,897 | 20,180 | 21,717 | 5,174 | 2,508 | 2,666 | 1,329 | 648 | 681 |
| 1943 | 48,789 | 23,574 | 25,215 | 42,259 | 20,397 | 21,862 | 5,189 | 2,521 | 2,668 | 1,341 | 656 | 685 |
| 1944 | 49,016 | 23,672 | 25,344 | 42,449 | 20,473 | 21,976 | 5,210 | 2,534 | 2,676 | 1,357 | 665 | 692 |
| 1945 | 49,182 | 23,723 | 25,459 | 42,636 | 20,549 | 22,087 | 5,187 | 2,508 | 2,679 | 1,359 | 666 | 693 |
| Civilian population ${ }^{3}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 1940 | 45,996 | 21,076 | 24,920 | 39,889 | 18,243 | 21,646 | 4,826 | 2,215 | 2,611 | 1,281 | 618 | 663 |
| 1941 | 44,849 | 20,003 | 24,846 | 38,743 | 17,228 | 21,515 | 4,818 | 2,160 | 2,658 | 1,288 | 615 | 673 |
| 1942 | 44,297 | 19,542 | 24,755 | 38,243 | 16,802 | 21,441 | 4,758 | 2,121 | 2,637 | 1,296 | 619 | 677 |
| 19434 | 43,771 | 19,006 | 24,765 | 37,818 | 16,334 | 21,484 | 4,651 | 2,050 | 2,601 | 1,302 | 622 | 680 |
| 1944 | 43,743 | 18,852 | 24,891 | 37,785 | 16,188 | 21,597 | 4,641 | 2,035 | 2,607 | 1,316 | 629 | 687 |
| 1945 | 43,873 | 18,858 | 25,015 | 37,916 | 16,200 | 21,716 | 4,640 | 2,029 | 2,611 | 1,317 | 629 | 688 |

1. The total population includes all members of the armed forces and Merchant Nayy whether at home or overseas.
2. Estimated population actually in the country (resident population). The figures excluce members

Source: Registrars General
2. Estimated population actually in the country (resident population). The figures exclude members
of the armed forces serving overseas and merchant seamen at sea estimated at about a quarter
of the armed forces serving
of a million at Ine 1933 .
3. The civilian population excludes members of the armed forces serving at home and abroad-
4. From 1943 , excluding ceftrin classes of seam.
at that date were: England and Wales, 122,000; Scoviland, 26,000; Northern Ireand so excluded

### 1.4 Age distribution of the resident population of the United Kingdom'



### 1.5 Age distribution of the resident population of the United Kingdom



## I.6 Births in the United Kingdom



### 1.7 Reproduction rates

|  | England and Wales |  |  | Scotland |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Gross | Effective |  | Gross | Net |
| 1935 | 0.854 | 0.764 |  | 1.057 | 0.909 |
| 1936 | 0.862 | 0.774 | 1.069 | 0.914 |  |
| 1937 | 0.872 | 0.785 | 1.051 | 0.901 |  |
| 1938 | 0.897 | 0.810 | 1.077 | 0.933 |  |
| 1939 | 0.892 | 0.808 | 1.058 | 0.932 |  |
| 1940 | 0.850 | 0.772 | 1.042 | 0.896 |  |
| 1941 | 0.836 | 0.761 | 1.058 | 0.893 |  |
| 1942 | 0.934 | 0.853 | 1.087 | 0.948 |  |
| 1943 | 0.985 | 0.900 | 1.162 | 1.012 |  |
| 1944 | 1.089 | 0.996 | 1.183 | 1.041 |  |
| 1945 | 0.992 | 0.909 |  | 1.088 | 0.978 |

## 1. 8 Infantile mortality

Deaths of infants under I year of age per thousand live births

|  | United Kingdom |  |  | England and Wales |  |  | Scotland |  |  | Northern Ireland |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Males | Females | Total | Males | Females | Total | Males | Females | Total | Males | Females |
| 1935 | 60 | 68 | 53 | 57 | 64 | 50 | 77 | 87 | 66 | 86 | 96 | 76 |
| 1936 | 62 | 70 | 54 | 59 | 66 | 51 | 82 | 92 | 72 | 77 | 86 | 67 |
| 1937 | 61 | 68 | 53 | 58 | 65 | 50 | 80 | 90 | 71 | 77 | 83 | 71 |
| 1938 | 55 | 62 | 48 | 53 | 60 | 46 | 70 | 77 | 62 | 75 | 79 | 71 |
| 1939 | 53 | 60 | 47 | 51 | 56 | 44 | 69 | 77 | 59 | 70 | 81 | 60 |
| 1940 | 60 | 69 | 52 | 57 | 64 | 49 | 78 | 90 | 66 | 86 | 95 | 76 |
| 1941 | 63 | 71 | 55 | 60 | 67 | 52 | 83 | 93 | 72 | 77 | 85 | 67 |
| 1942 | 53 | 59 | 46 | 51 | 57 | 44 | 69 | 78 | 60 | 76 | 87 | 65 |
| 1943 | 52 | 58 | 46 | 49 | 55 | 43 | 65 | 73 | 57 | 78 | 87 | 69 |
| 1944 | 48 | 53 | 42 | 45 | 50 | 40 | 65 | 73 | 56 | 67 | 74 | 61 |
| 1945 | 49 | 55 | 43 | 46 | 51 | 40 | 56 | 65 | 47 | 68 | 73 | 63 |

OPULATION AND VITAL STATISTICS

### 1.9 Deaths analysed by age and sex <br> Males


United Kingdom

| 1939 | 296.5 | 22.4 | 2.4 | 2.9 | 4.9 | 8.2 | 10.6 | 14.7 | 28.2 | 54.4 | 76.7 | 70.9 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1940 | 340.6 | 25.0 | 3.3 | 4.1 | 6.2 | 9.4 | 13.1 | 18.8 | 33.4 | 63.3 | 85.6 | 78.3 |
| 1941 | 316.3 | 25.4 | 3.4 | 4.5 | 6.6 | 9.0 | 11.5 | 18.2 | 30.3 | 56.8 | 78.8 | 7.9 |
| 1942 | 283.2 | 23.5 | 2.2 | 3.0 | 4.9 | 6.6 | 8.6 | 14.5 | 26.4 | 51.0 | 74.7 | 6.8 |
| 1943 | 29.2 | 24.1 | 2.3 | 2.8 | 4.8 | 6.2 | 7.8 | 14.3 | 27.2 | 51.8 | 76.7 | 73.5 |
| 1944 | 287.2 | 24.0 | 2.0 | 2.6 | 4.8 | 5.8 | 7.2 | 14.0 | 26.4 | 51.5 | 76.5 | 72.9 |
| 1945 | 284.6 | 22.4 | 2.0 | 2.4 | 4.1 | 5.3 | 6.6 | 12.7 | 25.7 | 51.1 | 77.0 | 75.4 |

England and Wales

| 1939 | 254.9 | 17.9 | 1.9 | 2.4 | 4.0 | 7.0 | 9.1 | 12.6 | 24.5 | 47.6 | 66.2 | 61.7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1940 | 294.2 | 19.7 | 2.7 | 3.3 | 5.2 | 8.1 | 11.4 | 16.3 | 29.3 | 55.9 | 74.2 | 68.2 |
| 1941 | 270.3 | 19.9 | 2.8 | 3.7 | 5.4 | 7.5 | 9.8 | 15.6 | 26.1 | 49.6 | 67.8 | 62.2 |
| 1942 | 242.1 | 18.6 | 1.8 | 2.5 | 4.1 | 5.4 | 7.3 | 12.4 | 22.6 | 44.6 | 64.4 | 58.5 |
| 1943 | 249.6 | 19.2 | 1.8 | 2.3 | 3.9 | 5.0 | 6.5 | 12.2 | 23.5 | 45.5 | 66.3 | 63.6 |
| 1944 | 246.9 | 19.2 | 1.6 | 2.1 | 4.0 | 4.7 | 6.1 | 12.0 | 22.8 | 45.2 | 66.3 | 63.1 |
| 1945 | 245.4 | 18.4 | 1.6 | 2.0 | 3.4 | 4.3 | 5.6 | 10.9 | 22.1 | 44.8 | 66.9 | 65.5 |

Scotland

| 1939 | 32.9 | 3.5 | 0.4 | 0.4 | 0.7 | 1.0 | 1.2 | 1.7 | 3.0 | 5.5 | 8.1 | 7.3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1940 | 36.8 | 4.0 | 0.5 | 0.6 | 0.8 | 1.0 | 1.3 | 2.0 | 3.3 | 6.1 | 9.0 | 8.0 |
| 1941 | 36.2 | 4.3 | 0.5 | 0.6 | 0.9 | 1.1 | 1.3 | 2.1 | 3.4 | 5.8 | 8.6 | 7.6 |
| 1942 | 32.3 | 3.6 | 0.3 | 0.4 | 0.6 | 0.9 | 1.0 | 1.7 | 3.1 | 5.2 | 8.1 | 7.3 |
| 1943 | 32.8 | 3.5 | 0.4 | 0.4 | 0.7 | 0.9 | 1.0 | 1.7 | 3.0 | 5.2 | 8.2 | 7.9 |
| 1944 | 31.9 | 3.6 | 0.3 | 0.4 | 0.7 | 0.8 | 0.8 | 1.6 | 2.9 | 5.2 | 8.1 | 7.7 |
| 1945 | 31.1 | 2.9 | 0.3 | 0.3 | 0.6 | 0.8 | 0.8 | 1.5 | 2.9 | 5.2 | 8.1 | 7.8 |

Northern Ireland

| 1939 | 8.7 | 1.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.4 | 0.7 | 1.3 | 2.4 | 1.9 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1940 | 9.6 | 1.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.5 | 0.8 | 1.3 | 2.4 | 2.1 |
| 1941 | 9.8 | 1.2 | 0.1 | 0.2 | 0.3 | 0.4 | 0.4 | 0.5 | 0.8 | 1.4 | 2.4 | 2.1 |
| 1942 | 8.8 | 1.3 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.4 | 0.7 | 1.2 | 2.2 | 2.0 |
| 1943 | 8.8 | 1.4 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.4 | 0.7 | 1.1 | 2.2 | 2.0 |
| 1944 | 8.4 | 1.2 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.4 | 0.7 | 1.1 | 2.1 | 2.1 |
| 1945 | 8.1 | 1.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.7 | 1.1 | 2.0 | 2.1 |

[^0]
### 1.9 Deaths analysed by age and sex'

 Females
## All ages Under 1 ges year under 2

## United Kingdom

| 1939 | 284.2 | 16.5 | 2.1 | 2.4 | 4.1 | 7.7 | 10.3 | 13.3 | 22.9 | 41.8 | 69.4 | 93.8 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1940 | 322.9 | 17.9 | 2.9 | 3.6 | 5.3 | 10.0 | 12.2 | 15.6 | 25.9 | 47.4 | 77.9 | 104.5 |
| 1941 | 298.9 | 18.6 | 3.1 | 4.0 | 5.3 | 9.9 | 11.8 | 14.6 | 23.9 | 42.1 | 70.4 | 95.3 |
| 1942 | 268.1 | 17.3 | 1.8 | 2.6 | 3.8 | 7.8 | 9.8 | 12.6 | 21.0 | 38.5 | 64.4 | 88.5 |
| 1943 | 282.9 | 17.8 | 2.0 | 2.3 | 3.7 | 7.6 | 9.6 | 13.1 | 21.5 | 39.3 | 68.0 | 97.7 |
| 1944 | 273.8 | 17.8 | 1.7 | 2.0 | 3.6 | 7.3 | 9.2 | 12.4 | 20.9 | 38.0 | 66.2 | 94.7 |
| 1945 | 274.6 | 16.5 | 1.6 | 2.0 | 3.0 | 6.4 | 8.2 | 11.7 | 20.3 | 37.7 | 68.0 | 99.2 |

## England and Wales

| 1939 | 244.0 | 13.3 | 1.7 | 2.0 | 3.3 | 6.4 | 8.7 | 11.2 | 19.6 | 36.1 | 59.8 | 81.8 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1940 | 278.4 | 14.2 | 2.2 | 2.8 | 4.4 | 8.5 | 10.4 | 13.4 | 22.6 | 41.1 | 67.5 | 91.3 |
| 1941 | 254.1 | 14.6 | 2.5 | 3.2 | 4.3 | 8.1 | 9.9 | 12.3 | 20.5 | 36.2 | 60.1 | 82.4 |
| 1942 | 228.6 | 13.7 | 1.4 | 2.1 | 3.1 | 6.3 | 8.1 | 10.6 | 18.1 | 33.1 | 55.3 | 76.7 |
| 1943 | 241.9 | 14.2 | 1.6 | 1.9 | 3.0 | 6.1 | 8.0 | 11.1 | 18.5 | 33.7 | 58.7 | 85.1 |
| 1944 | 234.2 | 14.3 | 1.4 | 1.6 | 2.9 | 5.9 | 7.7 | 10.5 | 18.0 | 32.7 | 57.0 | 82.1 |
| 1945 | 235.8 | 13.6 | 1.3 | 1.6 | 2.5 | 5.1 | 6.8 | 9.9 | 17.3 | 32.6 | 58.6 | 86.4 |

Scotland

| 1939 | 31.4 | 2.5 | 0.3 | 0.3 | 0.6 | 1.0 | 1.2 | 1.6 | 2.6 | 4.5 | 7.3 | 9.6 |
| ---: | ---: | ---: | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1940 | 35.1 | 2.8 | 0.5 | 0.6 | 0.7 | 1.2 | 1.4 | 1.7 | 2.6 | 5.0 | 8.1 | 10.7 |
| 1941 | 34.9 | 3.1 | 0.5 | 0.6 | 0.7 | 1.4 | 1.5 | 1.8 | 2.7 | 4.6 | 7.8 | 10.3 |
| 1942 | 31.1 | 2.7 | 0.3 | 0.4 | 0.5 | 1.2 | 1.3 | 1.5 | 2.3 | 4.3 | 7.1 | 9.5 |
| 1433 | 32.4 | 2.6 | 0.3 | 0.3 | 0.6 | 1.2 | 1.3 | 1.6 | 2.4 | 4.5 | 7.3 | 10.2 |
| 1944 | 31.2 | 2.6 | 0.2 | 0.3 | 0.5 | 1.1 | 1.1 | 1.5 | 2.3 | 4.2 | 7.2 | 10.2 |
| 1945 | 30.6 | 2.0 | 0.2 | 0.3 | 0.4 | 1.0 | 1.1 | 1.4 | 2.4 | 4.1 | 7.4 | 10.3 |

Northern Ireland

| 1939 | 8.8 | 0.7 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.7 | 1.2 | 2.3 | 2.4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1940 | 9.4 | 0.9 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.5 | 0.7 | 1.3 | 2.3 | 2.5 |
| 1941 | 9.9 | 0.9 | 0.1 | 0.2 | 0.3 | 0.4 | 0.4 | 0.5 | 0.7 | 1.3 | 2.5 | 2.6 |
| 1942 | 8.4 | 0.9 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 1.1 | 2.0 | 2.3 |
| 1943 | 8.6 | 1.0 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.4 | 0.6 | 1.1 | 2.0 | 2.4 |
| 1944 | 8.4 | 0.9 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 0.4 | 0.6 | 1.1 | 2.0 | 2.4 |
| 1945 | 8.2 | 0.9 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.4 | 0.6 | 1.0 | 2.0 | 2.5 |

## I.IO Marriages

| Thousands |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| United Kingdom |  |  |  |  |  |  |  |  |
| Number of mamriages         <br> Pelsons martited per 1,000 population 409.1 495.1 533.9 448.5 428.8 344.8 349.2 <br> 17.2 20.6 22.1 18.6 17.7 14.1 14.3 18.6  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Bachelors |  |  |  |  |  |  |  |  |
| Livorced men | 4.8 <br> 284 | ${ }^{6.21}$ | 6.0. | 5,6 | 5.9 | 7.0 | 8.8 | 12.0 |
| Spinters | 38770 | 471.2 | 508.6 | ${ }_{422.4}^{29.8}$ | 4020 | 3178 | 27.8 320.2 | 307 193 |
| Divorced women | 4.2 | 5.5 | 5.4 | 4.8 | 4.8 | 5.5 | ${ }^{320.2}$ | ${ }_{9.0}$ |
| $\begin{array}{ccccccccl}\text { Widows } & 18.0 & 18.5 & 20.0 & 21.4 & 21.9 & 21.4 & 22.6 & 28.5\end{array}$ |  |  |  |  |  |  |  |  |
| Under 21 years | 14.1 | 22.4 | 34.0 | 37.1 | 38.9 | 32.2 | 30.1 | 32.9 |
| $\begin{array}{llllllllll}\text { 21 years and luwards } & 395.0 & 472.6 & 499.9 & 411.3 & 389.9 & 312.4 & 319.1 & 42.7\end{array}$ |  |  |  |  |  |  |  |  |
| Under 21 years | 67.6 | 97.3 | 129.3 | 116.0 |  | 93.9 | 90.5 | 108.3 |
| 21 years and upwards | 341.6 | 397.8 | 404.7 | 332.4 | 31.8 | 250.9 | 25.8 | 348.3 |
| England and Wales |  |  |  |  |  |  |  |  |
| Number of marriages | 361.8 | 439.7 | 470.5 | 388.9 | 369.7 | 296.4 | 3027 | 397.6 |
| Persons married per 1,000 populationCivi condtion: |  |  |  |  |  |  |  |  |
| $\begin{array}{llllllllll}\text { Bachelors } & 331.8 & 407.9 & 438.2 & 357.1 & 337.5 & 265.2 & 269.9 & 359.3\end{array}$ |  |  |  |  |  |  |  |  |
| Sivored l | ${ }_{25}^{4.4}$ |  | 5.5 | 5.1 2.6 | 5.4 | ${ }^{6.2} 2$ |  | 0.9 |
| Spinsters | 341.4 | 417.8 | ${ }_{447.3}^{26.9}$ | ${ }_{365.1}^{26.1}$ | ${ }_{345.5}^{26.8}$ | 27.1 | 27,4.4 | 27.5 3636 |
| Divorced women | 3.8 | 5.0 | 4.9 | 4.3 | 4.3 | 4.9 | 5.8 | 8.0 |
| $\begin{array}{llllllllll}\text { Widows } \\ \text { Al of males } & 16.6 & 16.9 & 18.4 & 19.5 & 19.9 & 19.5 & 20.6 & 26.1\end{array}$ |  |  |  |  |  |  |  |  |
| Under 21 years | 12.2 | 19.5 | 30.2 | 32.7 | 34.3 | 28.2 | 26.4 | 28.8 |
| 21 years and luwardsAge of females |  |  |  |  |  |  |  |  |
| Age Under 21 Years |  |  |  |  |  |  |  |  |
| 21 years and upwards | 3025 | 353.1 | 354.8 | 286.3 | 26.7 | 214.2 | 223.3 | 302.4 |
| Scotland |  |  |  |  |  |  |  |  |
| Number of marriages | 38.7 | 46.2 | 53.5 | 47.6 | 47.4 | 38.2 | 37.0 | 48.6 |
| $\begin{array}{llllllllllll}\text { Persons marrea per , 000 popuation } & 15.5 & 18.5 & 21.1 & 18.5 & 18.3 & 14.7 & 14.2 & 18.8 \\ \text { Civi condition: }\end{array}$ |  |  |  |  |  |  |  |  |
| BachelorsDiolen |  |  |  |  |  |  |  |  |
| $\begin{array}{lllllllll}\text { Divored men } & 0.4 & 0.5 & 0.5 & 0.5 & 0.5 & 0.7 & 0.8 & 1.0 \\ \text { Widowers } & \text { 2.2 } & 2.5 & 2.5 & 2.5 & 2.5 & 2.4 & 2.4 & 1.7 \\ \text { Lin }\end{array}$ |  |  |  |  |  |  |  |  |
| $\begin{array}{lllllllll}\text { Spinsters } \\ \text { Divorced women } & 37.2 \\ & 0.4 & 44.5 & 51.7 & 45.6 & 45.2 & 3.9 .9 & 34.6 & 45.6\end{array}$ |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| $\begin{array}{lllllll}\text { Widows } \\ \text { ge of males: } & 1.2 & 1.3 & 1.4 & 1.5 & 1.7 & 1.6 \\ \text { liter }\end{array}$ |  |  |  |  |  |  |  |  |
| $\begin{array}{lllllllll}\text { 21 years and luwards } & 37.1 & 43.6 & 50.1 & 43.8 & 43.3 & 34.6 & 33.7 & 45.1\end{array}$ |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Under 21 years | 7.1 | 9.3 | 11.9 |  |  | 9.8 |  |  |
| 21 years and upwards | 31.6 | 36.9 | 41.7 | 36.5 | 35.6 | 28.4 | 27.7 | 37.5 |
| Northern Ireland |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| $\begin{array}{llllllllll}\text { Bachelors } & 8.0 & 8.7 & 9.3 & 11.4 & 11.1 & 9.6 & 8.9 & 9.9\end{array}$ |  |  |  |  |  |  |  |  |
| Divorced menWidowers |  |  |  |  |  |  |  |  |
| $\begin{array}{lllllllll}\text { Widoovers } & 0.6 \\ \text { Spinsers }\end{array}$ |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Under |  |  |  |  |  |  |  |  |
| 21 years and upwards | 7.4 | 7.8 | 8.1 | 9.7 | 9.5 | 8.3 | 7.8 | 8.6 |
|  | Soure: Registras General |  |  |  |  |  |  | General |

### 2.2 Persons found guilty of offences in England and Wales


action ( 222,000 were destroyed and a further 3.5 million were damaged) and in some areas the proportion was much higher (in Bermondsey in London, for example, 90 per cent of the housing stock was affected in some way); furthermore, about 20 per cent of schools and hospitals were also put out of action (Titmuss 1950: 328-30, 462-3 Harris 1992: 22). House building did not have a high Harris 1992: 22). House building did not have a high
priority in the war and, as in Germany, it was deliberately priority in the war and, as in Germany, it was deliberately
squeezed to provide resources for war production (Overy squeezed to provide resources for war production (Over
1988: 622). Thus, not only did overall investment fall sharply during the war (from 12 per cent of GDP in 1938 to 4 per cent in 1943) but the share of building in total gross domestic fixed capital formation also shrank (it fell from over a half of the total in 1939 to a third in 1940) (Feinstein 1972:T16, 86). In physical terms this meant that the total number of houses built in England and Wales between 1941-42 and 1944-45 was only 30,723 compared between 1941-42 and 1944-45 was only 30,723 compare
to 332,360 built in 1938-39 (table 2.19). This very low to 332,360 built in 1938-39 (table 2.19 ). This very low
rate of house completion, plus the wartime damage to the existing housing stock, meant that by 1945 the nation faced an acute housing shortage.

The war also ushered in a new batch of laws (and rejuvenated some old ones) concerned with protecting morale, preventing black marketeering, regulating industry morale, preventing black marketeering, regulating industry
and the labour market, and enforcing the blackout. Not and the labour market, and enforcing the blackout. Not
surprisingly convictions of people found guilty of breaking these laws rose dramatically at the beginning of the war: in England and Wales 61,000 people were convicted of such offences in 1939 and 340,000 in 1940, although thereafter the number of such convictions declined; in 1939 and 1940 more than 90 per cent of these convictions were for lighting offences but by 1945 this proportion had fallen to about a third of the total with convictions for offences
against the Control of industry and employment rising in importance to account for 46 per cent of the total (Smithies 1982: 7-24, 58-91; table 2.11). Other crime also increased during the war: in England and Wales between 1939 and 1945 the number of indictable offences known to the police rose by 57 per cent (and the proportion of people per 100,000 found guilty rose from 149 to 223), people per 100,000 found guilty rose from 149 to 223),
juvenile convictions by 39 per cent, and female convictions juvenile convictions by 39 per cent, and female conviction
almost doubled (Smithies 1982; Harris 1992: 28; tables 2.11 and 2.14). The result of this increased rate of conviction was that the average daily prison population increased by 42 per cent (table 2.17).

2.3 Civilian deaths registered: Analysis by cause and age' Males
United Kingdom

|  | United Kingdom |  |  |  |  |  |  |  |  |  | Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{r} \text { All } \\ \text { ages }^{2} \end{array}$ | Age group |  |  |  |  |  |  |  |  |  |
|  |  | Under 1 year | 1-4 | 5-9 | 10-14 | 15-24 | 25-34 | 35-44 | 45-44 | 55-64 | 65 and over |
| Deaths from all causes other than violence |  |  |  |  |  |  |  |  |  |  |  |
| ( $1-162,199$ and 200): |  |  |  |  |  |  |  |  |  |  |  |
| 1939 | 277,627 | 21,880 | 4,588 | 2,141 | 1,584 | 6.146 | 8,285 | 12,646 | 25,738 | 51,287 | 143,331 |
| 1940 | 309,506 | 24,301 | 6,355 | 2,506 | 1,672 | 6,265 | 8,978 | 14,384 | 28,900 | 58,320 | 157,820 |
| 1941 | 285,352 | 24,697 | 6,610 | 2,448 | 1,535 | 5,788 | 7.895 | 13,571 | 25,794 | 52,080 | 144,929 |
| 1942 | 265,626 | 22,944 | 4,408 | 1,885 | 1,450 | 5,197 | 6,912 | 12,277 | 23,911 | 48,226 | 138,415 |
| 1943 | 275,509 | 23,542 | 4,235 | 1,853 | 1,364 | 4,922 | 6,431 | 12,442 | 24,945 | 49,418 | 146,357 |
| 1944 | 269,091 | 23,265 | 3,542 | 1,647 | 1,289 | 4,391 | 5,790 | 11,662 | 23,736 | 48,656 | 145,111 |
| 1945 | 270,291 | 21,740 | 3,477 | 1,422 | 1,151 | 4,115 | 5,636 | 11,174 | 23,783 | 48,956 | 148,833 |



### 2.3 Civilian deaths registered: Analysis by cause and age



### 2.3 Civilian deaths registered: Analysis by cause and age'

 2.3 contined Males| ggdom |  |  |  |  |  |  |  |  |  |  | Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { All } \\ \text { ages }^{2} \end{gathered}$ | Age group |  |  |  |  |  |  |  |  |  |
|  |  | Under 1 year | 1-4 | 5-9 | 10-14 | 15-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65 and over |
| Deaths by violence (163-198): |  |  |  |  |  |  |  |  |  |  |  |
| 1939 | 18.918 | 495 | 726 | 672 | 450 | 2,116 | 2,379 | 2,157 | 2,478 | 3.119 | 4,325 |
| 1940 | 31,084 | 638 | 1,233 | 1,090 | 951 | 3,163 | 4,081 | 4,371 | 4,487 | 5,004 | 6,039 |
| 1941 | 30,941 | 722 | 1,342 | 1,351 | 1,182 | 3,132 | 3,706 | 4,601 | 4,412 | 4,822 | 5,650 |
| 1942 | 17,565 | 568 | 899 | 918 | 632 | 1,502 | 1,635 | 2,199 | 2,494 | 2,714 | 3,997 |
| 1943 | 15,710 | 612 | 787 | 918 | 595 | 1,263 | 1,282 | 1.955 | 2,218 | 2,396 | 3,679 |
| 1944 | 18,160 | 685 | 963 | 1,068 | 742 | 1,391 | 1,287 | 2,314 | 2,615 | 2,905 | 4,188 |
| 1945 | 14,283 | 630 | 842 | 915 | 616 | 1,156 | 980 | 1,572 | 1,905 | 2,108 | 3,553 |
| Suicides (163-64): |  |  |  |  |  |  |  |  |  |  |  |
| 1939 | 3.667 | - |  |  | 2 | 198 | 417 | 520 | 715 | 1,000 | 815 |
| 1940 | 3,167 | - |  |  | 4 | 127 | 289 | 471 | 625 | 846 | 805 |
| 1941 | 2,568 |  |  |  | 5 | 109 | 237 | 406 | 475 | 647 | 689 |
| 1942 | 2,309 | - | - | - | 5 | 123 | 204 | 347 | 450 | 556 | 624 |
| 1943 | 2,421 | - | - | - | 5 | 109 | 198 | 404 | 487 | 575 | 643 |
| 1944 | 2,405 | - |  |  | 4 | 110 | 170 | 356 | 500 | 592 | 673 |
| 1945 | 2,429 | - | - | - | 6 | 84 | 179 | 342 | 511 | 572 | 735 |
| Deaths of civilians due to operations of war (197) |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1939 | 73 | - |  |  |  | 3 | 8 | 20 | 28 | 13 | 1 |
| 1940 | 11,851 | 102 | 412 | 388 | 463 | 1,463 | 1,992 | 2.079 | 1,894 | 1,731 | 1,320 |
| 1941 | 12,279 | 136 | 456 | 470 | 555 | 1,555 | 1,811 | 2,237 | 1,923 | 1,805 | 1,324 |
| 1942 | 2,098 | 16 | 66 | 102 | 140 | 211 | 246 | 338 | 396 | 326 | 257 |
| 1943 | 1,651 | 12 | 59 | 83 | 124 | 179 | 139 | 240 | 317 | 273 | 225 |
| 1944 | 4,541 | 53 | 184 | 198 | 256 | 376 | 382 | 698 | 844 | 802 | 747 |
| 1945 | 1,222 | 16 | 68 | 62 | 92 | 101 | 105 | 161 | 249 | 207 | 161 |
| 1. The figures in brackets following each cause of death are the reference numbers Source: Registrars General to that particular cause in the Fifth Revision of the International List. <br> 2. Including a small number of unstated age. |  |  |  |  |  |  |  |  |  |  |  |

2.4 Civilian deaths registered: Analysis by cause and age
$\qquad$

Deaths from all causes
other than violence
$(1-162,199$ and 200):

|  | 17,165 | 4,034 | 1,960 | 1,637 | - | 10073 | 12,580 | 21,936 | 40,615 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 17,39 |  |  |  |  | 10,073 | 12,53 |  | 44,680 |  |
| 279,261 | 18,002 | 6,014 | 2,186 | 1,605 | 7,904 | 9,763 | 12,517 | 21,624 | 39,698 |  |
| 257,771 | 16,824 | 3,815 | 1,691 | 1,390 | 7,168 | 9, 105 | 11,758 | 20,060 | 37,272 | 148,687 |
| 273,463 | 17,484 | 退, 81 | 1,640 | 1,433 | 7,015 | 8,98 | 12,253 | 20,704 | 38,18 |  |
| 260,91 | 17,226 | 3,095 | 1,447 | 1,240 | 6.416 | 8,152 | 11,155 | 19,47 | 36,3 |  |
|  |  |  |  |  |  |  |  | 9,3 | 36,6 |  |

Scarlet fever $(8)$ :
1939
1940
1941
1942
1943
1944
1945


Whooping cough (9):
1939
1940
1941
1942
1943
1944
1945

| 965 | 523 | 413 | 23 |
| :--- | :--- | :--- | :--- |
| 531 | 255 | 253 | 21 |
| 1,848 | 900 | 885 | 54 |
| 532 | 309 | 209 | 12 |
| 851 | 469 | 360 | 20 |
| 731 | 447 | 259 | 21 |
| 501 | 273 | 208 | 17 |


| Diphtheria (10): <br> 1939 | 1,293 | 29 | 466 | 541 | 141 | 57 | 24 | 9 | 12 | 9 | 5 |
| :---: | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1940 | 1,641 | 34 | 637 | 650 | 187 | 57 | 26 | 24 | 10 | 11 | 5 |
| 1941 | 1,643 | 41 | 646 | 611 | 158 | 98 | 31 | 22 | 15 | 13 | 8 |
| 1942 | 1,111 | 29 | 415 | 414 | 106 | 67 | 27 | 21 | 14 | 11 | 7 |
| 1943 | 821 | 39 | 281 | 265 | 79 | 65 | 26 | 21 | 23 | 17 | 5 |
| 1944 | 592 | 21 | 227 | 197 | 52 | 33 | 21 | 15 | 7 | 10 | 9 |
| 1945 | 443 | 6 | 155 | 157 | 40 | 21 | 20 | 18 | 9 | 10 | 7 |

Tuberculosis of respiratory
system (13)

See footnotes on page 18

### 2.4 Civilian deaths registered:Analysis by cause and age ${ }^{1}$ <br> continued Females

 FemalesUnited Kingdom


| Other forms of tuberculosis (14-22): |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1939 | 2.415 | 160 | 454 | 216 | 191 | 488 | 300 | 183 | 142 | 132 | 149 |
| 1940 | 2,174 | 172 | 551 | 233 | 212 | 616 | 316 | 200 | 168 | 127 | 119 |
| 1941 | 3,098 | 174 | 749 | 311 | 226 | 700 | 290 | 221 | 154 | 133 | 140 |
| 1942 | 2,735 | 160 | 544 | 236 | 214 | 582 | 346 | 213 | 171 | 129 | 140 |
| 1943 | 2,734 | 155 | 564 | 260 | 206 | 623 | 292 | 201 | 149 | 118 | 166 |
| 1944 | 2,594 | 149 | 493 | 268 | 218 | 557 | 290 | 201 | 141 | 134 | 143 |
| 1945 | 2,242 | 157 | 506 | 251 | 213 | 500 | 230 | 182 | 137 | 119 | 147 |
| Influenza (33): |  |  |  |  |  |  |  |  |  |  |  |
| 1939 | 5,467 | 112 | 85 | 22 | 44 | 133 | 241 | 333 | 483 | 812 | 3,202 |
| 1940 | 6,489 | 185 | 153 | 41 | 30 | 156 | 198 | 340 | 577 | 1,099 | 3,710 |
| 1941 | 4,060 | 155 | 75 | 34 | 20 | 87 | 116 | 178 | 343 | 574 | 2,478 |
| 1942 | 1,830 | 85 | 62 | 15 | 13 | 52 | 68 | 111 | 155 | 259 | 1,010 |
| 1943 | 7,510 | 190 | 118 | 38 | 52 | 126 | 208 | 366 | 546 | 908 | 4,958 |
| 1944 | 2,157 | 107 | 47 | 16 | 13 | 54 | 63 | 75 | 139 | 244 | 1,399 |
| 1945 | 1,461 | 71 | 44 | 8 | 5 | 24 | 34 | 59 | 114 | 214 | 888 |


| Measles (35): |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1939 | 166 | 49 | 83 | 28 | 1 | 1 | 2 |  |  | 2 |  |
| 1940 | 663 | 200 | 365 | 62 | 5 | 9 | 7 | 4 | I | 5 | 5 |
| 1941 | 572 | 152 | 315 | 52 | 9 | 6 | 6 | 11 | 4 | - | 7 |
| 1942. | 332 | 94 | 186 | 37 | 5 | 5 | 3 | - | । | I |  |
| 1943 | 463 | 162 | 225 | 45 | 9 | 6 | 6 | 5 | I | I | 3 |
| 1944 | 148 | 55 | 75 | 14 | । | 1 | - | 1 |  |  | 1 |
| 1945 | 405 | 131 | 214 | 32 | 2 | 7 | 7 | 2 | I | 2 | 7 |
| Bronchitis (106): |  |  |  |  |  |  |  |  |  |  |  |
| 1939 | 8,568 | 505 | 140 | 22 | 21 | 58 | 80 | 153 | 329 | 853 | 6,407 |
| 1940 | 23,115 | 782 | 247 | 41 | 34 | 120 | 187 | 437 | 1,068 | 3,099 | 17.100 |
| 1941 | 16,984 | 869 | 218 | 27 | 20 | 108 | 123 | 259 | 731 | 1,904 | 12,725 |
| 1942 | 12,287 | 554 | 134 | 25 | 15 | 93 | 116 | 214 | 546 | 1,409 | 9,181 |
| 1943 | 15,123 | 626 | 141 | 20 | 18 | 81 | 130 | 306 | 631 | 1,625 | 11,545 |
| 1944 | 12,023 | 522 | 107 | 28 | 10 | 74 | 127 | 227 | 566 | 1,314 | 9,048 |
| 1945 | 13,28\| | 496 | 109 | 24 | 11 | 71 | 107 | 249 | 577 | 1,628 | 10,009 |


| Pneumonia (107-109): |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1939 | 11,376 | 2,329 | 910 | 145 | 103 | 262 | 385 | 503 | 758 | 1,336 | 4,645 |
| 1940 | 14,988 | 3,166 | 1.465 | 162 | 90 | 257 | 444 | 631 | 1,026 | 1,725 | 6,022 |
| 1941 | 1,828 | 3,289 | 1,266 | 159 | 83 | 264 | 385 | 554 | 829 | 1,451 | 5,548 |
| 1942 | 10.588 | 2,520 | 810 | 108 | 64 | 230 | 337 | 485 | 667 | 1,158 | 4,209 |
| 1943 | 13,089 | 3,022 | 849 | 114 | 85 | 275 | 405 | 573 | 816 | 1.402 | 5,548 |
| 1944 | 10,121 | 2,737 | 623 | 80 | 71 | 178 | 257 | 390 | 577 | 976 | 4,232 |
| 1945 | 10,218 | 2,808 | 586 | 69 | 54 | 165 | 233 | 361 | 541 | 986 | 4,415 |

### 2.4 Civilian deaths registered: Analysis by cause and age'



### 2.5 Notifications of infectious diseases

| Number |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| United Kingdom |  |  |  |  |  |  |  |
| Diphtheria | 58,052 | 63,018 | 64,794 | 52,074 | 44,176 | 31,428 | 25,134 |
| Typhoid and paratyphoid fevers | 1,909 | 3,761 | 5,945 | 1,170 | 1,004 | 848 | 730 |
| Erysipelas | 17,626 | 16,062 | 14,907 | 14,305 | 14,500 | 13,548 | 12,093 |
| Scarlet fever | 94,194 | 76,531 | 69,598 | 100,549 | 134,033 | 108,253 | 87,370 |
| Smallpox | । | । |  | 109 |  | 16 | 4 |
| Dysentery | 3,082 | 4,756 | 9,101 | 9,820 | 10,909 | 17,420 | 21,110 |
| Ophthalmia neonatorum | 5,947 | 5,563 | 5,117 | 5,556 | 5,543 | 4,603 | 4,044 |
| Pneumonia (acute primary and acute influenzal) | 52,482 | 61,977 | 64,549 | 54,901 | 67,141 | 50,740 | 44,637 |
| Puerperal fever and pyrexia | 11,034 | 9,161 | 8,957 | 10,244 | 9,976 | 9,336 | 8,276 |
| Tuberculosis: Total | 53,893 | 54,893 | 59,834 | 62,289 | 65,129 | 65,042 | 62,513 |
| England and Wales |  |  |  |  |  |  |  |
| Diphtheria | 47,343 | 46,280 | 50,797 | 41,404 | 34,662 | 23,199 | 18,596 |
| Typhoid and paratyphoid fevers | 1.479 | 2,833 | 4.763 | 858 | 713 | 542 | 535 |
| Erysipelas | 14,141 | 13,123 | 12,232 | 11,598 | 11,833 | 11,148 | 9,853 |
| Scarlet fever | 78,101 | 65,302 | 59,433 | 85,084 | 116,034 | 92,671 | 73,687 |
| Smalipox | 1 | 1 |  | 7 |  | 16 | 6 |
| Dysentery | 1,941 | 2,860 | 6,670 | 7.296 | 7,905 | 13,025 | 16,278 |
| Ophthalmia neonatorum | 4,594 | 4,390 | 4,195 | 4,517 | 4,502 | 3,660 | 3,314 |
| Pneumomia (acute primary and acute influenzal) | 42,312 | 47,875 | 50,942 | 42,698 | 52,407 | 38,631 | 34,371 |
| Puerperal fever and pyrexia | 9,252 | 7,627 | 7,356 | 8,542 | 8,354 | 7.944 | 7.013 |
| Tuberculosis:': Total | 46,206 | 46,572 | 50,964 | 52,619 | 54,342 | 54,313 | 52,110 |
| Respiratory | 34,930 | 36,151 | 39,499 | 40,629 | 42,410 | 43,794 | 42,166 |
| Other | 11,276 | 10,421 | 11,465 | 11,990 | 11,932 | 10,519 | 9,944 |
| Scotland |  |  |  |  |  |  |  |
| Diphtheria | 9,476 | 15,069 | 12,395 | 9,474 | 7,944 | 6,835 | 5,679 |
| Typhoid and paratyphoid fevers | 345 | 859 | 1,070 | 225 | 200 | 183 | 137 |
| Erysipelas | 3,235 | 2,715 | 2,514 | 2,570 | 2,557 | 2,261 | 2,103 |
| Scarlet fever | 12,023 | 8,353 | 8,760 | 13,792 | 14,722 | 12,057 | 11,654 |
| Smallpox |  |  |  | 101 |  |  |  |
| Dysentery | 1,132 | 1,888 | 2,429 | 2,515 | 2,984 | 4,373 | 4,811 |
| Ophthalmia neonatorum | 1,328 | 1,152 | 902 | 1,023 | 1,019 | 930 | 722 |
| Pneumonia (acute primary and acute influenza) | 9,455 | 13,658 | 13,316 | 11,855 | 14,428 | 11,852 | 10,049 |
| Puerperal fever | 784 | 735 | 709 | 775 | 814 | 680 | 617 |
| Puerperal pyrexia | 903 | 731 | 775 | 797 | 716 | 624 | 606 |
| Tuberculosis:: Total | 7,097 | 7,722 | 8,294 | 9,048 | 10,088 | 9,933 | 9,658 |
| Respiratory | 4,657 | 5,212 | 5,739 | 6,224 | 7,215 | 7,282 | 7,316 |
| Other | 2,440 | 2,510 | 2,555 | 2,824 | 2,873 | 2,651 | 2,342 |
| Northern Ireland |  |  |  |  |  |  |  |
| Diphtheria | 1,233 | 1,669 | 1,602 | 1,196 | 1.570 | 1,394 | 859 |
| Typhoid and paratyphoid fevers | 85 | 69 | 112 | 87 | 91 | 123 | 58 |
| Erysipelas | 250 | 224 | 161 | 137 | 110 | 139 | 137 |
| Scarlet fever | 4,070 | 2,876 | 1,405 | 1,673 | 3,277 | 3,525 | 2,029 |
| Smallpox | - | - | - | 1 | - | 2 |  |
| Dysentery | 5 | , | 2 | 9 | 20 | 22 | 21 |
| Ophthalmia neonatorum | 25 | 21 | 20 | 16 | 22 | 13 | 8 |
| Pneumonia (acute primary and acute influenzal) | 715 | 444 | 291 | 348 | 306 | 257 | 217 |
| Puerperal fever | 22 | 22 | 16 | 22 | 87 | 9 | 6 |
| Puerperal pyrexia | 73 | 46 | 101 | 108 | 87 | 79 | 34 |
| Tuberculosis:2: Total | 531 | 599 | 576 | 622 | 699 | 796 | 745 |
| 1. Formal notifications of new cases only. <br> 2. Cases of acute infectious tuberculosis only. |  |  |  |  | : Registrars and Northern | $\begin{aligned} & \text { Feneral for Eng } \\ & \text { reland dond De } \\ & \text { Heath } \end{aligned}$ | $\begin{aligned} & \text { sand, Wale } \\ & \text { eparment o } \\ & \text { for Scotianc } \end{aligned}$ |

### 2.6 Venereal disease

Cases dealt with at civilian treatment centres in Great Britain

|  | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total all cases | 149,218 | 137,746 | 121,754 | 130,054 | 137,330 | 142,377 | 139,034 | 145,387 |
| Males | 100,228 | 91,449 | 81,238 | 89,692 | 92,562 | 89,795 | 81,082 | 82,907 |
| Females | 48,990 | 46,297 | 40,516 | 40,362 | 44,768 | 52,582 | 57,952 | 62,480 |
| Syphils | 64,377 | 63,138 | 59,832 | 62,963 | 72,654 | 80,656 | 81,155 | 81,024 |
| Gonorrhoea | 83,335 | 73,247 | 60,514 | 65,348 | 62,914 | 60,313 | 56,707 | 63,320 |
| Soft chancre | 1,506 | 1,361 | 1,408 | 1,743 | 1,762 | 1,408 | 1,172 | 1,043 |
| New infection ${ }^{2}$ | 57,726 | 51,086 | 46,361 | 52,492 | 53,960 | 56,252 | 51,780 | 57,444 |
| Males | 42,272 | 37,789 | 34,470 | 37,705 | 36,082 | 34,848 | 30,121 | 34,531 |
| Females | 15,454 | 13,297 | 11,891 | 14,787 | 17,878 | 21,404 | 21,659 | 22,913 |
| Syphilis | 15,808 | 14,528 | 14,046 | 16,841 | 20,411 | 21,591 | 19,460 | 19,271 |
| Gonorrhoea | 40,826 | 35,579 | 31,230 | 34,337 | 32,326 | 33,695 | 31,545 | 37,458 |
| Soft chancre | 1,092 | 979 | 1.085 | 1,314 | 1,223 | 966 | 775 | 71 |

[^1]Source: Heath Departments

### 2.7 National Health Insurance

(i) Estimated numbers entitled to benefits

|  | End of year |  |  |  |  | Thousands |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| +4el | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| Total | 22,049 | 22,848 | 23,632 | 24,626 | 25,133 | 25,249 | 25,135 |
| Males: |  |  |  |  |  |  |  |
| Total | 14,595 | 15,122 | 15,37\| | 15,705 | 15.806 | 15,819 | 15,797 |
| Approved societies | 13,063 | 13,236 | 13,323 | 13,562 | 13,592 | 13,559 | 13,518 |
| Nayy and Army Fund | 136 | 425 | 514 | 554 | 587 | 605 | 621 |
| Deposit contributors | 144 | 170 | 198 | 209 | 206 | 195 | 172 |
| Exempt persons | 7 | 5 | 3 | 2 | 2 | 2 | 2 |
| Over age 65 | 1,245 | 1,286 | 1,333 | 1,378 | 1,419 | 1,458 | 1,484 |
| Females: |  |  |  |  |  |  |  |
| Total | 7,454 | 7,726 | 8,261 | 8.921 | 9,327 | 9,430 | 9,338 |
| Approved societies | 6,944 | 6,968 | 7,401 | 7.980 | 8,320 | 8,390 | 8,288 |
| Navy and Army Fund |  | 14 | 43 | 64 | 72 | 73 | 74 |
| Deposit contributors | 157 | 179 | 208 | 244 | 273 | 277 | 258 |
| Exempt persons | 6 | 5 | 3 | 2 | 60 | 2 | 1 |
| Over age 60 | 3471 | 560 | 606 | 631 | 660 | 688 | 717 |

(ii) Receipts, expenditure and accumulated funds

| £ thousand |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| Receipts: |  |  |  |  |  |  |  |
| Total | 45,157 | 43,383 | 47,029 | 59,189 | 58,134 | 58,060 | 57,221 |
| Contributions from employers and workers | 31,007 | 31,499 | 31,577 | 40,574 | 41,070 | 40,204 | 39,176 |
| Interest, etc., on funds | 6,382 | 3,530 | 6,952 | 9,155 | 6,389 | 6,765 | 6,882 |
| Parliamentary votes and grants | 7.768 | 8,354 | 8,500 | 9,460 | 10,675 | 11,091 | 11,163 |
| Expenditure: |  |  |  |  |  |  |  |
| Total | 41,350 | 41,012 | 39,026 | 47,288 | 51,916 | 54,013 | 54,247 |
| Benefts: |  |  |  |  |  |  |  |
| Total | 35,180 | 34,978 | 32,657 | 40,602 | 45,468 | 47,381 | 47,401 |
| Sickness | 11,251 | 12,353 | 11,053 | 15,808 | 19,285 | 19,406 | 18,725 |
| Disablement | 6,502 | 5,984 | 5,329 | 7.200 | 7,636 | 8,272 | 8,804 |
| Maternity | 1,762 | 1,701 | 1,705 | 1,877 | 2,104 | 2,256 | 2,042 |
| Medical | 12,689 | 12.475 | 12,452 | 13,453 | 14,138 | 15,074 | 15,449 |
| Other | 2,976 | 2,465 | 2,118 | 2,264 | 2,305 | 2,373 | 2,381 |
| Administration: |  |  |  |  |  |  |  |
| Total | 6,170 | 6,034 | 6,369 | 6,686 | 6,448 | 6.632 | 6,846 |
| Approved societies and insurance committees | 5,034 | 5,047 | 5,149 | 5,530 | 5,308 | 5,509 | 5,547 |
| Central departments | 1,136 | 987 | 1,220 | 1,156 | 1,140 | 1,123 | 1,299 |
| Accumulated funds (at end of year) | 147,046 | 148,510 | 155,606 | 166,073 | 171,084 | 174,289 | 176,303 |

### 2.8 Unemployment Insurance

(i) Persons insured

|  | July of each year |  |  |  |  |  |  |  |  |  |  | Thousands |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: |
| Great Britain | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |  |  |  |  |  |
| Total | 15,548 | 14.803 | 14,922 | 15,061 | 14,630 | 14,150 | 13,640 |  |  |  |  |  |
| General scheme | 14,738 | 14,158 | 14,292 | 14,406 | 13,945 | 13,465 | 12,965 |  |  |  |  |  |
| Agricultural scheme | 710 | 645 | 630 | 655 | 685 | 685 | 675 |  |  |  |  |  |

(ii) Receipts, expenditure and fund

|  | Years ended 31 March |  |  |  |  | £ thousand |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Receipts |  |  |  |  |  |  |  |
| Total | 68,543 | 71,480 | 78,941 | 80,306 | 80,159 | 77,797 | 89,834 |
| General scheme | 66,992 | 70,047 | 77,485 | 78,729 | 78,546 | 76,165 | 88,140 |
| Agricultural scheme | 1,551 | 1,433 | 1,456 | 1,577 | 1,613 | 1,632 | 1,694 |
| Contributions from: |  |  |  |  |  |  |  |
| Employers and employees: |  |  |  |  |  |  |  |
| General scheme | 43,969 | 46,479 | 50,803 | 50,50 । | 49,068 | 46,604 | 45,208 |
| Agricultural scheme | 996 | 930 | 907 | 960 | 956 | 959 | 972 |
| Defence departments | 138 |  |  |  |  |  | 8,060 |
|  |  |  |  |  |  |  |  |
| General scheme | 22,032 | 23,233 | 25,396 | 25,250 | 24,534 | 23,301 | 26,633 |
| Agricultural scheme | 494 | 465 | 453 | 480 | 478 | 480 | 486 |
| Income from investments: |  |  |  |  |  |  |  |
| General scheme | 839 | 325 | 1,282 | 2,975 | 4,942 | 6,258 | 8,234 |
| Agricultural scheme | 61 | 38 | 96 | 137 | 179 | 193 | 236 |

Agricultural schem
Other receipts: Agricultural scheme
Expenditur
${ }^{\text {Total }}$ General scheme General scheme
Agricultural scheme
Benefit, transitional payments and unemployment allowances:
General sch General scheme: $\begin{gathered}\text { Direct } \\ \text { Association }\end{gathered}$ Agricultural scheme: Direct
Administrative expenses General scheme Agricultural scheme
Interest on advances and reduction of debt Other payments and refunds: General scheme
Agricultural schem
Fund
Fund
Balance of fund at end of period General scheme
investments (at cost) at end of period
Treasury advances outstanding

$\begin{array}{llllll}29,211 & 97,986 & 170,694 & 243,998 & 313,672 & 385,047\end{array}$ $\begin{array}{rrrrrrr}24,156 & 29,258 & 9,986 & 10,694 & 243,998 & 313,672 & 385,047 \\ 3,254 & 4,058 & 5,45 & 6,42 & 7,87 & 9,177 & 10,531 \\ 27,511 & 33,230 & 103,150 & 177,187 & 251,872 & 322,892 & 396,271\end{array}$

Pensions
(i) Old age pensions payable from age 70

|  | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Number of pensions payable' (Thousands) | 1,906 | 1,944 | 1,986 | 2,043 | 2,128 | 2,186 | 2,255 |
| Total | 1,299 | 1,372 | 1,439 | 1,519 | 1,622 | 1,707 | 1,797 |
| $\quad$ Under Contributory Pensions Act | 607 | 572 | 547 | 524 | 506 | 479 | 458 |
| Other |  |  |  |  |  |  |  |
| Men: | 608 | 633 | 656 | 684 | 724 | 756 | 789 |
| $\quad$ Under Contributory Pensions Act | 182 | 174 | 169 | 163 | 161 | 152 | 145 |
| $\quad$ Other |  |  |  |  |  |  |  |
| Women: | 691 | 739 | 783 | 835 | 898 | 951 | 1,008 |
| $\quad$ Under Contributory Pensions Act | 425 | 398 | 378 | 362 | 345 | 327 | 313 |
| $\quad$ Other |  |  |  |  |  |  |  |
| Full rate: | 1,296 | 1,369 | 1,434 | 1,514 | 1,616 | 1,700 | 1,789 |
| $\quad$ Under Contributory Pensions Act | 580 | 546 | 522 | 499 | 480 | 454 | 434 |

Reduced rate:
Under Contributory Pensions Act
Other
] $30\left[\begin{array}{rrrrrr}3 & 5 & 5 & 6 & 7 & 8 \\ 26 & 25 & 25 & 26 & 25 & 24\end{array}\right.$
Total amount of pensions paid in year ended 31 March ( $£$ thousand)
Source: Ministry of National Insurance and H.M. Customs and Excise
(ii) Pensions insured and beneficiaries under the Widows', and Old Age Pensions Act, 1936

|  | End of year |  |  |  |  | Thousands |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| Estimated numbers insured: |  |  |  |  |  |  |  |
| Total | 21,835 | 22,640 | 23,361 | 24,242 | 24,736 | 24,863 | 24,767 |
| Men | 14,635 | 15,188 | 15,380 | 15,622 | 15,683 | 15,714 | 15,693 |
| Women | 7,200 | 7,452 | 7,981 | 8,620 | 9,053 | 9,149 | 9,074 |
| Number of beneficiaries: |  |  |  |  |  |  |  |
| Total | 2,016 | 2,349 | 2,423 | 2,467 | 2,507 | 2,544 | 2,585 |
| Widows: Contributory | 664 | 699 | 743 | 765 | 789 | 811 | 829 |
| Non-contributory | 179 | 161 | 144 | 130 | 117 | 104 | 93 |
| Children: Contributory | 282 | 274 | 261 | 249 | 241 | 234 | 225 |
| Non-contributory | 3 | 1 |  |  |  |  |  |
| Pensioners under $70{ }^{2}$ : Men | 551 | 566 | 586 | 601 | 613 | 622 | 634 |
| Women | 337 | 648 | 689 | 722 | 747 | 773 | 804 |
| 1. At the last Friday in March in each year. <br> 2. Men aged 65 and over; women aged 65 and over up to 30 June 1940 and 60 and over thereafter. |  |  |  | Source: Ministry of National Insurance |  |  |  |
|  |  |  |  |  |  |  |  |



## 2. War pensions, grants and allowances (i) Expenditure



| At 31 March in each year |  |  |  |  |  |  | $\begin{array}{r} \text { Number } \\ 1945 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 |  |
| Total | 877,400 | 850,570 | 869,915 | 980,050 | 1,061,05 5 | 1,224,070 | 1,431,385 |
| Services |  |  |  |  |  |  |  |
| Total | 877,400 | 846,150 | 817815 | 789,865 | 763,970 | 740,445 | 714.745 |
| Officers and dependants: |  |  |  |  |  |  |  |
| Disabled officers | $\begin{array}{r} 21,520 \\ 7,700 \end{array}$ | $\begin{array}{r} 21,140 \\ 7,590 \end{array}$ | $\begin{array}{r} 20,690 \\ 7,465 \end{array}$ | $\begin{gathered} 20,265 \\ 7,335 \end{gathered}$ | $\begin{array}{r} 19,850 \\ 7,190 \end{array}$ | $\begin{array}{r} 19,475 \\ 7,060 \end{array}$ | 19,095 6,945 |
| Adult dependants | 3,700 | 3,500 | 3,270 | 3,005 | 2,770 | 2,560 | 2,345 |
| Other' ${ }^{\text {d }}$ | 600 | 250 | 105 | 40 | 25 | 380 | 535 |
| Nurses and dependants: |  |  |  |  |  |  |  |
| Disabled nurses | 885 | 870 | 865 | 845 | 830 | 810 | 800 |
| Dependants | 20 | 20 | 20 | 20 | 20 | 15 |  |
| Other ranks and dependants: <br> 10465 |  |  |  |  |  |  |  |
| Disabled other ranks | 404,685 | 395,675 | 387, 100 | 378,395 | 370,360 | 361,605 | 352,725 |
| Widows | 116,520 | 114,380 | 112,590 | 110,640 | 108,785 148425 | 106,855 136865 | $\begin{aligned} & 104,895 \\ & \hline \end{aligned}$ |
| Adult dependants Other' | $\begin{aligned} & 196,730 \\ & 125,040 \end{aligned}$ | $\begin{aligned} & 183,000 \\ & 119,725 \end{aligned}$ | $\begin{aligned} & 171,040 \\ & 1 \mid 4,670 \end{aligned}$ | $\begin{aligned} & 159,110 \\ & 110,210 \end{aligned}$ | $\begin{aligned} & 148,425 \\ & 105,715 \end{aligned}$ | 136,865 104,820 | $\begin{aligned} & 125,790 \\ & 101,600 \end{aligned}$ |
| 1939-45 war: 3 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Officers and dependants: |  |  |  |  |  |  |  |
| Disabled officers |  |  | 100 | 755 | 1,455 | 3,030 | 5,630 |
| Widows |  | 100 | 1,225 | 2,810 | 4,625 | 7.515 | 10,950 |
| Adult dependants |  | 10 | 120 | 325 | 580 | 1,045 | 1,630 15765 |
| Other ${ }^{\text {a }}$ |  | 95 | 1,100 | 2,625 | 4,155 | 8,430 | 15,765 |
| Other ranks and dependarts: |  |  |  |  |  |  |  |
| Disabled other ranks |  |  |  | 35,905 | 64,440 | 116,110 | 177,920 |
| Widows |  | 1,285 | 8.050 | 18,670 | 30,030 | 46,210 | 69,260 |
| Adult dependants |  | 190 | 2,195 | 5,610 | 9,490 | 15,710 | 25,390 |
| Other ${ }^{\text {r }}$ |  | 1,770 | 18.465 | 77,025 | 123,915 | 214,730 | 325,860 |
| Mercantile marine |  |  |  |  |  |  |  |
| Officers: |  |  |  |  |  |  |  |
| Disabled offlcers |  |  | 10 | 75 | 245 | 910 | 1,550 |
| Widows |  | 115 | 675 | 1,860 | 2,890 | 3,365 | 3,555 |
| Adult dependants |  | 15 | 125 | 370 | 605 | 835 | 900 |
| Other' ${ }^{\text {l }}$ |  | 135 | 665 | 1,770 | 2,580 | 3,700 | 4,570 |
| Seamen: |  |  |  |  |  |  |  |
| Disabled seamen |  |  | 145 | 485 | 810 | 1,840 | 3,195 |
| Widows |  | 230 | 1,250 | 2,895 | 4,720 | 5,165 | 5,115 |
| Adult dependants |  | 30 | 315 | 900 | 1,545 | 2,045 | 2,190 |
| Other' |  | 385 | 1,775 | 4,580 | 7,170 | 9,155 | 9.725 |
| Civilians |  |  |  |  |  |  |  |
| Disabled civilians |  |  | 185 | 8.675 | 11,200 | 13,695 | 18,465 |
| Widows |  | 20 | 4,610 | 8.485 | 9,015 | 9,285 | 10,845 |
| Dependants |  |  | 330 | 880 | 900 | 960 | 1,105 |
| Other' |  | 20 | 4,920 | 15,485 | 16,715 | 19,890 | 23,020 |
| Source: Ministry of Pensions |  |  |  |  |  |  |  |

2. Offences known to the police and persons proceeded against and found guilty

| England and Woles |  |  |  |  |  |  | Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| All offences' |  |  |  |  |  |  |  |
| Persons proceeded against | 745,148 | 863,749 | 879,692 | 759,763 | 623,972 | 554,035 | 517,543 |
| Persons found guilty | 695,814 | 803,721 | 802,999 | 689,238 | 569,825 | 500,488 | 467,700 |
| Indictable offences |  |  |  |  |  |  |  |
| Offences known to police | 303,771 | 305,114 | 358,655 | 364,889 | 372,760 | 415,010 | 478,394 |
| Persons proceeded against | 86,645 | 99,017 | 118,746 | 118,295 | 115,508 | 118,849 | 128,733 |
| Persons found guilty: |  |  |  |  |  |  |  |
| Total | 78,058 | 89,814 | 107,571 | 107,150 | 104,868 | 106,550 | 115,974 |
| Breaking and entering | 11,714 | 13,353 | 14,762 | 14,625 | 14,548 | 16,554 | 21,260 |
| Frauds and false pretences ${ }^{2}$ | 2,401 | 1.860 | 3,312 | 2,953 | 2,907 | 2,684 | 2,350 |
| Larceny | 55,341 | 65,117 | 77,206 | 75,189 | 72,620 | 72,829 | 75,975 |
| Receiving | 2,591 | 4,060 | 6,238 | 6,597 | 6,051 | 6,331 | 7.014 |
| Sexual offences | 2,214 | 1,987 | 2,510 | 2,971 | 3,392 | 3,078 | 3.228 |
| Violence against the person:Total | 1,708 | 1,445 | 1,589 | 1,622 | 1,846 | 1,898 | 2.459 |
| Murder | 28 | 22 | 24 | 31 | 29 | 20 | 21 |
| Manslaughter | 61 | 63 | 64 | 85 | 62 | 80 | 101 |
| Wounding | 1,413 | 1,177 | 1,259 | 1,250 | 1,370 | 1,404 | 1,869 |
| Other offences against the person | 206 | 183 | 242 | 256 | 385 | 394 | 468 |
| Other offences | 2,089 | 1.992 | 1,954 | 3,193 | 3,504 | 3,176 | 3,688 |
| Non-indictable offences ${ }^{3}$ |  |  |  |  |  |  |  |
| Persons proceeded against | 597,117 | 424,392 | 474,590 | 406,934 | 313,673 | 291,096 | 330,692 |
| Persons found guilty: |  |  |  |  |  |  |  |
| Total | 557,825 | 381,462 | 417,066 | 354,369 | 278,132 | 255,865 | 297,438 |
| Assauts | 9,959 | 9,847 | 10,079 | 9,605 | 10,571 | 10,785 | 11,390 |
| Betting and gamingt | 13,035 | 7,550 | 8,936 | 10,359 | 9,811 | 8,950 | 10,626 |
| Bye laws and Police Regulations | 28,688 | 23,998 | 23,070 | 21,478 | 19,832 | 16,150 | 13,755 |
| Drunkenness and other offences under |  |  |  |  |  |  |  |
| Intoxicating Liquor Laws | 54,812 | 48,863 | 43,778 | 29,778 | 29,314 | 24,910 | 22,188 |
| Education Acts | 3,375 | 5,690 | 13,357 | 17,800 | 18,778 | 16,378 | 10,102 |
| Game Laws | 1,774 | 1,449 | 1,481 | 1,354 | 1,398 | 1,161 | 1,508 |
| Labour Laws | 5,883 | 2,754 | 1,792 | 1,878 | 2,220 | 1,943 | 1,774 |
| Malicious damage | 8,384 | 9,778 | 12,059 | 12,343 | 12,082 | 11,361 | 12,632 |
| Offences by prostitutes | 1,977 | 1,761 | 1,621 | 2,122 | 2,371 | 1,630 | 2,096 |
| Railway offences | 7,373 | 6,145 | 9,192 | 11,001 | 11,929 | 12,275 | 14,382 |
| Revenue Laws | 28,375 | 24,899 | 27,286 | 28,813 | 24,134 | 21,304 | 18,248 |
| Stealing | 1,898 | 2,333 | 4,651 | 4,568 | 5,187 | 3,780 | 3,394 |
| Trafic offences | 359,669 | 208,152 | 232,938 | 170,680 | 101,337 | 91,798 | 148,419 |
| Vagrancy Acts ${ }^{5}$ ) | 4,986 | 3,294 | 2,587 | 2,977 | 3,028 | 3,060 | 3,482 |
| Wireless Telegraphy Acts | 3,683 | 648 | 579 | 1,433 | 815 | 440 | 356 |
| Other offences | 23,954 | 24,301 | 23,660 | 28,180 | 25,325 | 29,940 | 23,086 |
| Offences against Defence Regulations |  |  |  |  |  |  |  |
| Persons proceeded against | 61,386 | 340,340 | 286,356 | 234,534 | 194,791 | 144,090 | 58,118 |
| Persons found guilty: |  |  |  |  |  |  |  |
| Total | 59,931 | 332,445 | 278,362 | 227,719 | 186,825 | 138,073 | 54,288 |
| Lighting offences | 59,758 | 299,260 | 210,934 | 154,080 | 109,757 | 73,831 | 17,594 |
| Looting |  | 426 | 2,508 | 415 | 255 | 561 | 93 |
| Control of industry | 20 | 5,624 | 13,543 | 22,832 | 30,071 | 24,237 | 17.472 |
| Control of employment |  |  | 275 | 4,114 | 12,583 | 10,124 | 7,597 |
| Strikes and lockouts |  |  | 50 | 582 | 1,284 |  | 125 |
| Trafic offences | 34 | 18,498 | 37,716 | 30,371 | 11,297 | 5,978 | 4,495 |
| Other offences | 119 | 8,637 | 13,336 | 15,325 | 21,578 | 23,342 | 6,912 |

. Including offences against Defence Regulations.
Including offences in connection with bankruotco
3. Excluding offences afainet Defence Regulations.
4. Including ganing offences under the Vagrancy Acts.
4. Including gaming offences under the Vagrancy $A$ Acts.
5. Excluding gaming offences under the Vagrancy Acts.

## 2. 2 Crimes and offences made known to the police and persons proceeded 2.12 against, convicted or found guilty



[^2]2. 3 Offences known to the police and persons proceeded against and found guilty

| Northerm Ireland |  |  |  |  |  | Number |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| All offences' |  |  |  |  |  |  |  |
| Persons proceeded against | 44,109 | 49,076 | 55,746 | 52.955 | 54,047 | 54,522 | 44.815 |
| Persons found guily | 40,498 | 46,017 | 52,634 |  |  |  |  |
| Indictable offences |  |  |  |  |  |  |  |
| Offences known to police | 2.579 | 2,990 | 3,586 | 4,307 | 4,566 | 5,123 | 5,709 |
| Persons found guilty: |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Total | 2,009 | 2,469 | 2,546 | 2,933 | 2,980 | 2,752 | 2,697 |
| Breaking and entering | 382 | 449 | 443 | 433 | 499 | 448 | 505 |
| Frauds and false pretences ${ }^{2}$ | 58 | 43 | 73 | 82 | 70 | 65 | 65 |
| Larceny | 1,286 | 1,627 | 1,644 | 1,879 | 1,873 | 1,764 | 1,643 |
| Receiving | 95 | 179 | 202 | 260 | 256 | 244 | 199 |
| Sexual offences | 26 | 20 | 24 | 31 | 28 | 31 | 43 |
| Violence against the person: |  |  |  |  |  |  |  |
| Total | 63 | 34 | 52 | 76 | 81 | 77 | 62 |
| Murder |  |  |  | 7 | । | 4 |  |
| Manslaughter | 4 | 4 | 5 | 4 |  | 4 |  |
| Wounding | 12 | 7 | 7 | 3 | 6 | 15 | 5 |
| Other offences against the |  |  |  |  |  |  |  |
| Other offences | 99 | 117 | 108 | 172 | 173 | 123 | 180 |
| Non-indictable offences ${ }^{3}$ |  |  |  |  |  |  |  |
| Persons proceeded against | 36,593 | 28,892 | 30,476 | 32,059 | 30,365 | 35,383 | 35,244 |
| Persons found guilty: |  |  |  |  |  |  |  |
| Total | 33,398 | 26,525 | 28,172 | 29,676 | 28,248 | 32,790 | 33,020 |
| Assauts | 491 | 469 | 441 | 481 | 661 | 505 | 621 |
| Betting and gaming ${ }^{4}$ | 3,382 | 2,180 | 1,938 | 2,043 | 2,193 | 2,434 | 2,754 |
| Byelaws and Police Regulations 1,755 1,415 1,398 1,64 1,796 2,306 2,522 |  |  |  |  |  |  |  |
| Drunkenness and other offences under Intoxicating Liquor Laws | 4,023 | 3,149 | 2,689 | 1,874 |  |  | 1,456 |
| Education Acts | 1,265 | 1,527 | 1,705 | 1,856 | 2,585 | 2,654 | 2,040 |
| Game Laws | 68 | 66 | 56 | 64 | 24 | 51 | 77 |
| Labour Laws | 496 | 257 | 178 | 121 | 87 | 63 | 77 |
| Malicious damage | 289 | 267 | 333 | 391 | 485 | 476 | 496 |
| Offences by prostitutes | 27 | 2 | 15 | 171 | 185 | 129 | 156 |
| Railway offences | 49 | 55 | 26 | 146 | 208 | 182 | 94 |
| Revenue Laws | 1,287 | 1,084 | 874 | 1,121 | 1,589 | 1,811 | 1,135 |
| Stealing | 60 | 127 | 217 | 1,121 | 241 | 184 | 159 |
| Trafic offences | 17,637 | 13,917 | 15,020 | 15,733 | 13,957 | 16,634 | 18,816 |
| Vagrancy Acts ${ }^{5}$ | 429 | 323 | 235 | 378 | 386 | 467 | 353 |
| Wireless Telegraphy Acts | 6 | 17 | 3 | 2 | 1 | 2 |  |
| Other offences | 2,134 | 1,674 | 3,134 | 3,437 | 2,154 | 3,416 | 2,256 |
| Offences against Defence Regulations |  |  |  |  |  |  |  |
| Offences known to police | 5,267 | 17,374 | 22,411 | 17,485 | 20,164 | 15,873 | 6,414 |
| Persons proceeded against | 5,267 | 17,374 | 22,409 | 17,484 | 20,164 | 15,873 | 6,414 |
| Persons found guity: |  |  |  |  |  |  |  |
| Total | $\begin{aligned} & 5,091 \\ & 50.060 \end{aligned}$ | $\begin{aligned} & 17,023 \\ & 15,589 \end{aligned}$ | $\begin{aligned} & 21,916 \\ & 18,420 \end{aligned}$ | $\begin{aligned} & 16,698 \\ & 12,584 \end{aligned}$ | $\begin{aligned} & 18,950 \\ & 11,254 \end{aligned}$ | $\begin{array}{r} 15,271 \\ 9,405 \end{array}$ | $\begin{aligned} & 6,191 \\ & 3,606 \end{aligned}$ |
| Lighting offences Looting |  |  | 18,420 153 |  |  |  |  |
| Other offences | 31 | 1,434 | 3,343 | 4,114 | 7,696 | 5,866 | 2,585 |

1. Including offences against Defence Regulations.
2. Excuduing offenceses against Deference Regulations.
3. Including gaming offences under the Vagrancy Acts
4. Excluding gaming offences under the Vagrancy Act

### 2.14 Juvenile delinquency

| England and Wales |  |  |  |  |  | Number |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wet elet | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| Juveniles found guilty |  |  |  |  |  |  |  |
| All offences | 53,106 | 66,080 | 72,483 | 66,522 | 68,049 | 68,069 | 73,620 |
| Indittable offences: |  |  |  |  |  |  |  |
| Total | 30,835 | 42,187 | 43,594 | 38,549 | 38,763 | 40,554 | 43,503 |
| Larceny | 21,476 | 29,545 | 29,698 | 25,291 | 25,378 | 25,931 | 26,443 |
| Breaking and entering | 7,715 | 10,275 | 10,982 | 10,512 | 10,281 | 11,544 | 13,664 |
| Receiving | 558 | 971 | 1,202 | 937 | 969 | 939 | 979 |
| Sexual offences | 495 | 465 | 540 | 503 | 621 | 594 | 636 |
| Frauds, etc. | 100 | 138 | 163 | 167 | 135 | 130 | 94 |
| Violence against the person | 136 | 141 | 176 | 124 | 180 | 176 | 244 |
| Other offences | 355 | 652 | 833 | 1.015 | 1,199 | 1,240 | 1,443 |
| Non-inditable offences: |  |  |  |  |  |  |  |
| Total | 21,291 | 20,341 | 24,160 | 24,347 | 24,816 | 23,391 | 27,575 |
| Highway Acts | 8.376 | 5,766 | 5,826 | 5,184 | 4,421 | 4,532 | 8.109 |
| Police Regulations | 2,048 | 1,508 | 1,250 | 1,564 | 1,700 | 1,651 | 1,903 |
| Malicious damage | 5,091 | 6,776 | 8,530 | 9,068 | 8,497 | 8,113 | 8,717 |
| Railway offences | 2,110 | 1,793 | 1,949 | 2,274 | 3,252 | 3,249 | 3,361 |
| Stealing | 1,040 | 1.530 | 3,319 | 3,198 | 3,697 | 2,719 | 2,241 |
| Betting and gaming | 602 | 866 | 1,131 | 878 | 777 | 499 | 439 |
| Other offences | 2,024 | 2,102 | 2,155 | 2,181 | 2,472 | 2,628 | 2,805 |
| Offences against Defence Regulations: |  |  |  |  |  |  |  |
| Total | 980 | 3,552 | 4,729 | 3,626 | 4,470 | 4,124 | 2,542 |
| Lighting offences | 974 | 3,183 | 3,315 | 2,772 | 2,594 | 2,307 | 1,481 |
| Looting | - | 220 | 946 | 137 | 118 | 150 | 25 |
| Control of industry | - | 9 | 36 | 105 | 136 | 148 | 115 |
| Preservation of agricultural land | - | 29 | 163 | 165 | 724 | 530 | 176 |
| Other offences | 6 | 111 | 269 | 447 | 898 | 989 | 745 |

## 2. I5 Juvenile delinquency'

| Scotand |  |  |  |  |  |  | Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1939 | 1940 | 1941. | 1942 | 1943 | 1944 | 1945 |
| Alll crimes and offences ${ }^{2}$ |  | . | .. |  |  |  | 4,292 |
| Charges proved without finding of guilt Juveniles found guilty | 10,957 | 13,885 | 14,290 | 15,138 | 15,170 | 15,264 | 15,952 |
| Crimes <br> Charges proved without finding of guilt Juveniles found guilty | 5,404 | 8,250 | 8,757 | 8,663 | 8,526 | 7,702 | $\begin{array}{r} 3,679 \\ 8,539 \end{array}$ |
| Miscellaneous offences ${ }^{3}$ Charges proved without finding of guilt Juveniles found guilty | 5,553 | 5,238 | 4,967 | 5,921 | 6,647 | 6,977 | 550 7,141 |
| Offences against war legislation Charges proved without finding of guilt Juveniles found guilty | $\because$ | 397 | 566 | 554 | 597 | 585 | $\begin{array}{r} 63 \\ 272 \end{array}$ |
| 1. Young persons under 17 years of age <br> 2. Including offences against war legislation. <br> 3. Excluding offences against war legislation. |  |  |  |  | Source: Scotish Home Department |  |  |

## 2. 16 Juvenile delinquency'

| Northern Ireland |  |  |  |  |  | Number |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| Juveniles found guilty |  |  |  |  |  |  |  |
| All offences | 1,706 | 1,971 | 1,826 | 1,888 | 2,032 | 2,234 | 2,069 |
| Indictable offences |  |  |  |  |  |  |  |
| Total | 717 | 1,126 | 906 | 929 | 898 | 811 | 701 |
| Larceny | 455 | 781 | 598 | 608 | 554 | 516 | 417 |
| Breaking and entering | 206 | 281 | 252 | 243 | 222 | 209 | 186 |
| Receiving | 15 | 35 | 22 | 20 | 35 | 33 | 16 |
| Sexual offences | 6 | 1 | 1 | 4 | 3 | । | 2 |
| Frauds, etc. | - | 7 | 4 | 3 | - | 3 | 2 |
| Violence against the person.. | 5 | - | - | - | - | 3 | 2 |
| Other offences | 30 | 21 | 29 | 51 | 84 | 46 | 76 |
| Non-indictable offences |  |  |  |  |  |  |  |
| Total | 960 | 814 | 817 | 882 | 1,001 | 1,275 | 1,329 |
| Highways Acts | 389 | 292 | 194 | 190 | 240 | 353 | 348 |
| Police Regulations | 351 | 282 | 241 | 230 | 237 | 432 | 497 |
| Malicious damage | 145 | 128 | 213 | 197 | 248 | 227 | 270 |
| Railway offences | 12 | 13 | 8 | 49 | 58 | 76 | 45 |
| Stealing | 20 | 52 | 89 | 144 | 136 | 110 | 86 |
| Betting and gaming |  | 1 | 4 | , | 9 | 11 | 18 |
| Other offences | 43 | 46 | 68 | 69 | 73 | 66 | 65 |
| Offences against Defence Regulations |  |  |  |  |  |  |  |
| Total | 29 | 31 | 103 | 77 | 133 | 148 | 39 |
| Lighting offences | 29 | 26 | 33 | 58 | 53 | 54 | 18 |
| Looting |  |  | 43 | - | - |  | - |
| Other offences | - | 5 | 27 | 19 | 80 | 94 | 21 |

## 2. 17 Prison population: Receptions and daily average population



## 2. $18^{\text {Divorce proceedings' }}$

|  | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| England and Wales ${ }^{2}$ |  |  |  |  |  |  |  |
| Dissolution of marriage: |  |  |  |  |  |  |  |
| Pettions filed | 8,517 | 6,915 | 8.079 | 11,613 | 14,887 | 18,390 | 24,857 |
| On grounds of: Adultery | 4,731 | 3,931 | 4,781 | 7.116 | 9,513 | 12,006 | 17,091 |
| Desertion | 2,813 | 2,326 | 2,667 | 3,630 | 4,342 | 5,100 | 6,227 |
| Cruelty | 705 | +467 | +437 | 605 | 736 | 963 | 1,223 |
| Lunacy | 208 | 159 | 173 | 223 | 265 | 278 | 283 |
| Presumed decease | 60 | 32 | 21 | 39 | 31 | 43 | 33 |
| By husbands | 3,822 | 3,485 | 4,279 | 6,303 | 8,100 | 10,154 | 14,271 |
| By wives | 4,695 | 3,430 | 3,800 | 5,310 | 6,787 | 8,236 | 10,586 |
| Decrees nisi granted | 7,019 | 7,111 | 6,318 | 8,608 | 10,724 | 14,356 | 18,982 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| By husbands | 96 | 100 | 127 | 247 | 288 | 328 | 503 |
| By wives | 90 | 71 | 99 | 143 | 210 | 251 | 351 |
| Decrees nisi granted | 178 | 139 | 143 | 230 | 330 | 406 | 500 |
| Scotland ${ }^{2}$ |  |  |  |  |  |  |  |
| Divorce: |  |  |  |  |  |  |  |
| Actions in which final judgment given | 884 | 805 | 772 | 1,027 | 1,317 | 1,745 | 2,237 |
| On grounds of: Adultery | 439 | 380 | 370 | 490 | 732 | 1,067 | 1,517 |
| Desertion | 392 | 370 | 349 | 467 | 509 | 583 | 619 |
| Cruelty | 32 | 33 | 40 | 53 | 48 | 77 | 73 |
| Insanity | 21 | 22 | 13 | 17 | 28 | 18 | 28 |
| At instance of: Husbands | 426 | 421 | 402 | 552 | 775 | 1,088 | 1,546 |
| Wives | 458 | 384 | 370 | 475 | 542 | 657 | 691 |
| Divorce granted | 869 | 794 | 760 | 1,011 | 1,301 | 1,711 | 2,205 |
| Northern Ireland |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Nullity of marriage: |  |  |  |  |  |  |  |
| Pettions filed | 3 | 3 | 3 | 6 | 3 | 4 | 9 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| to 1945 is to some extent due to the introduction of new |  |  |  |  |  |  |  |

## 2. 19 Number of houses built'

|  | Total | Permanent houses built by loca authorities ${ }^{2}$ |  | Permanent houses built by private builders ${ }^{2}$ |  | War destroyed houses re-built |  | Houses built by Government departments ${ }^{2}$ |  | Temporary houses erected by authorities |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Assisted | $\begin{aligned} & \text { Un- } \\ & \text { assisted } \end{aligned}$ | Assisted | Unassisted | $\begin{array}{r} \text { By } \\ \text { local } \\ \text { authori- } \\ \text { ties } \end{array}$ | By private builders under licence | $\begin{gathered} \text { Per- } \\ \text { manent } \end{gathered}$ | $\begin{aligned} & \text { Tem- } \\ & \text { porary } \end{aligned}$ |  |
| England and Wales ${ }^{5}$ |  |  |  |  |  |  |  |  |  |  |
| 1935-38 (average) | 334,405 | 48,579 | 12,336 | 1,177 | 272,313 |  |  |  |  |  |
| 1938-39 | 332,360 | 88,776 | 12,968 | 4,207 | 226,409 |  |  | - |  |  |
| 1939-40 | 195,962 | 40,231 | 10,221 | 2,849 | 142,661 |  |  |  |  |  |
| 1940-41 | 42,498 | 11,802 | 3,606 | 648 | 26,442 |  |  |  |  |  |
| 1941-42 | 9,841 | 1,676 | 1,237 | 118 | 5,483 |  |  | 1,32 |  |  |
| 1942-43 | 9,577 | 586 | 792 | 40 | 2,454 |  |  | 5,70 |  |  |
| 1943-44 | 5,768 | 1,437 | 1,102 | 12 | 1,067 |  |  | 2,150 |  |  |
| 1944-45 | 5,537 | 1,691 | 741 | 108 | 1,744 |  |  | 1,25 |  |  |
| 1945 (April to | 10,384 | 366 |  |  |  | 142 | 36 | I |  | 8,939 |
| December) |  |  |  |  |  |  |  |  |  |  |
| Scotland |  |  |  |  |  |  |  |  |  |  |
| 1935-38 average | 24,426 | 15,850 | 990 | 5 | 7,581 |  |  |  |  |  |
| 1939 | 25,529 | 18,902 | 216 | 58 | 6,353 |  |  |  |  |  |
| 1940 | 14,206 | 10,357 | 117 | 228 | 3,504 |  |  |  |  |  |
| 1941 | 5,406 | 4,676 | 38 | 68 | 624 |  | - |  |  |  |
| 1942 | 3,296 | 3.034 | 38 | 21 | 203 |  |  |  |  |  |
| 1943 | 2,809 | 2,717 |  | 28 | 64 |  |  |  |  |  |
| 1944 | 2,553 | 2,383 |  | 36 | 134 |  |  |  |  |  |
| 1945 | 2,006 | 1,428 |  | 27 | 111 |  | - 3 |  |  | 437 |
|  |  |  |  |  |  |  |  |  |  |  |
| 1935-38 (average) | 2,951 | 158 |  | 2,395 | 385 |  |  | 13 |  |  |
| 1938-39 | 1,324 | 1,100 | 16 | 6 - | 207 |  |  | । |  |  |
| 1939 (April to December) | 267 | 169 |  |  | 96 |  | - | 2 |  | - - |
| 1940 | 400 | 400 |  |  |  |  |  |  |  |  |
| 1941 | 206 | 206 |  | - - |  |  |  |  |  |  |
| 1942 |  | - |  | - |  |  |  |  |  |  |
| 1943 |  |  |  |  |  |  |  |  |  |  |
| 1944 | 27 |  |  |  | 10 |  |  | 17 |  | - |
| 1945 | 81 | - |  | - - | 2 |  | - | 60 |  | - |
| 1. Including flats, each flat being counted as one unit. Source: Heath Departments |  |  |  |  |  |  |  |  |  |  |
| 2. The Scottish Nationa and the Northem Ire ocal authorities, but for private builders. | sing Compa Housing Tru housing ass | ust are included <br> sociations are | housing ed in the fig included in | association in the figure $\qquad$ |  |  |  |  |  |  |
| 3. Accommodation for and other Governme on behalf of the Irish |  | olice, prison st d, in Norther diers' Land Tru | staffs, defenc m Ireland, h ust. | ce services houses built |  |  |  |  |  |  |
| 4. Excluding houses in E $£ 78$ (or 105 in the M | d and Wales olitan Police | es having a rate <br> e District) | teable value | e exceeding |  |  |  |  |  |  |
| 5. Years ended 31 March and from 1934-35 to years. | $\begin{aligned} & \text { om 1934-35t } \\ & 8-39 \text { for Nor } \end{aligned}$ | to 1944-45 orthern Ireland | for England d. Thereaf | and Wales, ter calendar |  |  |  |  |  |  |


| Great Britain |  |  |  |  |  | £ million |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type of work | Description | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| Total |  | 425 | 470 | 425 | 350 | 290 | 290 |
| Military construction | Airfields, camps and training establishments, defence works, storage depots, etc. | 140 | 120 | 125 | 122 | 49 | 12 |
| Industrial facilities | Factories, warehouses and storage premises | 80 | 76 | 65 | 46 | 29 | 25 |
| Civil defence | Air raid precautions, public shelters, static water supplies etc. |  | 42 | 23 | 2 | 9 |  |
| Residential building | Construction of hostels and houses |  | 22 | 16 | 6 | 13 | 30 |
| Roads and streets | Strengthening, widening and major maintenance |  | 2 | 3 | 3 | 3 | 2 |
| Public and institutional buildings | Hospitals, schools, etc. |  | 6 | 6 | 9 | 6 | 5 |
| Public utilities | Electricity, gas, water, sewerage, railways, ports, canals, tramways, etc. |  | 19 | 16 | 12 | 8 | 12 |
| Mining | Mines and opencast coal production |  | - | 2 | 7 | 13 | 14 |
| Air raid damage | Repairs, demolition and debris clearance | 6 | 63 | 61 | 50 | 58 | 113 |
| All other work | Including conversion, adaptation, maintenance and repair (other than war damage repair) of houses |  | 120 | 108 | 83 | 102 | 77 |
|  |  |  |  |  |  |  |  |

[^3]In September 1939, in marked contrast with the situation in August 1914, the British state began the war with Germany in the belief that the conflict would be a long one and that it could only be won by adopting a policy of 'armament in depth' (Handcock and Gowing 1949:68,71). This meant mobilising the resources available to the economy as fully and effectively as possible in order to supply troops for the Armed Forces and to arm those to supply troops for the Armed Forces and to arm
troop. Furthermore, when Churchill became Prime troop. Furthermore, when Churchill
Minister in May 1940 his government abandoned financial Minister in May 1940 his government abandoned financial
controls and planning and adopted physical planning as its
main means of managing the economy; the former relied on the monetary resources available to the economy and to the state, on determining government programmes on the basis of pounds and pence, whereas the latter relied on the physical resources available to the state, on determining government programmes on the basis of, for example, the amount and type of labour or steel available.

The supply and distribution of labour was one of the chief constraints facing the economy and by late 1942 the Manpower Budget (which allocated the available labour supply to government departments, and particularly to those representing the armed forces and the munitions industries) had emerged as probably the key economic tool used by the War Cabinet to plan the economy (Hancock and Gowing 1949: 438-52). Thus, manpower planning and manpower statistics were at the very heart of the wartime economy. The Manpower Budget was the focal point of many of the disputes between various Ministers as it dictated the manpower balance between the Armed Forces and civil employment and, within civil employment, the balance between the munitions industries and the nonmunitions industries, and so reflected the strategic and economic priorities of the state

The control and allocation of manpower by the state could not be achieved without a range of compulsory powers to

## 3. Expansion of the Armed Forces in the United Kingdom



### 3.2 The relative importance of industries in the United Kingdom



Engineering and metals, explosives and chemicals and shipbui iding industries.
Texties, woodworking, paper and printing, leather glass and pottery industries.
allow it to intervene directly in the labour market. These powers were mainly exercised by the Ministry of Labour and National Service. They included: the wartime National Service Acts of 1939-42 which made males aged 18-50 liable for military service and made women liable to be called up for service in the Women's Auxiliary Services (the female branches of the army, navy and air force and the nursing services) or the Civil Defence services; the Schedule of Reserved Occupations, which ensured that industries vital to the war effort did not lose workers unnecessarily to the Armed Forces; and the Essential Works Orders, which were used to control the supply and movement of labour (Ince 1946: 18-27). Compulsion on its own might have alienated the labour movement and hus to balance this the state also used wage incentives and supported improvements in working conditions and welfare; furthermore, the responsibility of wielding the tools of compulsion were placed in the hands of one of the leading trade unionists of the interwar period, Ernest Bevin, who was appointed by Churchill as the Minister of Labour in 1940. Although these measures did not prevent worker discontent, the labour movement was more co-operative with the state than it had been in the First World War: for example, the average numbers of days lost per year due to strike action between 1939 and 1945 was roughly a third of the average for 1914-1918 (table 3.30; Department of Employment and Productivity 1971: 396)

The main strategic priority was to raise a large military force to combat the menace from the Axis powers (Germany, Italy and Japan). The expansion of the military services was rapid: they increased by almost three million
between 1939 and 1941 and had reached five million by 1945, accounting for almost a quarter of the working population (table 3.3). Of these, more than 90 per cent were men serving in the Armed Forces; and of the Armed Forces the Army was the largest, followed by the Royal Air Force and then the Royal Navy (in June 1945 they accounted for, respectively, 63 per cent, 20 per cent and I7 per cent of the total Armed Forces) (table 3.4). The remainder were women serving in the Women's Auxiliary Services (which was created in 1940) who provided many essential support services during the war. As with most wars the fighting was done primarily by young men: in June 1943, for example, a quarter of the Armed Forces were aged 22 or younger and another quarter were aged between 23 and 27 ; by the end of the war 63 per cent of all UK men aged between 20 and 29 were serving in the Armed Forces (tables 3.5 and I.5).

The expansion of the Armed Forces was fed by two main sources: reduced unemployment (in the 1930s Britain had experienced very high levels of unemployment and at the beginning of 1940 there were still more than one million people unemployed) and the recruitment of workers from civil employment. This recruitment was fuelled mainly by conscription - less than a third of the wartime intake of the Armed Forces were volunteers (table 3.6). Despite the large outflow of labour from industry civil employment remained fairly stable during the war because the overall size of the working population actually increased (from 19.5 million in 1938 to a wartime peak of 22.3 million in 1943). This mainly reflected an increase in the female participation rate (new female workers accounted for four
out of every five of the new labour market entrants) which meant that the sharp fall in male civil employment was countered by a sharp rise in female civil employment (table 3.3).

Within civil employment there was also a marked transformation in the importance of different industries: the strategic priorities of the war called for the expansion of the munitions and related industries (metals, engineering, vehicles, shipbuilding, chemicals, explosives, paints, oils, etc.) at the expense of the non-munitions industries. Thus, the munitions and related industries saw their share of civil employment increase from 16 per cent in 1939 to a wartime peak of 23 per cent in 1943 whilst those industries considered 'less essential' to the war effort (such as textiles, commercial services, leather, wood and paper) saw their share decline from 49 per cent in 1939 to 28 per
cent in 1944 (Howlett, 1944: 22-24; tables 3.12-3.25 Furthermore, many workers in these 'less essential' industries were engaged in the manufacture of supplies for the Armed Forces: in December 1943, for example, such work occupied 43 per cent of workers in the textile
 industries, 41 per cent per cent in the furniture and upholstery industry and 42 per cent in the paper industry (tables 3.19-3.22). Finally, the establishment of the war economy also went hand-inhand with an expansion in the size of the state. New Ministries were established (such as the Ministries of Aircraft Production, Economic Warfare, Food, Shipping Aupply Works and Buidings) and the number of civi upply and Works and Building) and the number of civil servants more than doubled from 0.6 million in April 193 oo the wartime peak of 1.4 million four years later (tables 3.26 and 3.27 ).

mans

### 3.3 Distribution of fotal manpower

| Great Britain | At June in each year |  |  |  |  |  | Thousands |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| Total working population | 19,473 | 19,750 | 20,676 | 21,332 | 22,056 | 22,285 | 22,008 | 21,649 |
| Males | 14.476 | 14,656 | 15,104 | 15,222 | 15,141 | 15,032 | 14,901 | 14,881 |
| Females | 4,997 | 5,094 | 5,572 | 6,110 | 6.915 | 7,253 | 7,107 | 6,768 |
| Total in Armed Forces and Auxiliary Services | 385 | 480 | 2,273 | 3,383 | 4,091 | 4,761 | 4,967 | 5,090 |
| Males | 385 | 480 | 2,218 | 3,278 | 3,784 | 4,300 | 4,500 | 4,653 |
| Females |  |  | 55 | 105 | 307 | 461 | 467 | 437 |
| Registered insured unemployed | 1,710 | 1,270 | 645 | 198 | 87 | 60 | 54 | 103 |
| Males | 1,325 | 1,013 | 434 | 100 | 61 | 44 | 40 | 68 |
| Females | 385 | 257 | 211 | 98 | 26 | 16 | 14 | 35 |
| Ex.members of H.M. Forces not yet in employment | - | - | - | - | - | 20 | 20 | 40 |
| Males | - | - | - | - | - | 13 | 14 | 27 |
| Females | - | - | - | - | - | 7 | 6 | 13 |
| Total in civil employment | 17,378 | 18,000 | 17,758 | 17,751 | 17,878 | 17,444 | 16.967 | 16,416 |
| Males | 12,766 | 13,163 | 12,452 | 11.844 | 11,296 | 10,675 | 10,347 | 10,133 |
| Females | 4,612 | 4,837 | 5,306 | 5,907 | 6,582 | 6,769 | 6,620 | 6,283 |
| Agriculture and fishing | 949 | 950 | 925 | 981 | 1,002 | 1,047 | 1,048 | 1,041 |
| Mining and quarrying | 849 | 873 | 886 | 820 | 823 | 818 | 813 | 799 |
| Metals, engineering, vehicles and shipbuilding | 2,590 | 2,812 | 3,198 | 3,753 | 4,372 | 4,659 | 4,496 | 3,899 |
| Chemicals, explosives, paints, oils, etc. | 276 | 294 | 361 | 487 | 618 | 574 | 515 | 447 |
| Textiles | 861 | 1,002 | 1,074 | 871 | 723 | 669 | 635 | 634 |
| Clothing, boots and shoes | 717 | 752 | 748 | 674 | 550 | 493 | 455 | 481 |
| Food, drink and tobacco | 640 | 654 | 621 | 597 | 567 | 519 | 508 | 518 |
| Cement, bricks, pottery, glass, etc. | 271 | 265 | 220 | 211 | 188 | 170 | 159 | 159 |
| Leather, wood, paper, etc. | 844 | 859 | 725 | 614 | 573 | 539 | 536 | 555 |
| Other manufactures | 164 | 177 | 181 | 190 | 163 | 123 | 129 | 127 |
| Building and civil engineering | 1,264 | 1,310 | 1,064 | 1,043 | 893 | 726 | 623 | 722 |
| Gas, water and electricity supply | 240 | 242 | 213 | 214 | 214 | 200 | 193 | 196 |
| Transport and shipping | 1,225 | 1,233 | 1,146 | i, 194 | 1,217 | 1,176 | 1,237 | 1,252 |
| Distributive trades | 2,882 | 2,887 | 2,639 | 2,332 | 2,173 | 2,009 | 1,927 | 1,958 |
| Commerce, banking, insurance and finance | 414 | 413 | 370 | 358 | 317 | 282 | 268 | 264 |
| National and Local Government | 1,386 | 1,385 | 1,448 | 1,636 | 1,728 | 1,786 | 1,809 | 1,903 |
| Civil Defence, Fire Service and Police | 1,386 | 80 | 345 | 383 | 384 | 323 | 282 | 127 |
| Miscellaneous services | 1,806 | 1,812 | 1.594 | 1,393 | 1,373 | 1,331 | 1,334 | 1,334 |
| Men aged 14-64, women aged 14-59. Including employers and self-employed as well as employees, but excluding indoor private domestic service. Women in part-time paid employment are included, two being counted as one unit. Figures exclude prisoners-of-war, but include such other foreign workers as entered civilian employment. |  |  |  |  |  |  | e: Ministr and Natio | $\begin{aligned} & \text { of Labour } \\ & \text { al Service } \end{aligned}$ |

### 3.4 Strength of the Armed Forces and Women's Auxiliary Services

| United Kingdom |  |  | End of month |  |  |  | Thousands |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Armed Forces' |  |  |  | Women's Auxiliary Services ${ }^{2}$ |  |  |  |  |
|  |  | Total | Royal $\mathrm{Nav}^{3}$ | Army ${ }^{+}$ | Royal Air Force | Total | Women's Royal Naval Service | Auxiliary Territorial Service ${ }^{5}$ | Women's Auxiliary Air Force | Nursing Services ${ }^{6}$ |
| 1939 | September | 1,270 | 180 | 897 | 193 |  | 1.6 |  |  | 2.4 |
|  | December | 1,557 | 214 | 1,128 | 215 | 43.1 | 3.4 | 23.9 | 8.8 | 7.0 |
| 1940 | March | 1,842 | 241 | 1,361 | 240 |  | 4.4 |  | 8.9 | 8.2 |
|  | June | 2,212 | 271 | 1,650 | 291 | 56.6 | 5.6 | 31.5 | 11.9 | 7.6 |
|  | September | 2,615 | 307 | 1,888 | 420 | 69.3 | 7.9 | 36.1 | 17.4 | 7.9 |
|  | December | 2,899 | 333 | 2,075 | 491 | 75.1 | 10.0 | 36.4 | 20.5 | 8.2 |
| 1941 | March | 3,090 | 365 | 2,166 | 559 | 85.8 | 12.3 | 37.5 | 27.0 | 9.0 |
|  | June | 3,278 | 395 | 2,221 | 662 | 105.3 | 15.1 | 42.8 | 37.4 | 10.0 |
|  | September | 3,483 | 424 | 2,292 | 767 | 157.5 | 18.0 | 65.0 | 64.1 | 10.4 |
|  | December | 3,602 | 449 | 2,340 | 813 | 216.0 | 21.6 | 85.1 | 98.4 | 10.9 |
| 1942 | March | 3,690 | 477 | 2,397 | 816 | 258.6 | 24.8 | 111.1 | 110.8 | 11.9 |
|  | June | 3,784 | 496 | 2,453 | 835 | 307.5 | 28.6 | 140.2 | 125.7 | 13.0 |
|  | September | 3,918 | 529 | 2.494 | 895 | 351.1 | 33.5 | 162.2 | 141.5 | 13.9 |
|  | December | 4,068 | 566 | 2,566 | 936 | 400.6 | 39.3 | 180.7 | 166.0 | 14.6 |
| 1943 | March | 4,186 | 610 | 2,628 | 948 | 435.9 | 45.0 | 195.3 | 180.1 | 15.5 |
|  | June | 4,300 | 660 | 2,673 | 967 | 461.6 | 53.3 | 210.3 | 181.6 | 16.4 |
|  | September | 4,371 | 710 | 2,679 | 982 | 470.7 | 60.4 | 212.5 | 180.3 | 17.5 |
|  | December | 4,435 | 756 | 2,680 | 999 | 467.5 | 64.8 | 207.5 | 176.8 | 18.4 |
| 1944 | March | 4,448 | 768 | 2,680 | 1,000 | 468.8 | 68.6 | 206.2 | 175.7 | 18.3 |
|  | June | 4,500 | 778 | 2,720 | 1,002 | 466.4 | 73.5 | 199.0 | 174.4 | 19.5 |
|  | September | 4,509 | 776 | 2.741 | 992 | 463.7 | 74.0 | 198.2 | 171.2 | 20.3 |
|  | December | 4,525 | 780 | 2,760 | 985 | 457.1 | 73.4 | 196.4 | 166.2 | 21.1 |
| 1945 | March | 4,553 | 781 | 2,802 | 970 | 449.7 | 73.2 | 195.3 | 159.7 | 21.5 |
|  | June | 4,653 | 783 | 2,920 | 950 | 437.2 | 72.0 | 190.8 | 153.0 | 21.4 |

1. Excluding men locally enlisted abroad.
2. Including women Iocaly enisted abroad.
3. Including men serving wite
4. Including women locally enlisted abroad. 3. Including men serving with the Roval Navy on T.124 agreements, Royal Marine Police and
5. Ip to June 1941, prisoners-of-war and missing.

Including men serving with the India Unattached List, but excluding the British Indian Service.
Men localy enlisted abroad are included up to September 1941. Excluding those locally enlisted abroad on modififed forms of Auxiliary Territorial Service
engagements whose documents were maintained outside the United Kingdom. From June 1944
all women locally enlisted abroad whose documents were maintained outside the United Kingdom
are excluded

### 3.5 Age distribution of the Armed Forces and Women's Auxiliary Services

| Thousands |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Armed Forces ${ }^{\text {' }}$ |  |  |  |  | Women's Auxiliary Services' |  |  |  |  |
|  | 1941 | 1942 | 1943 | 1944 | 1945 | 1941 | 1942 | 1943 | 1944 | 1945 |
|  | December | June | June | June | June | December | June | June | June | June |
| Age: |  |  |  |  |  |  |  |  |  |  |
| 18 and under | 63.3 | 66.0 | 149.1 | 78.5 | 76.2 | 29.4 | 18.1 | 17.3 | 9.5 | 7.4 |
| 19 | 155.0 | 143.5 | 184.7 | 195.3 | 186.3 | 23.4 | 34.4 | 40.2 | 25.6 | 22.7 |
| 20 | 253.5 | 213.2 | 222.1 | 226.3 | 215.4 | 25.7 | 36.4 | 60.3 | 39.6 | 30.3 |
| 21 | 311.1 | 272.6 | 241.0 | 239.5 | 228.5 | 31.6 | 46.4 | 62.5 | 64.2 | 36.8 |
| 22 | 252.8 | 300.8 | 281.1 | 254.6 | 236.6 | 18.2 | 41.2 | 66.5 | 61.8 | 57.5 |
| 23 | 210.9 | 236.3 | 297.9 | 277.9 | 248.2 | 11.5 | 21.8 | 56.3 | 61.0 | 54.1 |
| 24 | 190.7 | 208.0 | 231.3 | 306.3 | 272.8 | 8.7 | 14.5 | 29.3 | 51.6 | 52.4 |
| 25 | 211.9 | 183.9 | 203.2 | 235.2 | 304.5 | 8.5 | 11.6 | 20.6 | 27.9 | 43.7 |
| 26 | 201.3 | 203.9 | 183.1 | 197.6 | 2375 | 6.8 | 10.9 | 13.8 | 19.7 | 23.6 |
| 27 | 191.3 | 196.1 | 212.9 | 184.2 | 201.3 | 6.1 | 8.6 | 12.6 | 12.7 | 15.9 |
| 28 | 179.5 | 189.4 | 205.2 | 212.4 | 180.3 | 4.6 | 7.7 | 10.4 | 11.9 | 10.3 |
| 29 | 176.0 | 177.8 | 196.6 | 205.5 | 209.7 | 3.9 | 6.2 | 8.8 | 9.3 | 10.0 |
| 30 | 161.7 | 176.6 | 185.5 | 197.7 | 202.5 | 3.3 | 5.6 | 7.0 | 8.2 | 7.9 |
| 31 | 145.8 | 158.8 | 184.5 | 187.5 | 194.5 | 2.9 | 4.4 | 6.0 | 6.9 | 7.0 |
| 32 | 119.8 | 146.6 | 168.3 | 184.1 | 184.5 | 2.5 | 3.9 | 4.9 | 5.9 | 5.8 |
| 33 | 113.9 | 121.6 | 159.9 | 171.4 | 182.1 | 2.2 | 3.2 | 4.2 | 4.7 | 5.3 |
| 34 | 104.6 | 114.9 | 136.9 | 161.6 | 170.1 | 1.9 | 2.6 | 3.5 | 3.9 | 4.0 |
| 35 | 99.3 | 108.9 | 1278 | 138.6 | 160.8 | 1.9 | 2.4 | 3.1 | 3.1 | 3.2 |
| 36 | 74.7 | 102.7 | 120.0 | 130.0 | 136.4 | 1.6 | 2.2 | 2.6 | 2.8 | 2.6 |
| 37 | 62.1 | 78.7 | 112.2 | 122.7 | 127.1 | 1.5 | 1.9 | 2.3 | 2.4 | 2.3 |
| 38 | 49.4 | 65.3 | 88.7 | 114.5 | 119.4 | 1.3 | 1.8 | 2.1 | 2.1 | 2.0 |
| 39 | 44.0 | 54.3 | 74.4 | 90.6 | 112.5 | 1.1 | 1.5 | 1.9 | 1.7 | 1.7 |
| 40 | 40.6 | 50.2 | 62.2 | 76.1 | 87.9 | 1.0 | 1.3 | 1.6 | 1.6 | 1.4 |
| 41 | 29.5 | 44.2 | 57.5 | 61.6 | 72.8 | 1.1 | 1.2 | 1.3 | 1.4 | 1.3 |
| 42 | 20.17 |  | 50.2 | 57.8 | 58.5 | 1.1 |  | 1.1 | 1.2 | 1.1 |
| 43 | 16.4 |  |  | 50.3 | 74.8 | 0.8 |  |  | 1.0 | 1.0 |
| 44 | 14.1 | 159.2 |  | 33.5 | 48.0 | 0.6 | 4.7 |  | 1.1 | 0.8 |
|  |  |  | 157.0 |  |  |  |  | 5.0 |  |  |
| 45 <br> 46 and over | $\begin{aligned} & 13.6 \\ & 82.0 \end{aligned}$ |  |  | 123.7 | $\begin{aligned} & 33.5 \\ & 91.6 \end{aligned}$ | $\begin{aligned} & 0.4 \\ & 1.0 \end{aligned}$ |  |  | 3.4 | 0.8 2.3 |
| All ages | 3,589.0 | 3.773 .7 | 4,293.3 | 4.515.1 | 4,654.4 | 204.7 | 294.4 | 445.2 | 446.2 | 415.2 |

[^4]
### 3.6 Intake and outflow of the Armed Forces and Women's Auxiliary Services



### 3.7 Releases from the Armed Forces, Women's Auxiliary Services and Nursing Services'



Excluding releases for a temporary period, but including those released locally abroad or

repatriated from the United Kingdom.

### 3.8 Casualties suffered during the war by the Armed Forces, Auxiliary Services and Merchant Navy'

| Total |  |  |  |  | War against Germany |  |  |  | War against Japan |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | Killed | $\begin{gathered} \text { Miss- } \\ i n g^{2} \end{gathered}$ | Wound- <br> ed | Prison-ers-ofwar | Killed | $\begin{gathered} \text { Miss- } \\ \text { ing } \end{gathered}$ | Wounded | Prison-ers-ofwar | Killed | $\begin{gathered} \text { Miss- Y } \\ \text { ing } \end{gathered}$ | Wound- | Prison-ers-ofwar |

## Armed Forces ${ }^{3}$

755,439 264,443 41,327 $277,077172,592$
$\begin{array}{lllllllll}234,475 & 35,075 & 260,548 & 135,009 & 2,96\end{array}$
$\qquad$ ed
 $\begin{array}{lllllllllllll}\text { Royal Air Force } & \| 12,296 & 69,606 & 6,736 & 22,839 & 13,115 & 66,080 & 5,404 & 21,761 & 9,727 & 3,526 & 1,332 & 1,078 \\ 3,388\end{array}$

Women's Auxiliary
Services
Total
Total
Women's Royal
Women's Royal
Naval Service
Naval Servici
Auxiliary Terri-
Auxiliary Yerri-
torial Service
Women's Auxiliary
$\begin{array}{llllll}\text { Air Force } & 611 & 187 & 4 & 420\end{array}$

1. From 3 September 1939 to 14 August 1945 as reported to 28 February 1946
2. From 3 September 1939 to 14 Ausust 1944 as reported to 28 February 1946 .
3. Including 6,244 still missing at 28 february 1946 and 39,835 who rejoined their units.
4. Incuding 6,244 still missing at 28 February 1946 and 39,835 who reioined their units.

Newfoundland and Sourthern Rhodes

### 3.9 Strength of the Home Guard and Royal Observer Corps

|  |  | Home Guard |  | Royal Observer Corps |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Men | Women | Total | Full-time' |  | Part-time ${ }^{\prime}$ |  |
|  |  | Men |  |  | Women | Men | Women |
| 1940 | June |  | 1,456 |  | 27.9 | 2.3 | - | 25.6 |  |
| 1941 | June | 1,603 |  | 33.2 | 4.0 | - | 29.3 |  |
|  | December | 1,530 |  | 34.8 | 4.4 | - | 30.0 | 0.4 |
| 1942 | June | 1,565 |  | 34.0 | 5.1 | 0.2 | 28.0 | 0.8 |
|  | December | 1,741 |  | 32.4 | 5.5 | 0.4 | 25.6 |  |
| 1943 | March | 1,793 |  | 32.8 | 5.7 | 0.7 | 25.2 | 1.1 |
|  | June | 1,784 | 4 | 32.9 | 5.9 | 1.0 | 24.8 | 1.2 |
|  | September | 1,769 | 16 | 32.9 | 6.2 | 1.4 | 24.1 | 1.3 |
|  | December | 1,754 | 22 | 33.0 | 6.4 | 2.1 | 23.2 | 1.3 |
| 1944 | March | 1,739 | 28 | 32.8 | 6.5 | 2.5 | 22.4 | 1.4 |
|  | June | 1,727 | 31 | 32.7 | 6.4 | 2.6 | 22.1 | 1.5 |
|  | September | 1,698 | 32 | 32.5 | 6.4 | 2.8 | 21.9 21.4 | 1.5 1.4 |
|  | December | 1,685 |  | 32.2 | 6.4 | 2.9 | 21.4 | 1.4 |
| 1945 | March | - |  | 32.1 | 6.5 | 3.0 | 21.2 | 1.4 |
|  | June |  |  | 8.7 | 5.7 | 2.1 | 0.9 |  |
| I. Figures before 1942 are estimated. |  |  |  |  |  | Source: War Office and Air Ministy |  |  |
| 43 |  |  |  |  |  |  |  |  |

### 3.10 Numbers employed in the Civil Defence services

|  |  | Whole-time |  |  |  |  |  | Part-time |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  National <br> A.R.P. Fire <br> Services $^{2}$  |  |  |  | Casualty Services ${ }^{3}$ |  | A.R.P. <br> Services |  | National Fire Service ${ }^{2}$ |  | Casualty Services ${ }^{3}$ |  |
|  |  | Males | Females | Males | Females | Males | Females | Males | Females | Male | Females | Males | Females |
| 1940 | March | 117.5 | 15.9 | 72.9 | 5.4 | 17.0 | 31.6 |  |  | 153.9 | 7.6 | 41.9 | 125.0 |
|  | June | 108.7 | 14.9 | 72.2 | 4.7 | 14.9 | 33.0 | 719.4 | 136.9 | 161.6 | 8.9 | 46.7 | 134.2 |
|  | September | 112.0 | 14.9 | 82.1 | 4.2 | 15.2 | 35.0 | 774.0 | 153.0 | 168.0 | 9.0 | 51.2 | 137.0 |
|  | December | 112.3 | 15.2 | 88.0 | 5.4 | 15.1 | 35.4 | 774.7 | 149.9 | 163.4 | 8.9 | 49.8 | 129.1 |
| 1941 | March | 112.0 | 15.8 | 92.5 | 4.5 | 14.9 | 35.3 | 778.4 | 152.2 | 168.1 | 9.8 | 48.0 | 122.8 |
|  | June | $110.1$ | $16.8$ | 96.8 | $5.4$ | $14.5$ | 36.0 | 759.2 | 148.3 | 159.4 | 10.0 | 47.2 | 122.2 |
|  | September | 109.0 | $17.5$ |  |  | $13.6$ | 37.2 | 734.7 | 140.6 |  |  | 45.6 | 117.7 |
|  | December |  | $19.1$ | 106.8 | 19.7 | 13.4 | 37.9 | $668.0^{4}$ | $127.2^{4}$ | 136.5 | 8.2 | 42.9 | 107.6 |
| 1942 | March | 99.7 | 19.4 | 108.6 | 26.0 | 11.8 | 36.1 | 710.8 | 127.2 | 122.1 | 9.6 | 39.8 | 97.1 |
|  | June | 88.7 | 17.6 | 107.7 | 28.5 | 9.3 | 30.7 | 739.6 | 137.3 | 129.9 | 11.1 | 39.7 | 95.2 |
|  | September | 78.9 | 14.9 | 101.8 | 30.4 | 8.2 | 26.2 | 746.2 | 148.1 | 141.1 | 18.6 | 41.2 | 101.9 |
|  | December | 74.4 | 13.5 | 98.0 | 31.9 | 7.5 | 24.8 | 777.4 | 165.5 | 176.6 | 33.1 | 44.5 | 114.2 |
| 1943 | March | 69.6 | 12.4 | 95.5 | 32.2 | 7.2 | 23.2 | 782.5 | 165.3 | 200.3 | 42.6 | 48.2 | 120.3 |
|  | June | 66.5 | 11.7 | 93.8 | 30.7 | 7.1 | 21.8 | 773.4 | 167.1 | 214.8 | 47.0 | 47.5 | 116.6 |
|  | September | 62.2 | 11.0 | 92.6 | 29.4 | 6.9 | 20.3 | 797.9 | 175.7 | 224.5 | 51.1 | 49.0 | 117.7 |
|  | December | 59.6 | 10.4 | 90.6 | 27.3 | 6.7 | 19.3 | 799.3 | 177.4 | 233.2 | 53.8 | 49.0 | 116.2 |
| 1944 | March | 57.7 | 10.2 | 88.6 | 25.7 | 6.6 | 18.7 | 802.5 | 178.4 | 234.9 | 53.6 | 49.4 | 115.0 |
|  | June | 56.9 | 10.0 | 86.6 | 24.1 | 7.1 | 17.8 | 799.4 | 179.8 | 231.9 | 54.6 | 49.8 | 114.2 |
|  | September | 54.3 | 9.5 | 84.4 | 22.2 | 6.5 | 17.8 | 791.7 | 177.4 | 228.5 | 53.0 | 48.9 | 112.6 |
|  | December | 28.5 | 5.0 | 71.7 | 20.0 | 4.1 | 9.6 | 651.8 | 1508 | 160.4 | 46.3 | 37.8 | 81.9 |
| 1945 |  | 24.8 |  |  |  |  |  | 622.7 |  |  |  | 29.3 | 63.0 |
|  | June |  |  | $46.2$ | $10.6$ | .. |  |  |  | $102.9$ | $5.2$ |  | . |
|  | September | . |  | 36.5 | 5.5 | . | . | . . |  | 47.6 | 9.8 | . |  |
| $\begin{aligned} & \text { 1. Civil } \\ & \text { mes } \end{aligned}$ | vil Defence (Ge essengers | Services | s: wardens, | s, rescue | and first-aid | parties, | port and | ontrol cen |  |  |  | Source: Ho | ome Office |
|  | 2. Until September 1941 regular Fire Brigades and Auxiliary Fire Service. Including Works Brigades. |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & \text { 3. Eme } \\ & \text { 4. ExCl } \\ & \text { thou } \end{aligned}$ | nergency ambula <br> cluding non-effe <br> ousand females in |  | and first-aid sly included 1941. | $\begin{aligned} & \text { post ser } \\ & \text { d. They reme } \end{aligned}$ | numbered 3 | 3.3 thous | and males and | $\text { nd } 11.9$ |  |  |  |  |  |

## 3. Numbers employed in the Police services

## Great Britain

## 3. I 2 Numbers employed in agriculture

| Great Britin |  |  |  |  |  |  |  | Thousands |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All workers' |  |  | Regular workers ${ }^{2}$ |  | Casual workers |  |  |
|  | Total | Males | Females | Males | Females | Males | Females | $\text { Land Army }{ }^{3}$ |
| 1939 June | 711 | 618 | 93 | 546 | 55 | 72 | 39 |  |
| 1940 June | 712 | 602 | 110 | 530 | 58 | 72 | 52 | 8.8 |
| December | 669 | 591 | 79 | 514 | 46 | 76 | 32 | 8.8 |
| 1941 June | 759 | 619 | 141 | 531 | 71 | 88 | 69 | 15.9 |
| December | 729 | 598 | 131 | 504 | 72 | 94 | 59 | 23.5 |
| 1942 June | 824 | 627 | 197 | 530 | 110 | 97 | 87 | 44.4 |
| December | 789 | 614 | 175 | 516 | 104 | 98 | 71 | 59.0 |
| 1943 June | 843 | 621 | 223 | 517 | 128 | 104 | 95 | 77.7 |
| December | 805 | 619 | 186 | 514 | 121 | 105 | 66 | 80.3 |
| 1944 June | 863 | 647 | 216 | 522 | 95 | 100 | 73 | 78.0 |
| December | 835 | 652 | 182 | 514 | 83 | 91 | 54 | 71.6 |
| 1945 June | 887 | 683 | 204 | 521 | 90 | 104 | 71 | 65.3 |

Workers on holdings of more than one acre. Excluding the occupier his wife and domestic
Source: Agricultural Departments of the Women's Land Army, members of H.M. Forces, prisoners of war, etc., but not school child
2. Including before /une 1944 , in the case of England and Wales, and December 1945 in the case of
Scotland, prisoners of war and members of the WWonen's land Almy

Scotland, prisoners of war and members of the Women's Land Army employed as regular
figures for all workers
. fgures include all those in full-time employment in agricultural, horticultural and timber work.

## 3. 3 Numbers employed in engineering and metals', explosives and chemicals and shipbuilding industries ${ }^{2}$



## 3. 4 Numbers employed in the explosives, chemicals, paints, oils, etc., industries



## 3. I5 Numbers employed in shipbuilding and ship repairing'

| Great Britain |  |  |  |  |  |  |  |  | Thousands |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Naval vessels |  |  |  | Merchant vessels |  |  |
|  |  |  | Private yards |  |  |  | Total | New work | Repairs and conversions |
|  |  | Total | Total | $\begin{aligned} & \text { H.M. } \\ & \text { dockyards } \end{aligned}$ | New work | Repairs and conversions |  |  |  |
| 1939 J | June | 144.7 |  | . | . |  |  | . |  |
| 1940 | June | 203.1 | 130.3 | 26.4 | 62.4 | 41.5 | 72.8 | 28.8 | 44.0 |
|  | September | 208.6 | 131.3 | 28.6 | 65.8 | 36.9 | 77.3 | 28.1 | 49.2 |
|  | December | 215.5 | 135.2 | 29.5 | 68.5 | 37.2 | 80.3 | 30.6 | 49.7 |
| 1941 | March | 221.7 | 139.8 | 30.0 | 67.1 | 42.7 | 81.9 | 31.6 | 50.3 |
|  | June | 232.4 | 141.9 | 30.1 | 73.0 | 38.8 | 90.5 | 36.0 | 54.5 |
|  | September | 234.9 | 141.9 | 30.1 | 74.3 | 37.5 | 93.0 | 36.6 | 56.4 |
|  | December | 239.5 | 146.3 | 33.5 | 75.1 | 37.7 | 93.2 | 35.9 | 57.3 |
| 1942 | March | 244.3 | 148.6 | 34.9 | 75.3 | 38.4 | 95.7 | 37.2 | 58.5 |
|  | June | 249.3 | 153.6 | 35.4 | 78.2 | 40.0 | 95.7 | 38.2 | 57.5 |
|  | September | 257.7 | 158.7 | 36.2 | 89.3 | 41.1 | 99.0 | 42.9 | 58.5 |
|  | December | 272.3 | 168.5 | 36.1 | 88.0 | 40.6 | 102.2 | 42.2 | 59.1 |
| 1943 | March | 244.3 | 148.6 | 36.3 | 83.0 | 44.0 | 101.8 | 37.2 | 59.0 |
|  | June | 249.3 | 153.6 | 36.7 | 87.5 | 43.3 | 104.8 | 38.2 | 62.8 |
|  | September | 272.5 | 170.1 | 36.7 | 89.3 | 44.1 | 102.4 | 42.9 | 59.5 |
|  | December | 272.3 | 168.5 | 37.8 | 88.0 | 42.7 | 103.8 | 42.2 | 61.6 |
| 1944 | March | 244.3 | 148.6 | 37.5 | 87.7 | 44.5 | 102.0 | 40.7 | 61.3 |
|  | June | 249.3 | 153.6 | 37.4 | 88.3 | 38.9 | 106.5 | 41.3 | 65.2 |
|  | September | 272.5 | 170.1 | 37.4 | 86.2 | 45.2 | 96.7 | 41.0 | 55.7 |
|  | December | 272.3 | 168.5 | 37.1 | 82.7 | 47.7 | 93.1 | 40.0 | 53.1 |
| 1945 | March | 258.7 | 161.4 | 36.7 | 77.0 | 47.7 | 97.3 | 41.6 | 55.7 |
|  | June | 252.3 | 148.4 | 35.7 | 73.9 | 38.8 | 103.9 | 42.5 | 61.4 |

## 3. 16 Numbers employed in engineering and allied industries'

|  |  | Total numbers employed |  |  | Numbers employed on |  |  |  |  | Thousands |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Manufacture of equipment and supplies for the Forces |  |  |  | Orders for export | Orders for home market |
|  |  | Total | Males | Females | Total | Orders for Admiralty | Orders for Ministry of Supply | Orders for Ministry of Aircraft Production |  |  |
| 1939 | June | 2,312.9 | 1,901.7 | 411.2 | . |  |  |  |  |  |
| 1940 | June | 2,627.1 | 2,087.4 | 539.7 | 1,812.9 |  |  |  | 215.7 | 598.5 |
|  | September | 2,768.8 | 2,171.6 | 597.2 | 2,064.5 |  |  |  | 188.1 | 516.2 |
|  | December | 2,851.0 | 2,232.4 | 618.6 | 2,194.8 | 457.7 | 764.1 | 973.0 | 164.3 | 491.9 |
| 1941 | March | 2,997.5 | 2,260.8 | 736.7 | 2,340.2 | 448.5 | 824.8 | 1,066.9 | 151.6 | 505.7 |
|  | June | 3,142.6 | 2,294.0 | 848.6 | 2,524.4 | 475.5 | 912.7 | 1,136.2 | 136.3 | 481.9 |
|  | September | 3,251.5 | 2,330.0 | 921.5 | 2,647.2 | 486.7 | 968.9 | 1,191.6 | 126.9 | 477.4 |
|  | December | 3,461.7 | 2,388.6 | 1,073.1 | 2,849.7 | 498.8 | 1,091.5 | 1,259.4 | 109.4 | 502.6 |
| 1942 | March | 3,595.9 | 2,410.8 | 1,185.1 | 3,004.9 | 502.1 | 1,167.1 | 1,335.7 | 99.5 | 491.5 |
|  | June | 3,730.0 | 2,425.5 | 1,304.5 | 3,164.8 | 517.9 | 1,234.3 | 1,412.6 | 86.8 | 478.4 |
|  | September | 3,849.4 | 2,464.8 | 1,385.6 | 3,285.2 | 533.1 | 1,277.1 | 1,475.0 | 77.1 | 487.1 |
|  | December | 3,948.9 | 2,482.5 | 1,466.4 | 3,388.1 | 546.6 | 1,314.9 | 1,526.6 | 71.7 | 489.1 |
| 1943 | March | 3,988.6 | 2,480.4 | 1,508.2 | 3,435.8 | 564.5 | 1,318.7 | 1,552.6 | 67.1 | 485.7 |
|  | June | 4,010.2 | 2,472.6 | 1,537.6 | 3,453.3 | 580.5 | 1,299.0 | 1,573.8 | 66.3 | 490.6 |
|  | September | 3,999.8 | 2,461.6 | 1,538.2 | 3,444.3 | 595.6 | 1,224.3 | 1,624.4 | 67.3 | 488.2 |
|  | December | 3,997.1 | 2,453.2 | 1,543.9 | 3,442.7 | 597.8 | 1,166.7 | 1,678.2 | 675 | 486.9 |
| 1944 |  | 3,949.1 | 2,427.1 | 1,522.0 | 3,393.9 | 597.4 | 1,143.8 | 1,652.7 | 69.4 | 485.8 |
|  | June | 3,865.2 | 2,377.8 | 1,487.4 | 3,301.4 | 589.1 | 1,108.6 | 1,603.7 | 67.9 | 495.9 |
|  | September | 3,777.6 | 2,339.0 | 1,438.6 | 3,207.3 | 572.2 | 1,078.5 | 1,556.6 | 72.6 | 497.7 |
|  | December | 3,636.2 | 2,278.3 | 1,357.9 | 3,029.0 | 550.4 | 1,038.3 | 1,440.3 | 84.7 | 522.5 |
| 1945 | March | 3.492.1 | 2,209.7 | 1,282.4 | 2,842.0 | 522.0 | 1,017.0 | 1,303.0 | 100.1 | 550.0 |
|  | June | 3,308.2 | 2,130.6 | 1,177.6 | 2,541.4 | 485.2 | 949.0 | 1,107.2 | 128.9 | 637.9 |

## 3. I7 Numbers employed in engineering and metals industries'



## 3. 17 Numbers employed in engineering and metals industries'

| Great Britain |  |  |  |  |  |  |  |  |  |  | Thousands |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | General iron founding, heating and ventilating apparatus |  |  | Electric cables, apparatus, etc. |  |  | Scientific instruments watches, clocks, plate, jewellery, etc. |  |  | Non-ferrous metal manufacture |  |  |
|  |  | Total | Males | Females | Total | Males | Females | Total | Males | Females | Total | Males | Females |
| 1939 | June | 117.3 | 106.1 | 11.2 | 195.9 | 116.4 | 79.5 | 87.0 | 54.8 | 32.2 | 55.9 | 51.2 | 4.7 |
| 1940 | June | 98.6 | 86.6 | 12.0 | 222.7 | 122.9 | 99.8 | 92.6 | 550 | 37.6 | 68.5 | 61.6 | 6.9 |
|  | September | 91.3 | 78.7 | 12.6 | 2272 | 123.1 | 104.1 | 93.3 | 55.1 | 38.2 | 71.2 | 63.3 | 7.9 |
|  | December | 89.5 | 77.0 | 12.5 | 2274 | 123.1 | 104.3 | 92.5 | 56.2 | 36.3 | 74.0 | 65.0 | 9.0 |
| 1941 | March | 88.6 | 75.6 | 13.0 | 233.7 | 120.4 | 113.3 | 95.2 | 56.3 | 38.9 | 76.5 | 66.7 | 9.8 |
|  | June | 89.4 | 75.2 | 14.2 | 237.3 | 117.1 | 120.2 | 98.0 | 56.1 | 41.9 | 81.7 | 68.1 | 13.6 |
|  | September | 89.0 | 77.0 | 12.0 | 242.1 | 114.8 | 127.3 | 98.2 | 61.4 | 36.8 | 85.5 | 69.2 | 16.3 |
|  | December | 88.5 | 74.2 | 14.3 | 254.5 | 115.4 | 139.1 | 98.4 | 61.3 | 37.1 | 85.9 | 69.5 | 16.4 |
| 1942 | March | 88.2 | 73.1 | 15.1 | 257.1 | 113.7 | 143.4 | 98.6 | 60.3 | 38.3 | 90.5 | 69.9 | 20.6 |
|  | June | 87.8 | 68.3 | 19.5 | 261.4 | 114.7 | 146.7 | 98.7 | 53.2 | 45.5 | 94.4 | 71.2 | 23.2 |
|  | September | 93.0 | 68.4 | 24.6 | 270.2 | 117.4 | 152.8 | 98.5 | 52.4 | 46.1 | 99.6 | 74.3 | 25.3 |
|  | December | 89.7 | 66.8 | 22.9 | 280.5 | 118.8 | 161.7 | 97.8 | 51.1 | 46.7 | 104.0 | 76.1 | 27.9 |
| 1943 | March | 89.4 | 65.6 | 23.8 | 285.4 | 118.8 | 166.6 | 98.0 | 50.5 | 47.5 | 106.7 | 77.8 | 28.9 |
|  | June | 85.8 | 64.6 | 21.2 | 29.0 | 118.8 | 172.2 | 99.4 | 51.3 | 48.1 | 114.4 | 83.3 | 31.1 |
|  | September | 82.1 | 61.8 | 20.3 | 293.1 | 117.8 | 175.3 | 99.3 | 51.0 | 48.3 | 113.3 | 82.3 | 31.0 |
|  | December | 81.4 | 61.4 | 20.0 | 296.5 | 116.9 | 179.6 | 98.8 | 50.4 | 48.4 | 113.0 | 82.1 | 30.9 |
| 1944 | March | 80.3 | 60.6 | 19.7 | 295.6 | 115.7 | 179.9 | 97.2 | 48.9 | 48.3 | 110.4 | 79.9 | 30.5 |
|  | June | 74.8 | 56.3 | 18.5 | 295.0 | 114.7 | 180.3 | 96.9 | 48.6 | 48.3 | 106.7 | 76.7 | 30.0 |
|  | September | 74.7 | 56.3 | 18.4 | 290.4 | 114.0 | 176.4 | 95.6 | 48.0 | 47.6 | 100.8 | 72.9 | 27.9 |
|  | December | 74.6 | 56.2 | 18.4 | 292.0 | 114.0 | 178.0 | 94.4 | 47.2 | 47.2 | 92.0 | 67.6 | 24.4 |
| 1945 | March | 74.6 | 56.2 | 18.4 | 289.3 | 113.5 | 175.8 | 93.1 | 46.6 | 46.5 | 86.3 | 64.4 | 21.9 |
|  | June | 72.2 | 55.1 | 17.1 | 279.9 | 112.2 | 167.7 | 91.0 | 45.4 | 45.6 | 84.0 | 63.0 | 21.0 |

## 3. I 8 Numbers employed in the iron and steel industry'

| Great Britain |  |  |  | Thousands |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total numbers employed |  |  | Numbers employed in |  |  |  |  |
|  | Total | Males | Females | Pig iron production | Steel <br> melting, iron and steel rolling, etc. | Tin plate production | Iron and steel tube manufacture | Wire, wire netting and manufacture |
| 1939 June | 259.1 | 246.1 | 13.0 | 15.5 | 160.0 | 25.1 | 31.7 | 26.8 |
| 1940 June | 273.3 | 255.0 | 18.3 | 16.7 | 167.3 | 24.3 | 33.8 | 31.2 |
| 1941 June | 299.9 | 267.1 | 32.8 | 17.6 | 193.9 | 16.7 | 37.2 | 34.5 |
| 1942 June | 318.8 | 258.4 | 60.4 | 17.3 | 207.4 | 16.3 | 39.9 | 37.9 |
| 1943 June | 303.9 | 239.7 | 64.2 | 17.4 | 195.4 | 13.8 | 41.3 | 36.0 |
| 1944 June | 292.3 | 230.6 | 61.7 | 17.9 | 189.1 | 12.3 | 39.1 | 33.9 |
| 1945 June | 267.7 | 216.8 | 50.9 | 15.9 | 174.8 | 12.4 | 34.7 | 29.9 |

3.19

Numbers employed in the textile industries ${ }^{\prime}$


## 3. 9 Numbers employed in the textile industries ${ }^{\text {' }}$



| 1939 June | 139.3 | 34.2 | 105.1 | $\ldots$ | $\ldots$ | $\ldots$ | 55.4 | 20.7 | 34.7 | $\ldots$ | $\ldots$ | $\ldots$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1940 June | 136.9 | 31.8 | 105.1 | $\ldots$ | $\ldots$ | $\ldots$ | 61.1 | 20.4 | 40.7 | $\ldots$ | $\ldots$ | $\ldots$ |
| December | 123.4 | 27.5 | 95.9 | 23.5 | 14.5 | 85.4 | 55.6 | 18.2 | 37.4 | 19.9 | 7.7 | 28.0 |
| 1941 June | 110.9 | 24.9 | 86.0 | 18.0 | 11.3 | 81.6 | 49.9 | 15.7 | 34.2 | 18.7 | 6.6 | 24.6 |
| December | 92.6 | 21.2 | 71.4 | 14.9 | 11.6 | 66.1 | 47.9 | 14.1 | 33.8 | 19.8 | 5.1 | 23.0 |
| 1942 June | 81.4 | 18.1 | 63.3 | 17.7 | 7.6 | 56.1 | 48.3 | 13.8 | 34.5 | 22.9 | 3.9 | 21.5 |
| $\quad$ December | 77.6 | 16.1 | 61.5 | 19.6 | 3.9 | 54.1 | 46.3 | 13.4 | 32.9 | 23.9 | 3.1 | 19.3 |
| 1943 June | 74.3 | 15.4 | 58.9 | 17.0 | 3.2 | 54.1 | 42.9 | 12.6 | 30.3 | 25.3 | 2.8 | 14.8 |
| $\quad$ December | 69.1 | 14.5 | 54.6 | 15.2 | 3.1 | 50.8 | 42.0 | 12.5 | 29.5 | 27.3 | 2.7 | 12.0 |
| 1944 June | 67.9 | 14.3 | 53.6 | 17.8 | 5.1 | 45.0 | 41.5 | 12.3 | 29.2 | 26.4 | 2.8 | 12.3 |
| $\quad$ December | 68.2 | 14.4 | 53.8 | 18.7 | 5.4 | 44.1 | 39.9 | 11.8 | 28.1 | 25.2 | 2.5 | 12.2 |
| 1945 June | 69.6 | 14.7 | 54.9 | 14.9 | 5.5 | 49.2 | 39.7 | 11.8 | 27.9 | 20.1 | 4.3 | 15.3 |


| Textile bleaching, printing, dyeing and finishing |  |  |  |  | Other textile industries |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Numbers employed on |  |  |  |  | Numbers employed on |  |  |  |  |  |
| Total | Males Females | Manufac- <br> ture of equipment and supplies for the Forces | Orders for export | Orders for home market | Total | Males | Females | Manufacfacture of equipment and supplies for the Forces | Orders for export | Orders home market |


| 1939 | June | 79.6 | 56.7 | 22.9 |  |  |  | 93.9 | 32.6 | 61.3 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 80.0 | 55.0 | 25.0 |  |  |  | 101.1 | 30.1 | 71.0 |  |  |  |
|  | December | 75.2 | 50.4 | 24.8 | 23.6 | 25.3 | 26.3 | 98.8 | 29.0 | 69.8 | 44.6 | 12.5 | 41.7 |
|  | June | 71.1 | 46.8 | 24.3 | 22.5 | 25.8 | 22.8 | 93.1 | 25.2 | 67.9 | 44.5 | 11.2 | 37.4 |
|  | December | 63.2 | 40.5 | 22.7 | 21.8 | 21.7 | 19.7 | 82.6 | 21.6 | 61.0 | 40.1 | 9.5 | 33.0 |
|  | June | 57.2 | 36.8 | 20.4 | 22.0 | 13.9 | 21.3 | 75.4 | 19.4 | 56.0 | 39.8 | 6.4 | 29.2 |
|  | December | 53.5 | 33.9 | 19.6 | 19.6 | 11.6 | 22.3 | 69.2 | 18.0 | 51.2 | 40.7 | 4.1 | 24.4 |
| 1943 |  | 51.7 | 32.6 | 19.1 | 21.1 | 10.7 | 19.9 | 68.5 | 17.8 | 50.7 | 41.9 | 4.1 | 22.5 |
|  | December | 51.8 | 32.5 | 19.3 | 23.9 | 9.5 | 18.4 | 68.3 | 17.7 | 50.6 | 46.6 | 2.6 | 19.1 |
|  | June | 51.8 | 32.4 | 19.4 | 24.2 | 10.6 | 17.0 | 67.9 | 17.6 | 50.3 | 46.2 | 2.9 | 18.8 |
|  | December | 52.0 | 32.3 | 19.7 | 24.6 | 11.7 | 15.7 | 68.2 | 18.0 | 50.2 | 46.7 | 3.2 | 18.3 |
| 1945 June |  | 52.2 | 32.0 | 20.2 | 21.1 | 12.6 | 18.5 | 69.1 | 19.1 | 50.0 | 40.6 | 5.6 | 22.9 |

3.20

Numbers employed in certain clothing industries ${ }^{1}$


### 3.21



### 3.22 Numbers employed in certain paper and printing industries

| Great Britain |  |  |  |  |  |  | Thousands |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Paper, paper board, cardboard box, etc. making |  |  |  |  |  | Printing, publishing and bookbinding, etc. |  |  |  |  |  |
|  |  |  |  | Numbers | employed | d on |  |  |  | Numbers | employed | don |
|  | Total | Males |  | Manufacture of equipment and supplies for the Forces | Orders for export | Orders for home market | Total | Males | Females | Manufacfacture of equipment supplies for the Forces | Orders export expor | $\begin{gathered} \text { Orders } \\ \text { for } \\ \text { home } \\ \text { market } \end{gathered}$ |
| 1939 June | 152.1 | 79.7 | 72.4 |  |  |  | 304.3 | 198.9 | 105.4 |  |  |  |
| 1940 June December | $\begin{aligned} & 134.2 \\ & 123.9 \end{aligned}$ | $\begin{aligned} & 66.6 \\ & 61.9 \end{aligned}$ | $\begin{aligned} & 67.6 \\ & 62.0 \end{aligned}$ | 16.4 | 23.8 | 83.7 | $\begin{aligned} & 233.5 \\ & 205.1 \end{aligned}$ | $\begin{aligned} & 143.0 \\ & 123.3 \end{aligned}$ | $\begin{aligned} & 90.5 .5 \\ & 81.8 \end{aligned}$ | 5.0 | 26.2 | 173.9 |
| 1941 June December | $\begin{aligned} & 120.4 \\ & 113.0 \end{aligned}$ | $\begin{aligned} & 57.7 \\ & 50.8 \end{aligned}$ | $\begin{aligned} & 62.7 \\ & 62.2 \end{aligned}$ | $\begin{aligned} & 23.6 \\ & 27.6 \end{aligned}$ | $\begin{aligned} & 14.3 \\ & 11.6 \end{aligned}$ | $\begin{aligned} & 82.5 \\ & 73.8 \end{aligned}$ | $\begin{aligned} & 190.2 \\ & 185.9 \end{aligned}$ | $\begin{aligned} & 111.3 \\ & 108.3 \end{aligned}$ | $\begin{aligned} & 78.9 \\ & 77.6 \end{aligned}$ | $\begin{aligned} & 7.7 \\ & 10.1 \end{aligned}$ | $\begin{aligned} & 21.0 \\ & 17.3 \end{aligned}$ | $\begin{aligned} & 161.5 \\ & 158.5 \end{aligned}$ |
| 1942 June December | $\begin{aligned} & 108.7 \\ & 104.3 \end{aligned}$ | $\begin{aligned} & 49.9 \\ & 48.6 \end{aligned}$ | $\begin{aligned} & 58.8 \\ & 55.7 \end{aligned}$ | $\begin{aligned} & 31.1 \\ & 3 \end{aligned}$ | $\begin{aligned} & 8.3 \\ & 6.1 \end{aligned}$ | $\begin{aligned} & 69.3 .3 \\ & 68.2 \end{aligned}$ | $\begin{aligned} & 175.8 \\ & 169.3 \end{aligned}$ | $\begin{aligned} & 99.4 \\ & 95.4 \end{aligned}$ | $\begin{aligned} & 76.4 \\ & 73.9 \end{aligned}$ | $\begin{aligned} & 23.9 \\ & 18.2 \end{aligned}$ | $\begin{aligned} & 13.2 \\ & 12.5 \end{aligned}$ | $\begin{aligned} & 138.7 \\ & 138.6 \end{aligned}$ |
| 1943 June December | $\begin{aligned} & 97.8 \\ & 99.6 \end{aligned}$ | $\begin{aligned} & 45.1 \\ & 45.8 \end{aligned}$ | $\begin{aligned} & 52.7 \\ & 53.8 \end{aligned}$ | $\begin{aligned} & 33.8 \\ & 42.3 \end{aligned}$ | $\begin{aligned} & 5.3 \\ & 5.3 \end{aligned}$ | $\begin{aligned} & 58.7 \\ & 52.0 \end{aligned}$ | $\begin{aligned} & 155.0 \\ & 163.8 \end{aligned}$ | $\begin{aligned} & 92.9 .9 \\ & 92.0 \end{aligned}$ | $\begin{aligned} & 72.1 \\ & 71.8 \end{aligned}$ | $\begin{aligned} & 17.0 \\ & 21.9 \end{aligned}$ | $\begin{aligned} & 14.8 \\ & 13.1 \end{aligned}$ | 133.2 128.8 |
| 1944 June December | $\begin{aligned} & 97.8 \\ & 95.9 \\ & 9.9 \end{aligned}$ | $\begin{aligned} & 44.1 \\ & 4.8 \end{aligned}$ | $\begin{aligned} & 53.7 \\ & 52.1 \end{aligned}$ | $\begin{aligned} & 42.6 \\ & 39.2 \end{aligned}$ | $\begin{aligned} & 5.4 \\ & 5.8 \end{aligned}$ | $\begin{aligned} & 49.8 .8 \\ & 50.9 \end{aligned}$ | $\begin{aligned} & 162.5 \\ & 164.8 \end{aligned}$ | $\begin{aligned} & 90.6 \\ & 91.5 \end{aligned}$ | $\begin{aligned} & 71.9 \\ & 73.3 \end{aligned}$ | $\begin{aligned} & 23.1 \\ & 23.3 \end{aligned}$ | $\begin{aligned} & 13.5 \\ & 14.2 \end{aligned}$ | $\begin{aligned} & 125.9 \\ & 127.3 \end{aligned}$ |
| 1945 June | 98.2 | 45.4 | 52.8 | 35.4 | 7.8 | 55.0 | 173.4 | 97.0 | 76.4 | 18.8 | 14.9 | 139.7 |
| 1. See footrrote 2 to Table 3.13 . Source: Ministry of Labour and Notional Servicer |  |  |  |  |  |  |  |  |  |  |  |  |
| 57 |  |  |  |  |  |  |  |  |  |  |  |  |

### 3.23 Numbers employed in leather and rubber manufacture'



### 3.24 Numbers employed in glass and pottery manufacture'

|  |  | Great Brita |  |  |  |  |  |  |  |  |  |  | housands |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Glass man | ufacture | (excludi | Jing bottles and | and scient | fic glass) |  |  | Pottery, ear | arthenware, es |  |  |
|  |  |  |  |  | Number | rs employ | yed on |  |  |  | Number | employ | ed on |
|  |  | Total | Males F |  | Manufacture of equipment supplies Forces | $\begin{aligned} & \text { Orders } \\ & \text { for } \\ & \text { export } \end{aligned}$ | $\begin{gathered} \text { Orders } \\ \text { for } \\ \text { home } \\ \text { market } \end{gathered}$ | Total | Males | Females | Manufacture of equipment and supplies for the Forces | $\begin{aligned} & \text { Orders } \\ & \text { for } \\ & \text { export } \end{aligned}$ | $\begin{gathered} \text { Orders } \\ \text { for } \\ \text { home } \\ \text { market } \end{gathered}$ |
| 1939 | June | 30.6 | 22.5 | 8.1 |  |  |  | 67.0 | 30.0 | 37.0 |  |  |  |
|  | June December | $\begin{aligned} & 28.3 \\ & 27.8 \end{aligned}$ | $\begin{aligned} & 19.2 \\ & 18.5 \end{aligned}$ | $\begin{aligned} & 9.1 \\ & 9.3 \end{aligned}$ | 5.2 | 6.8 | 15.8 | $\begin{aligned} & 59.3 \\ & 55.2 \end{aligned}$ | $\begin{aligned} & 23.9 \\ & \\ & \hline \end{aligned}$ | $\begin{array}{r} 35.4 \\ 34.2 \end{array}$ | 10.7 | 22.6 | 21.9 |
|  | June December | $\begin{aligned} & 25.9 \\ & 25.2 \end{aligned}$ | $\begin{aligned} & 16.3 \\ & 15.2 \end{aligned}$ | $\begin{array}{r} 9.6 \\ 10.0 \end{array}$ | $\begin{aligned} & 6.6 \\ & 5.3 \end{aligned}$ | $\begin{aligned} & 6.9 \\ & 4.0 \end{aligned}$ | $\begin{aligned} & 12.4 \\ & 15.9 \end{aligned}$ | $\begin{aligned} & 52.1 \\ & 44.5 \end{aligned}$ | $\begin{aligned} & 19.1 \\ & 16.3 \end{aligned}$ | $\begin{aligned} & 33.0 \\ & 28.2 \end{aligned}$ | $\begin{aligned} & 5.3 \\ & 4.7 \end{aligned}$ | $\begin{aligned} & 21.6 \\ & 18.6 \end{aligned}$ | $\begin{aligned} & 25.2 \\ & 21.2 \end{aligned}$ |
|  | June December | $\begin{aligned} & 26.1 \\ & 24.9 \end{aligned}$ | $\begin{aligned} & 15.6 \\ & 14.6 \end{aligned}$ | $\begin{aligned} & 10.5 \\ & 10.3 \end{aligned}$ | $\begin{aligned} & 7.6 \\ & 8.6 \end{aligned}$ | $\begin{aligned} & 2.9 \\ & 1.6 \end{aligned}$ | $\begin{aligned} & 15.6 \\ & 14.7 \end{aligned}$ | $\begin{aligned} & 39.7 \\ & 37.5 \end{aligned}$ | $\begin{aligned} & 15.4 \\ & 14.9 \end{aligned}$ | $\begin{aligned} & 24.3 \\ & 22.6 \end{aligned}$ | $\begin{aligned} & 4.2 \\ & 5.5 \end{aligned}$ | $\begin{aligned} & 16.6 \\ & 10.0 \end{aligned}$ | $\begin{aligned} & 18.9 \\ & 22.0 \end{aligned}$ |
|  | June December | $\begin{aligned} & 24.4 \\ & 24.4 \end{aligned}$ | $\begin{aligned} & 14.0 \\ & 14.0 \end{aligned}$ | $\begin{aligned} & 10.4 .4 \\ & 10.4 \end{aligned}$ | 8.8 9.5 | 1.1 2.4 | $\begin{aligned} & 14.5 \\ & 12.5 \end{aligned}$ | $\begin{aligned} & 36.7 \\ & 36.6 \end{aligned}$ | $\begin{aligned} & 146 \\ & 14.6 \end{aligned}$ | $\begin{aligned} & 22.1 \\ & 22.0 \end{aligned}$ | $\begin{aligned} & 4.9 \\ & 4.6 \end{aligned}$ | $\begin{array}{r} 9.8 \\ 10.3 \end{array}$ | $\begin{aligned} & 22.0 \\ & \end{aligned}$ |
|  | June December | $\begin{aligned} & 24.3 \\ & 25.1 \end{aligned}$ | $\begin{aligned} & 14.0 \\ & 14.8 \end{aligned}$ | $\begin{aligned} & 10.3 \\ & 0.3 \end{aligned}$ | $\begin{aligned} & 9.6 \\ & 7.9 \end{aligned}$ | $\begin{aligned} & 2.6 \\ & 2.7 \end{aligned}$ | $\begin{aligned} & 12.1 \\ & 14.5 \end{aligned}$ | $\begin{aligned} & 36.2 \\ & 37.1 \end{aligned}$ | $\begin{aligned} & 14.3 \\ & 14.5 \end{aligned}$ | $\begin{aligned} & 2.9 \\ & 22.6 \end{aligned}$ | $\begin{aligned} & 4.5 \\ & 5.1 \end{aligned}$ | $\begin{aligned} & 10.0 \\ & 11.1 \end{aligned}$ | $\begin{aligned} & 21.7 \\ & 20.9 \end{aligned}$ |
| 1945 | June | 25.7 | 15.5 | 10.2 | 7.0 | 3.8 | 14.9 | 39.0 | 14.7 | 24.3 | 7.5 | 12.9 | 18.6 |
| 1. See footnote 2 to Table 3.113 . |  |  |  |  |  |  |  |  |  | Source: Ministry of Labour and National Serice |  |  |  |

### 3.25 Railway staff: Numbers employed



### 3.26 Industrial staff in the Civil Service'



### 3.27

| Great Britain |  |  |  |  |  |  |  |  |  |  |  |  | Thousands |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Post Office | $\underset{\text { miralty }}{\text { Ad- }}$ | $\begin{aligned} & \text { War } \\ & \text { Office } \end{aligned}$ | $\underset{\text { Ministry }}{\text { Air }}$ | Ministry of Supply | Ministry Aircraft Production | Ministry Labour and National Service | Ministry of Food | Ministry Transport | Ministry Works | Other departments |
| 1939 | April I | 387.7 | 196.6 | 12.9 | 19.8 | 19.7 | - | - | 28.3 | - | 3.0 | 6.3 | 101.1 |
| 1940 | January 1 | 433.9 | 186.9 | 17.6 | 28.2 | 26.9 | 160 | - | 27.9 | 13.7 | 3.2 | 7.1 | 106.4 |
|  | April 1 | 454.8 | 188.4 | 20.1 | 32.6 | 28.7 | 18.7 | - | 26.0 | 19.3 | 6.5 | 7.4 | 107.1 |
|  | July 1 | 482.1 | 188.0 | 21.6 | 33.3 | 19.8 | 23.0 | 12.4 | 28.9 | 23.7 | 3.1 | 7.8 | 120.5 |
|  | October I | 492.2 | 188.0 | 235 | 34.1 | 21.2 | 27.0 | 7.9 | 29.7 | 24.9 | 3.1 | 8.2 | 124.5 |
| 1941 | January 1 | 520.3 | 188.7 | 23.9 | 39.0 | 23.5 | 30.6 | 8.9 | 30.4 | 29.0 | 3.0 | 8.3 | 135.0 |
|  | April 1 | 554.5 | 195.3 | 25.9 | 44.2 | 26.2 | 37.0 | 10.0 | 32.4 | 29.8 | 11.3 | 9.2 | 133.2 |
|  | July 1 | 605.3 | 198.9 | 28.2 | 49.5 | 33.2 | 41.8 | 10.9 | 39.0 | 40.4 | 12.4 | 10.1 | 140.9 |
|  | October 1 | 620.5 | 202.6 | 29.7 | 54.9 | 34.6 | 48.3 | 12.0 | 38.2 | 33.6 | 12.8 | 11.1 | 142.7 |
| 1942 | January I | 640.7 | 204.1 | 32.0 | 55.1 | 35.4 | 54.2 | 12.9 | 39.3 | 35.4 | 13.2 | 12.0 | 147.1 |
|  | April I | 657.4 | 204.8 | 33.7 | 58.6 | 36.2 | 58.7 | 13.8 | 40.3 | 36.8 | 13.7 | 12.8 | 148.0 |
|  | July 1 | 674.4 | 206.1 | 34.7 | 62.6 | 36.6 | 61.4 | 14.9 | 42.0 | 38.9 | 14.4 | 13.5 | 149.3 |
|  | October 1 | 688.4 | 207.2 | 36.4 | 64.0 | 37.9 | 64.5 | 15.6 | 42.5 | 38.3 | 15.0 | 14.2 | 152.8 |
| 1943 | January 1 | 704.1 | 207.4 | 42.1 | 66.3 | 39.6 | 67.7 | 16.4 | 43.0 | 38.1 | 15.2 | 14.5 | 153.8 |
|  | April 1 | 710.6 | 207.6 | 43.4 | 69.2 | 39.6 | 67.9 | 16.2 | 43.8 | 39.4 | 15.6 | 14.4 | 153.5 |
|  | Juy 1 | 719.2 | 206.3 | 45.8 | 68.6 | 36.5 | 68.0 | 18.8 | 43.3 | 49.2 | 15.7 | 14.2 | 152.8 |
|  | October 1 | 715.5 | 204.9 | 47.7 | 69.5 | 36.5 | 67.9 | 19.7 | 41.2 | 45.0 | 15.9 | 14.6 | 152.6 |
| 1944 | January 1 | 708.1 | 203.4 | 49.0 | 69.2 | 36.7 | 66.4 | 20.3 | 39.8 | 42.3 | 16.0 | 14.3 | 150.7 |
|  | April I | 704.4 | 202.7 | 50.2 | 68.7 | 37.3 | 64.0 | 20.6 | 39.4 | 40.0 | 16.1 | 14.5 | 150.9 |
|  | July 1 | 712.7 | 203.5 | 51.9 | 68.3 | 37.1 | 63.1 | 21.1 | 40.3 | 44.7 | 16.6 | 14.8 | 151.3 |
|  | October 1 | 705.9 | 205.2 | 52.7 | 67.9 | 36.6 | 62.1 | 21.6 | 38.4 | 39.3 | 16.3 | 14.8 | 151.0 |
| 1945 | January 1 | 704.6 | 207.4 | 53.4 | 68.1 | 36.2 | 61.6 | 21.5 | 37.1 | 38.2 | 15.0 | 15.3 | 150.8 |
|  | April 1 | 704.7 | 208.6 | 54.4 | 67.5 | 35.7 | 60.8 | 21.5 | 35.6 | 37.9 | 14.9 | 14.3 | 153.5 |
|  | July 1 | 703.8 | 210.5 | 54.4 | 63.8 | 34.7 | 58.6 | 21.0 | 36.6 | 43.0 | 14.5 | 15.1 | 151.6 |
|  | October 1 | 690.0 | 220.4 | 52.7 | 61.3 | 33.7 | 50.4 | 20.0 | 36.0 | 38.3 | 13.4 | 15.8 | 148.0 |

### 3.28 Male operatives employed on the Government building

 programme in Great Britain'|  | Total | End of month |  |  |  |  |  |  | ThousandsNewhouseconstruc-tion(including <br> site pre- <br> paration) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | For Services and Supply Departments |  |  |  |  |  |  |  |
|  |  | Total | Admiralty | War Office ${ }^{2}$ | Air Ministry ${ }^{2}$ | Ministry of Supply | $\begin{array}{cc} \text { Ministry } & \\ \text { of } & \text { Ministry } \\ \text { Aircraft } & \text { of } \\ \text { Production }^{2} \text { Transport }^{2} \end{array}$ |  |  |
| 1941 July August September October November December | $\begin{aligned} & 541.8 \\ & 543.8 \\ & 557.8 \\ & 560.9 \\ & 537.7 \\ & 517.6 \end{aligned}$ | $\begin{aligned} & 342.6 \\ & 341.0 \\ & 347.2 \\ & 348.5 \\ & 346.0 \\ & 333.7 \end{aligned}$ | $\begin{aligned} & 34.2 \\ & 33.2 \\ & 32.2 \\ & 32.6 \\ & 31.0 \\ & 29.5 \end{aligned}$ | $\begin{aligned} & 55.1 \\ & 55.7 \\ & 55.5 \\ & 56.5 \\ & 56.5 \\ & 55.9 \end{aligned}$ | $\begin{aligned} & 109.3 \\ & 109.3 \\ & 109.9 \\ & 108.7 \\ & 106.7 \\ & 99.3 \end{aligned}$ | $\begin{aligned} & 100.5 \\ & 100.0 \\ & 10.1 \\ & 105.9 \\ & 106.4 \\ & 103.0 \end{aligned}$ | 32.8 10.7 <br> 32.1 10.7 <br> 30.6 10.9 <br> 32.3 12.5 <br> 34.3 111.1 <br> 34.9 11.1 |  | $\begin{aligned} & 199.2 \\ & 202.8 \\ & 210.6 \\ & 212.4 \\ & 191.7 \\ & 183.9 \end{aligned}$ |
| 1942 January February March April May June July August September October November December | $\begin{aligned} & 503.7 \\ & 496.7 \\ & 510.2 \\ & 514.0 \\ & 495.5 \\ & 480.9 \\ & 466.7 \\ & 46.7 \\ & 46.7 \\ & 46.5 \\ & 44.7 \\ & 426.2 \end{aligned}$ | $\begin{aligned} & 330.8 \\ & 329.8 \\ & 332.7 \\ & 337.7 \\ & 328.3 \\ & 319.4 \\ & 319.3 \\ & 327.3 \\ & 33.1 \\ & 336.0 \\ & 328.5 \\ & 320.5 \end{aligned}$ | 28.6 28.7 27.0 26.2 26.4 26.6 25.0 28.3 26.5 27.0 27.9 27.2 | $\begin{aligned} & 54.7 \\ & 50.2 \\ & 52.1 \\ & 50.7 \\ & 48.0 \\ & 44.2 \\ & 45.0 \\ & 52.8 \\ & 62.0 \\ & 71.2 \\ & 72.8 \\ & 75.6 \end{aligned}$ | 102.5 <br> 105.3 <br> 106.5 <br> 112.6 <br> 112.8 1128 <br> 117.1 <br> 120.7 <br> 129.1 129.6 <br> 130.1 +29.8 <br> 129.8 | 92.3 92.8 92.6 91.5 82.1 75.3 65.2 60.5 52.1 48.9 45.1 41.9 | 40.6 12.1 <br> 40.5 12.3 <br> 41.7 12.8 <br> 43.5 13.2 <br> 49.1 12.9 <br> 48.0 12.5 <br> 54.9 12.1 <br> 53.3 11.7 <br> 53.1 11.2 <br> 49.4 10.2 <br> 43.4 9.2 <br> 37.9 8.1 | $\begin{aligned} & 171.9 \\ & 165.9 \\ & 176.0 \\ & 174.7 \\ & 165.6 \\ & 195.8 \\ & 145.6 \\ & 134.7 \\ & 126.8 \\ & 121.7 \\ & 114.2 \\ & 103.6 \end{aligned}$ | 1.0 1.0 1.5 1.6 1.6 1.7 1.8 2.7 2.7 2.7 2.5 2.5 |
| 1943 January February March April May June July August September October November December | $\begin{aligned} & 425.3 \\ & 419.9 \\ & 405.7 \\ & 388.7 \\ & 372.3 \\ & 356.1 \\ & 347.1 \\ & 351.4 \\ & 344.8 \\ & 345.4 \\ & 33.5 \\ & 316.5 \end{aligned}$ | $\begin{aligned} & 323.5 \\ & 319.9 \\ & 312.4 \\ & 296.4 \\ & 280.3 \\ & 263.1 \\ & 247.1 \\ & 244.4 \\ & 235.8 \\ & 224.9 \\ & 221.4 \\ & 215.6 \end{aligned}$ | $\begin{aligned} & 27.7 \\ & 30.0 \\ & 32.2 \\ & 31.6 \\ & 31.4 \\ & 32.2 \\ & 31.9 \\ & 31.8 \\ & 31.4 \\ & 31.8 \\ & 31.9 \\ & 30.8 \end{aligned}$ | $\begin{aligned} & 78.3 \\ & 76.9 \\ & 72.5 \\ & 66.3 \\ & 51.4 \\ & 44.9 \\ & 38.2 \\ & 37.8 \\ & 36.9 \\ & 34.4 \\ & 33.2 \\ & 34.1 \end{aligned}$ | $\begin{aligned} & 130.2 \\ & 127.8 \\ & 124.5 \\ & 123.8 \\ & 119.1 \\ & 109.8 \\ & 103.9 \\ & 102.2 \\ & 99.0 \\ & 94.5 \\ & 87.6 \\ & 78.3 \end{aligned}$ | $\begin{aligned} & 38.9 .9 \\ & 37.7 \\ & 37.5 \\ & 36.2 \\ & 35.6 \\ & 34.7 \\ & 34.1 \\ & 33,0 \\ & 31.5 \\ & 29.4 \end{aligned}$ |   <br> 39.7 8.7 <br> 39.0 8.5 <br> 37.7 8.0 <br> 35.3 8.2 <br> 33.7 9.1 <br> 32.6 8.9 <br> 22.6 9.4 <br> 29.6 10.0 <br> 26.6 10.4 <br> 25.2 9.6 <br> 24.7 9.0 <br> 23.9 8.4 | $\begin{aligned} & 99.7 \\ & 99.9 \\ & 91.2 \\ & 88.9 \\ & 89.7 \\ & 90.7 \\ & 96.1 \\ & 10.0 \\ & 10.7 \\ & 101.6 \\ & 100.6 \\ & 91.5 \end{aligned}$ | 2.1 2.1 2.1 2.4 2.3 2.3 3.9 6.0 7.3 8.9 8.8 9.6 |
| 1944 January February March April May June July August September October November December | $\begin{aligned} & 317.3 \\ & 316.8 \\ & 306.3 \\ & 295.6 \\ & 273.4 \\ & 267.5 \\ & 249.4 \\ & 231.5 \\ & 222.1 \\ & 216.5 \\ & 201.9 \\ & 195.0 \end{aligned}$ | $\begin{aligned} & 213.3 \\ & 207.7 \\ & 190.7 \\ & 175.6 \\ & 153.1 \\ & 146.2 \\ & 134.4 \\ & 133.2 \\ & 124.2 \\ & 114.0 \\ & 105.0 \\ & 98.6 \end{aligned}$ | 30.7 29.4 27.7 25.1 22.2 20.5 19.3 18.5 18.5 19.2 18.4 17.6 | 35.1 34.4 32.2 31.2 29.9 28.9 26.3 24.4 23.0 22.0 21.0 18.9 | 71.9 63.8 53.8 47.9 39.9 38.9 32.9 31.6 30.0 30.4 28.6 27.0 | $\begin{aligned} & 45.2 \\ & 47.9 \\ & 46.0 \\ & 42.7 \\ & 33.7 \\ & 31.6 \\ & 31.3 \\ & 36.6 \\ & 31.5 \\ & 23.1 \\ & 21.0 \\ & 20.3 \end{aligned}$ | 22.4 8.0 <br> 23.1 9.1 <br> 21.9 9.1 <br> 20.3 8.4 <br> 18.8 8.6 <br> 17.6 8.7 <br> 16.4 8.2 <br> 14.4 7.7 <br> 13.3 7.9 <br> 11.5 7.8 <br> 9.4 6.5 <br> 8.7 6.1 | 94.6 <br> 100.5 <br> 107.7 <br> 114.0 <br> 115.5 <br> 110.3 <br> 93.1 <br> 97.6 92.0 <br> 91.4 | 9.4 8.6 7.9 7.0 6.3 5.8 4.7 4.6 4.8 4.9 4.9 5.0 |
| 1945 January February March April May June July | $\begin{aligned} & 189.7 \\ & 198.2 \\ & 200.1 \\ & 207.1 \\ & 218.1 \\ & 219.9 \\ & 242.5 \end{aligned}$ | $\begin{aligned} & 93.8 \\ & 9.5 \\ & 92.3 \\ & 9.0 \\ & 9.0 \\ & 87.9 \\ & 87.4 \end{aligned}$ | $\begin{aligned} & 16.3 \\ & 16.4 \\ & 15.1 \\ & 15.3 \\ & 15.3 \\ & 14.4 \\ & 14.6 \end{aligned}$ | $\begin{aligned} & 17.6 \\ & 17.6 \\ & 17.0 \\ & 17.7 \\ & 15.9 \\ & 15.9 \\ & 14.0 \end{aligned}$ | $\begin{aligned} & 26.9 \\ & 26.5 \\ & 25.9 \\ & 25.6 \\ & 25.4 \\ & 23.4 \\ & 22.8 \end{aligned}$ | $\begin{aligned} & 20.3 \\ & 21.2 \\ & 22.1 \\ & 21.5 \\ & 23.0 \\ & 23.6 \\ & 24.2 \end{aligned}$ | 7.2 5.5 <br> 7.1 5.7 <br> 6.4 5.8 <br> 5.7 6.2 <br> 5.6 7.0 <br> 4.3 6.4 <br> 4.5 7.3 | $\begin{array}{r} 90.5 \\ 95.3 \\ 9.3 \\ 99.6 \\ 105.7 \\ 106.3 \\ 122.8 \end{array}$ | $\begin{array}{r} 5.4 \\ 8.4 \\ 13.1 \\ 16.5 \\ 20.5 \\ 26.6 \\ 32.3 \end{array}$ |
| 1. Aged 16 and over <br> 2. Labour employed on licensed work sponsored by War Office, Air Ministry, Ministry of Aircraft Production and Ministry of Transport is included under " Civil Departments " before January 1943. <br> 3. Including repair of houses made uninhabitable by war damage; salvage operations and war debris clearance; and first aid repairs carried out by the Special Repair Service. |  |  |  |  |  |  |  |  |  |

3.29 Training of civilians in Government training centres and emergency
training establishments ${ }^{\prime}$

|  |  | Number in training |  | Number admitted to training |  | Number completed training |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Males | Females ${ }^{2}$ | Males | Females ${ }^{2}$ | Males | Females ${ }^{2}$ |
|  |  | End of period |  | Weekly averages |  |  |  |
| 1940 | 3rd Quarter | 24,039 | - | 1,829 | - | 515 | - |
|  | 4th Quarter | 24,286 | - | 1,616 | - | 1,160 | - |
| 1941 | Ist Quarter | 20,74 | 6,576 | 1,729 | 861 | 1,482 | 245 |
|  | 2nd Quarter | 28,256 | 10,231 | 2,200 | 1,147 | 1,099 | 644 |
|  | 3rd Quarter | 19,670 | 10,280 | 1,052 | 1.104 | 1,371 | 789 |
|  | 4th Quarter | 12,254 | 14,399 | 824 | 1,524 | 1,235 | 971 |
| 1942 | Ist Quarter | 9,283 | 12,041 | 695 | 1,362 | 800 | 1,345 |
|  | 2nd Quarter | 8,436 | 12,132 | 706 | 1,336 | 644 | 1,164 |
|  | 3rd Quarter | 6.140 | 12,073 | 513 | 1,318 | 575 | 1,156 |
|  | 4th Quarter | 5,780 | 11,940 | 447 | 1,146 | 396 | 1,022 |
| 1943 | Ist Quarter | 5,184 | 11,166 | 418 | 1,046 | 397 | 989 |
|  | 2nd Quarter | 4,521 | 9,512 | 395 | 937 | 394 | 943 |
|  | 3rd Quarter | 3,216 | 6,460 | 281 | 636 | 319 | 729 |
|  | 4th Quarter | 3,345 | 5,786 | 274 | 538 | 218 | 523 |
| 1944 | \|st Quarter | 3,172 | 3,796 | 253 | 308 | 203 | 417 |
|  | 2nd Quarter | 3,236 | 3,191 | 225 | 276 | 191 | 287 |
|  | 3rd Quarter | 2,654 | 1,985 | 187 | 170 | 187 | 215 |
|  | 4th Quarter | 2,634 | 953 | 189 | 78 | 153 | 142 |
| 1945 | Ist Quarter | 2,596 | 443 | 167 | 37 | 129 | 71 |
|  | 2nd Quarter | 2,851 | 291 | 162 | 23 | 116 | 28 |
|  | 3rd Quarter | 3,498 | 270 | 190 | 19 | 101 | 18 |

1. Excluding coal mining training centres. 2. Women were admitted to Govermment training centres in January 1941 .

|  | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Working days lost through the stoppages which began in the year ${ }^{2}$ | 1,354 | 941 | 1,077 | 1,530 | 1.832 | 3,696 | 2,847 |
| Analysis by number of workers involved: |  |  |  |  |  |  |  |
| Under 100 | 90 | 66 | 82 | 66 | 82 | 105 | 151 |
| 100 and under 250 | 192 | 111 | 84 | 92 | 146 | 136 | 197 |
| 1,000 and under 2,500 | 280 | 309 | 229 | 459 | 338 | 392 | 391 |
| 2,500 and under 5,000 | 132 | 69 | 82 | 151 | 185 | 158 | 203 |
| 5,000 and upwards | 95 | 156 | 218 | 449 | 606 | 2,398 | 1,413 |

Working days lost each year through all stoppages in
progress ${ }^{3}$
Analysis by industry:

| All industries and services | 1,356 | 940 | 1,079 | 1,527 | 1,808 | 3,714 | 2,835 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Building and contracting | 131 | 73 | 36 | 29 | 25 | 7 | 5 |
| Mining and quarrying | 612 | 508 | 338 | 862 | 889 | 2,495 | 644 |
| Metals, engineering and shipbuilding | 332 | 163 | 556 | 526 | 635 | 1,048 | 528 |
| Textiles | 100 | 77 | 36 | 26 | 17 | 47 | 10 |
| Clothing | 13 | 40 | 16 | 19 | 7 | 5 | 68 |
| Transport and communications | 56 | 13 | 54 | 35 | 181 | 85 | 1,491 |
| Other industries and services | 112 | 66 | 43 | 30 | 54 | 27 | 89 |

1. Stoppages involving fewer than ten workers or lasting less than one day have been
omitted except when the aggregate number of working days lost exceeded 100 .
omitted except when the agreegate number of working days lost exceecded 100 .
The figures relate to stoppages begining in the years shown and the figures for
working days lost included dayse begsinning in in the yusequers shown years where the to toppage
extended into the following calendar year
This analysis hows the total working days lost within each year as a result of stoppages


D efore the war more than 22 million tons of food and animal feeding-stuffs were imported into the UK but by 1942 less than 11 million tons were being imported (Hammond 1951:392); thus, between 1939 and 1942 imports of butter and sugar fell by roughly two-thirds and wheat imports fell by a third (table 8.8). The loss of food imports was partly due to the loss of access to markets controlled by the Axis powers, and to enemy action, but the main factors were financial constraints (at least until the advent of Lend-lease in March 1941) and the need to

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economise on scarce shipping capacity (tables 4.19-4.20). State policy towards the agricultural sector was driven by two related concerns: the need to increase domestic production to replace the loss of imported foodstuffs and the desire to maintain a high nutritional level for the the desire to mantain a high nutritionat leveltorne less
population. This in turn meant that the state was les population. This in turn meant that the state was less
concerned with the volume of agricultural output and more concerned about its calorific output (Murray 1955 241).

The consequence of this for domestic production was that arable farming was encouraged at the expense of livestock farming. Thus, in Britain between 1939 and 1943 arable production increased (wheat production by 81 per cent, potatoes by 92 per cent, fodder crops by 27 per cent and vegetables by 30 per cent) whilst livestock numbers, with the exception of cattle (because of the importance of mik output), fell (the pig population by 58 per cent, sheep and lambs by 24 per cent and poultry by 45 per cent)'( tables 4.1-4.9). There were also significant gains in yelds per acre in arable farming, particularly in grain production (table 4.7). Even more impressive than the increases in yield per acre was the performance of the agricultural sector in terms of food value: net calorie output increased by 91 per cent during the war and calorific reliance on imports was cut from 70 per cent to 60 per cent (Murray 1955: 242).

## 4. Estimated food supplies per head of civilian population



### 4.2 Estimated food supplies per head of civilian population



The increases in wartime agricultural output were probably a reflection of increased inputs of land and capital rather than an improved labour input. Although employment in agriculture did increase during the war many of these new workers were inexperienced in agriculture (such as the female recruits of the Women's Land Army and prisoners fwar) or were working in new sectors within agriculture -war) or were work in sectors within agriculture (e., the experienced livestock workers who were transferred to the arable sector) and thus it is likely that the quality of the labour input declined (Williams 1954: 333-5; table 3.12). Increases in the amount of arable land from 1.9 million acres in 1939 to 17.9 milion acres in 1944 (the result of the 'ploughing-up' campaign promoted by the state) undoubtedly helped raise output, although this was irrored by a dedine in the area devoted to permanent grasslands (reflecting the declining importance of livestock) (table 4.3). The key to increased output and yields was, (table 4.3). The key to increased output and yields was, machinery, and their growing acceptance of scientific methods of production and modern methods of farm management (Pollard 1983: 206; tables 4.12, 6.15 and 7.30; Murray 1955: 243-4).

The state played a key role in agriculture during the war both in terms of the support and encouragement it offered to farmers and in terms of the food policy it pursued towards consumers. State support to farmers came in two main forms: first, through central direction and financial
incentives (in the forms of subsidies and grants) the state encouraged farmers to make improvements to their land and to make greater and more effective use of fertilisers and machinery; second, price incentives were used to encourage production (Pollard 1983: 206). The increased prices paid to farmers were not passed on to consumers and this led to a massive rise in the food subsidy borme by at the state: over the course of the war the net annual cost of food subsidies borne by the Ministry of Food rose from
-
Another important prop of wartime food policy was rationing (Howlett 1994a: 291-2). This was primarily used as an anti-inflationary tool and, by being seen to promote equality, it also served as a method of social control However, another important function of rationing was to make the best possible use of the limited food supplies, which included a successful attempt to ensure that the nutritional status of the population did not deteriorate (Milward 1977: 281). Rationing was first introduced in 1940 and by the end of the war had been extended so that it encompassed most basic foodstuff, petrol, clothing and other consumer goods. The inflationary pressures present in the economy following the end of the war meant that the state continued rationing into the postwar period and even extended it (bread, for example, was frst rationed in 1946) and for many foodstuffs rationing did not end until the mid-1950s.

### 4.3 Area of crops and grassland

| Great Britain |  |  |  |  |  |  | Thousand acres |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1936-38 average | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| Crops and grass' |  |  |  |  |  |  |  |  |
| Total | 29,359 | 29,201 | 29,098 | 29,057 | 28,926 | 28,807 | 28,745 | 28,758 |
| Arable land | 11,991 | 11,870 | 13,203 | 14,991 | 16,175 | 17,387 | 17,936 | 17.866 |
| Permanent grassland | 17,368 | 17,331 | 15,089 | 14.066 | 12,752 | 11,420 | 10,809 | 10,892 |
| Tillage |  |  |  |  |  |  |  |  |
| Total | 8,471 | 8,342 | 9,826 | 11,916 | 12,839 | 13,659 | 13,708 | 13,063 |
| Wheat | 1,851 | 1,763 | 1,797 | 2,247 | 2,504 | 3,451 | 3,215 | 2,272 |
| Barley | 926 | 1,010 | 1,321 | 1,457 | 1,513 | 1,771 | 1,957 | 2,201 |
| Oats | 2,130 | 2,135 | 3,002 | 3,501 | 3,658 | 3,210 | 3,215 | 3,305 |
| Mixed com | 96 | 85 | 258 | 529 | 529 | 485 | 415 | 435 |
| Rye (threshed) | 15 | 14 | 17 | 40 | 58 | 128 | 119 | 79 |
| Potatoes | 597 | 589 | 695 | 966 | 1,116 | 1,193 | 1,219 | 1,207 |
| Sugar beet | 335 | 345 | 329 | 351 | 425 | 417 | 431 | 417 |
| Fodder crops: |  |  |  |  |  |  |  |  |
| Beans | 119 | 135 | 90 | 193 | 222 | 248 | 286 | 206 |
| Peas | 40 | 37 | 38 | 64 | 69 | 64 | 57 | 46 |
| Turnips and swedes | 753 | 688 | 720 | 808 | 832 | 806 | 798 | 793 |
| Mangolds | 226 | 215 | 229 | 265 | 268 | 285 | 307 | 307 |
| Other | 297 | 284 | 332 | 482 | 514 | 502 | 523 | 506 |
| Hops | 18 | 19 | 19 | 18 | 18 | 19 | 20 | 20 |
| Mustard (seed) | 27 | 24 | 24 | 17 | 22 | 16 | 13 | 18 |
| Flax for fibre (as straw) | 1 | 2 | 18 | 38 | 45 | 52 | 60 | 44 |
| Fruit | 299 | 293 | 291 | 300 | 292 | 291 | 288 | 285 |
| Vegetables | 277 | 290 | 301 | 371 | 418 | 419 | 499 | 508 |
| Flowers and nursery stock | 24 | 25 | 18 | 14 | 12 | 9 | 9 | 11 |
| Other crops | 17 | 18 | 20 | 35 | 44 | 52 | 47 | 56 |
| Bare fallow | 423 | 374 | 306 | 219 | 280 | 240 | 231 | 347 |
| Temporary grassland |  |  |  |  |  |  |  |  |
| Total | 3,520 | 3,528 | 3,376 | 3,075 | 3,336 | 3,728 | 4,228 |  |
| For hay | 1,730 | 1,689 | 1,698 | 1,547 | 1,858 | 2,095 | 2,266 | 2.589 |
| For grazing | 1,790 | 1,838 | 1,678 | 1.528 | 1,478 | 1,633 | 1,962 | 2,213 |
| Permanent grassland |  |  |  |  |  |  |  |  |
| Total | 17,368 | 17,331 | 15,896 | 14,066 | 12,752 | 11,420 | 10,809 | 10,892 |
| For hay | 4,699 | 4,786 | 4,398 | 3,883 | 3,343 | 2,811 | 2,433 | 2.524 |
| For grazing | 12,669 | 12,545 | 11,497 | 10,184 | 9,409 | 8,609 | 8,379 | 8,369 |
| Rough grazings | 15,944 | 16,006 | 15,995 | 16,344 | 16,289 | 16,420 | 16,278 | 16,554 |

Source:Agricultural Department

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### 4.4 Area of crops and grassland



### 4.5 Estimated quantity of crops and grass harvested

| Great Britain |  |  |  |  |  |  | Thousand tons |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1936-38 average | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| Wheat | 1,646 | 1,642 | 1,628 | 2,000 | 2,556 | 3,435 | 3,134 | 2,174 |
| Barley | 762 | 889 | 1,089 | 1,127 | 1.432 | 1,632 | 1,737 | 2,096 |
| Oats | 1,676 | 1,733 | 2,514 | 2,815 | 3,125 | 2,670 | 2,574 | 2.862 |
| Mixed com | 76 | 73 | 222 | 423 | 447 | 380 | 341 | 366 |
| Rye (grain) | 10 | 10 | 11 | 26 | 45 | 94 | 87 | 58 |
| Potatoes | 4,085 | 4,354 | 5,375 | 6,783 | 8,162 | 8,537 | 8,026 | 8.702 |
| Sugar beet | 2,741 | 3,529 | 3,176 | 3,226 | 3,923 | 3,760 | 3,267 | 3,886 |
| Fodder crops: |  |  |  |  |  |  |  |  |
| Beans | 96 | 111 | 54 | 153 | 162 | 194 | 190 | 161 |
| Peas | 29 | 23 | 30 | 42 | 51 | 43 | 33 | 31 |
| Turnips and swedes | 10,557 | 9,699 | 10,366 | 11,570 | 12,844 | 11,677 | 11,811 | 11,946 |
| Mangolds | 4,065 | 4,050 | 4,229 | 5,090 | 5,404 | 5,785 | 5,543 | 6,508 |
| Straw: |  |  |  |  |  |  |  |  |
| Wheat | 2,062 | 1,986 | 1,854 | 2,347 | 2,810 | 3,759 | 3,327 | 2,304 |
| Barley | 720 | 838 | 961 | 1,083 | 1,282 | 1,425 | 1,492 | 1,776 |
| Oat | 2,212 | 2,227 | 2,858 | 3,515 | 3,805 | 3,197 | 3,072 | 3,263 |
| Hops | 13 | 14 | 14 | 13 | 13 | 14 | 13 | 14 |
| Mustard (seed) | 11 | 11 | 9 | 6 | 9 | 5 | 4 | 6 |
| Flax for fibre (as straw) | 2 | 3 | 30 | 61 | 79 | 107 | 105 | 90 |
| Fruit | 428 | 797 | 558 | 293 | 714 | 644 | 612 | 450 |
| Vegetables | 2,355 | 2,389 | 2,596 | 2,851 | 3,659 | 3,113 | 3,387 | 1,213 |
| Hay from temporary grassland | 2,337 | 2,273 | 2,315 | 2,139 | 2,669 | 3,038 | 2,894 | 3.843 |
| Hay from permanent grassland | 4,539 | 4,783 | 3,898 | 3,786 | 3,233 | 2,844 | 2,093 | 2,659 |

### 4.6 Estimated quantity of crops and grass harvested

| Northerm Ireland |  |  |  |  |  |  | Thousand tons |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1936-38 average | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| Wheat | 6 | 3 | 13 | 18 | 11 | 12 | 4 | 2 |
| Barley | 3 | 3 | 15 | 17 | 14 | 13 | 15 | 12 |
| Oats | 264 | 270 | 378 | 432 | 428 | 394 | 379 | 383 |
| Mixed com |  |  | 4 | 15 | 16 | 14 | 8 | 6 |
| Rye (grain) |  |  |  |  |  |  | । | । |
| Potatoes | 788 | 864 | 1,030 | 1,221 | 1,231 | 1,285 | 1,070 | 1,089 |
| Fodder crops: |  |  |  |  |  |  |  |  |
| Beans |  |  |  | , | 碞 | 1 | 1 | 1 |
| Turnips and swedes | 433 | 385 | 448 | 466 | 380 | 336 | 318 | 324 |
| Mangolds | 17 | 19 | 29 | 30 | 22 | 20 | 17 | 16 |
| Straw: |  |  |  |  |  |  |  |  |
| Wheat | 8 | 4 | 15 | 23 | 14 | 16 | 6 | 2 |
| Barley | 3 | 4 | 18 | 19 | 16 | 15 | 19 | 15 |
| Oat | 382 | 383 | 528 | 579 | 585 | 557 | 553 | 537 |
| Mixed corn |  | + | 6 | 20 | 21 | 18 | 11 | 9 |
| Flax for fibre (as straw) | 43 | 42 | 93 | 180 | 146 | 187 | 249 | 161 |
| Fruit | 23 | 27 | 25 | 28 | 35 | 13 | 54 | 7 |
| Vegetables | 15 | 13 | 21 | 32 | 31 | 30 | 35 | 29 |
| Hay from temporary grassland | 339 | 315 | 338 | 314 | 387 | 400 | 344 | 352 |
| Hay from permanent grassland | 458 | 419 | 460 | 390 | 371 | 387 | 359 | 338 |

### 4.7 Estimated yield per acre

|  | Unit | 1936-38 average | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wheat | Cwts. | 17.7 | 18.6 | 18.1 | 17.8 | 20.4 | 19.9 | 19.5 | 19.1 |
| Barley |  | 16.4 | 17.6 | 16.5 | 15.5 | 18.9 | 18.4 | 17.7 | 19.0 |
| Oats | " | 15.7 | 16.2 | 16.8 | 16.1 | 17.1 | 16.6 | 16.0 | 17.3 |
| Mixed corn | " | 15.8 | 17.2 | 17.2 | 16.1 | 17.0 | 15.7 | 16.5 | 16.8 |
| Rye (grain) | " | 12.5 | 13.7 | 12.6 | 13.2 | 15.4 | 14.7 | 14.7 | 14.6 |
| Potatoes | Tons | 6.9 | 7.4 | 7.7 | 7.0 | 7.3 | 7.2 | 6.6 | 7.2 |
| Sugar beet |  | 8.2 | 10.3 | 9.7 | 9.3 | 9.3 | 9.1 | 7.7 | 9.4 |
| Fodder crops: |  |  |  |  |  |  |  |  |  |
| Beans | Cwts. | 16.3 | 16.4 | 12.0 | 16.0 | 14.7 | 15.8 | 13.4 | 15.7 |
| Peas |  | 14.6 | 12.7 | 16.0 | 13.3 | 15.2 | 13.7 | 12.3 | 13.6 |
| Turnips and swedes | Tons | 14.1 | 14.1 | 14.4 | 14.3 | 15.4 | 14.5 | 14.9 | 15.1 |
| Mangolds |  | 18.0 | 18.9 | 18.5 | 19.3 | 20.3 | 20.4 | 18.1 | 21.3 |
| Straw: |  |  |  |  |  |  |  |  |  |
| Wheat | Cwts. | 22.3 | 22.5 | 20.6 | 20.9 | 22.4 | 21.8 | 20.7 | 20.3 |
| Barley |  | 15.5 | 16.6 | 14.5 | 14.9 | 17.0 | 16.1 | 15.2 | 16.1 |
| Oat |  | 20.8 | 20.9 | 19.0 | 20.1 | 20.8 | 19.9 | 19.1 | 19.8 |
| Hops |  | 13.5 | 15.3 | 14.5 | 14.5 | 14.2 | 14.9 | 13.0 | 14.1 |
| Mustard (seed) | " | 8.5 | 9.3 | 7.6 | 6.9 | 8.7 | 7.0 | 7.1 | 7.6 |
| Flax for fibre (as straw) | Tons | 1.8 | 1.8 | 1.6 | 1.6 | 1.7 | 2.0 | 1.9 | 2.0 |
| Hay from temporary grassland | Cuts. | 26.9 | 26.9 | 27.3 | 27.7 | 28.8 | 29.0 | 25.5 | 29.7 |
| Hay from permanent grassland | " | 19.2 | 20.0 | 17.7 | 19.5 | 19.4 | 20.2 | 17.2 | 21.1 |

### 4.8 Estimated yield per acre

| Northern Ireland |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Unit | $1936-38$ | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
|  |  | average |  |  |  |  |  |  |  |

### 4.9 Number of cattle, sheep, pigs and poultry on agricultural holdings

| Great Britain | At June in each year |  |  |  |  |  |  |  | Thousands |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4481 | 1936 | 1937 | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| Cattle |  |  |  |  |  |  |  |  |  |  |
| Total | 7,853 | 7,909 | 8,030 | 8,119 | 8,361 | 8,153 | 8,248 | 8,428 | 8,616 | 8,697 |
| Cows and heifers in milk | 2,596 | 2,583 | 2,606 | 2,628 | 2,647 | 2,667 | 2,587 | 2,674 | 2,686 | 2,673 |
| Cows in caf but not in milk | 461 | 450 | 429 | 447 | 455 | 489 | 545 | 596 | 605 | 576 |
| Heifers in calf with first calf | 514 | 530 | 541 | 539 | 596 | 552 | 751 | 729 | 744 | 747 |
| Bulls being used for service | 101 | 104 | 106 | 109 | 110 | 111 | 120 | 126 | 127 | 129 |
| Other cattle: |  |  |  |  |  |  |  |  |  |  |
| Two years old and over | 1,109 | 1,117 | 1,099 | 1,144 | 1,214 | 1,056 | 1,086 | 1,092 | 1,188 | 1,311 |
| One year and under two | 1,583 | 1,590 | 1,601 | 1,677 | 1,671 | 1,702 | 1,513 | 1,556 | 1,591 | 1,634 |
| Under one year | 1,490 | 1,535 | 1,649 | 1,575 | 1,667 | 1,577 | 1,646 | 1,654 | 1,674 | 1,628 |
| Sheep and lambs |  |  |  |  |  |  |  |  |  |  |
| Total | 24,205 | 24,712 | 25,882 | 25,993 | 25,465 | 21,445 | 20,764 | 19,700 | 19,435 | 19,496 |
| Ewes for breeding | 10,548 | 10,606 | 10,406 | 10,572 | 10,309 | 8,865 | 8,520 | 7,899 | 7.820 | 7,916 |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| One year old and over | 2,315 | 2,120 | 3,825 | 3,45 | 3,734 | 3,407 | 2,982 | 3,109 | 3,167 | 3,218 |
| Under one year | 11,015 | 11,649 | 11,355 | 11,664 | 11,125 | 8,924 | 9,016 | 8,454 | 8,213 | 8,127 |
| Pigs |  |  |  |  |  |  |  |  |  |  |
| Total | 4,040 | 3,883 | 3,822 | 3,767 | 3,631 | 2,207 | 1,872 | 1,571 | 1,631 | 1,903 |
| Sows for breeding | 512 | 487 | 463 | 479 | 426 | 216 | 221 | 162 | 226 | 218 |
| Boars for service | 37 | 35 | 33 | 33 | 30 | 18 | 18 | 15 | 19 | 19 |
| Other pigs: |  |  |  |  |  |  |  |  |  |  |
| Five months old and over |  |  |  | [ 677 | 827 | 633 | 547 | 573 | 487 | 628 |
| Two months and under five | 3,491 | 3,361 | 3,326 | 1,616 | 1,567 | 933 | 679 | 515 | 522 | 651 |
| Under two months $]$ |  |  |  | [963 | 781 | 408 | 406 | 307 | 377 | 386 |
| Poultry |  |  |  |  |  |  |  |  |  |  |
| Total | 70,005 | 63,704 | 64,053 | 64,137 | 62,121 | 49,126 | 43,212 | 35,299 | 38,481 | 44,665 |
| Total fowls | 65,698 | 59,830 | 59,920 | 60,234 | 58,545 | 46,233 | 40,160 | 32,241 | 34,986 | 40,615 |
| Six months and over | 29,142 | 27,997 | 26,475 | 26,610 | 29,554 | 28,418 | 20,446 | 16,247 | 15,976 | 17,533 |
| Under six months | 36,556 | 31,833 | 33,445 | 33,624 | 28,991 | 17,815 | 19,714 | 15,994 | 19,010 | 23,083 |
| Ducks | 2,843 | 2,499 | 2,564 | 2,467 | 2,263 | 1.796 | 1,981 | 1,939 | 2,234 | 2,542 |
| Geese | 661 | 577 | 634 | 611 | 608 | 620 | 648 | 707 | 779 | 866 |
| Turkeys | 804 | 797 | 934 | 825 | 705 | 477 | 423 | 411 | 483 | 542 |

## 4. 0 Number of cattle, sheep, pigs and poultry on agricultural holding

| Northern Ireland | At June in each year |  |  |  |  |  |  |  | Thousands |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1936 | 1937 | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| Cattle |  |  |  |  |  |  |  |  |  |  |
| Total | 770 | 730 | 732 | 753 | 732 | 787 | 827 | 832 | 886 | 919 |
| Cows and heifers in milk | 250 | 237 | 229 | 213 | 202 | 211 | 222 | 236 | 242 | 245 |
| Cows in calf but not in mik |  |  |  | 32 | 33 | 35 | 43 | 44 | 47 | 49 |
| Heifers in calf with first calf | 25 | 23 | 30 | 25 | 24 | 34 | 51 | 44 | 50 | 53 |
| Bulls being used for service | 5 | 4 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 |
| Other cattle: |  |  |  |  |  |  |  |  |  |  |
| Two years old and over | 81 | 75 | 85 | 85 | 87 | 111 | 128 | 134 | 155 | 186 |
| One year and under two | 199 | 194 | 191 | 190 | 186 | 191 | 180 | 170 | 179 | 180 |
| Under one year | 210 | 198 | 192 | 204 | 196 | 200 | 197. | 198 | 208 | 201 |
| Sheep and lambs |  |  |  |  |  |  |  |  |  |  |
| Total | 835 | 829 | 893 | 895 | 854 | 812 | 742 | 683 | 672 | 654 |
| Ewes for breeding | 382 | 377 | 402 | 403 | 854 | 364 | 332 | 301 | 300 | 295 |
| Rams for serviceOther sheep: |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| One year old and over | 39 | 36 | 46 | 43 | 51 | 71 | 60 | 61 | 65 | 71 |
| Under one year | 403 | 406 | 433 | 437 | 413 | 366 | 340 | 312 | 297 | 279 |
| Pigs |  |  |  |  |  |  |  |  |  |  |
| Total | 522 | 570 | 561 | 627 | 475 | 351 | 271 | 257 | 237 | 249 |
| Sows for breeding | 57 | 54 | 58 | 63 | 42 | 29 | 28 | 24 | 26 | 27 |
| Boars for service | 2 | 2 | 2 | 2 | 1 | 0.6 | 0.5 | 0.3 | 0.4 | 0.4 |
|  |  |  |  |  |  |  |  |  |  |  |
| Five months old and over |  |  | 83 | 90 | 93 | 78 | 65 | 41 | 31 |  |
| Two months and under five | 463 | 514 | 230 | 255 | 212 | 181 | 133 | 153 | 142 | 149 |
| Under two months |  |  | 189 | 217 | 128 | 61 | 45 | 40 | 38 | 39 |
| Poultry |  |  |  |  |  |  |  |  |  |  |
| Total | 10,570 | 10,182 | 10,193 | 10,220 | 9,122 | 12,933 | 14,601 | 15,430 | 16,646 | 17,471 |
| Fowls | 9,543 | 9,222 | 9,199 | 9,295 | 8,120 | 11,850 | 13,342 | 14,130 | 15.256 | 16,050 |
| Ducks | 499 | 428 | 425 | 415 | 396 | 530 | 664 | 701 | 759 | 794 |
| Geese | 139 | 112 | 113 | 104 | 103 | 115 | 118 | 114 | 123 | 124 |
| Turkeys | 389 | 420 | 456 | 406 | 413 | 438 | 478 | 485 | 508 | 504 |

## 4. | | Horses grazed on agricultural land

|  | At June in each year |  |  |  |  |  |  |  | Thousands |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1936 | 1937 | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| Great Britain Total | 1,013 | 1,005 | 1,002 | 987 | 959 | 962 | 917 | 871 | 829 | 796 |
| Used for agricultural purposes' | 672 | 663 | 668 | 649 | 642 | 667 | 585 | 616 | 577 | 545 |
| Unbroken horses: One year old and over Under one year | $\begin{gathered} 108 \\ 57 \end{gathered}$ | $\begin{gathered} 114 \\ 61 \end{gathered}$ | $\begin{array}{r} 122 \\ 60 \end{array}$ | $\begin{array}{r} 131 \\ 57 \end{array}$ | $\begin{aligned} & 126 \\ & 50 \\ & 50 \end{aligned}$ | $\begin{array}{r} 114 \\ 42 \end{array}$ | $\begin{array}{r} 105 \\ 39 \end{array}$ | $\begin{aligned} & 90 \\ & 37 \end{aligned}$ | $\begin{aligned} & 87 \\ & 87 \end{aligned}$ | $\begin{aligned} & 87 \\ & 34 \end{aligned}$ |
| Stallions being used for service | 4 | 4 | 5 | 5 | 4 | 3 | 3 | 3 | 3 | 3 |
| Other ${ }^{2}$ | 171 | 162 | 148 | 146 | 136 | 136 | 184 | 125 | 126 | 127 |
| Northern Ireland Total | 99 | 98 | 99 | 97 | 97 | 97 | 95 | 90 | 88 | 85 |
| Used for agricutural purposes' | 81 | 81 | 80 | 76 | 77 | 80 | 80 | 77 | 75 | 72 |
| Unbroken horses: One year old and over ${ }^{3}$ Under one year | $\begin{aligned} & 5 \\ & 4 \end{aligned}$ | $\begin{aligned} & 6 \\ & 4 \end{aligned}$ | $\begin{aligned} & 7 \\ & 5 \end{aligned}$ | $\begin{aligned} & 9 \\ & 5 \end{aligned}$ | 8 | $\begin{aligned} & 7 \\ & 3 \end{aligned}$ | $\begin{aligned} & 6 \\ & 3 \end{aligned}$ | 5 2 | 4 3 | 4 3 |
| Other ${ }^{2}$ | 8 | 7 | 6 | 8 | 8 | 7 | 7 | 6 | 6 | 6 |

[^5]to which they are put.
3. Including stallions being used for service.

## 4. 12 Agricultural tractors, machines and implements in use

| Great Britain |  |  | Nurrber |
| :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & 1942 \\ & \text { May } \end{aligned}$ | $\begin{aligned} & 194 \\ & \text { April } \end{aligned}$ | $\begin{array}{r} 1946 \\ \text { January } \end{array}$ |
| Tractors: |  |  |  |
| Total | 116.830 | 173,370 | 203,420 |
| Tracklayers | 5,600 | 9,090 | 12,350 |
| Three and four-wheeled | 104,780 | 153,350 | 175,050 |
| Two-wheeled market garden type | 6,450 | 10,930 | 16,020 |
| Mouldboard ploughs: |  |  |  |
| Total | 465,630 | 466,860 | 482,190 |
| Horse drawn | 353,180 | 312,710 | 303,240 |
| $\begin{array}{llll}\text { Tractor drawn } & 112,450 & \text { 154,150 } & \text { 178,950 }\end{array}$ |  |  |  |
| Disc harrows | 33,840 | 58,860 | 65,200 |
| Cultivators or grubbers | 161,690 | 191,410 | 247,790 |
| Toolbars | 14,340 | 23,100 | 33,710 |
| Corn drils ${ }^{2}$ | 101,550 | 108,640 | 115,510 |
| Mowing machines | 220,420 | 210,590 | 228,320 |
| Binders | 131,600 | 144,040 | 149,500 |
| Threshing machines | $13,150^{3}$ | $14,960^{3}$ | 14.960 |
| Combined harvester-threshers | 1,000 | 2,500 | 3,800 |
| Potato spinners | 37,030 | 53,460 37,790 | 59,470 48,290 |
| Milking machines | 29,510 | 37,790 | 48,290 |

Including combined seed and fertilizer drills
2. Including combined seed and fertilizer

## 4. I 3 Movement off farms of cereals, potatoes and sugar beet

|  | Weekly averages |  |  |  |  |  |  |  |  |  |  | Thousand tons |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Year | Jan* | Feb | Mar | Apr* | May | Jun | ju* | Aug | Sep | Oct* | Nov | Dec |
| Cereals: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{lllllllllllllll}1940 & 18.3 & 22.8 & 24.0 & 19.8 & 13.4 & 12.5 & 5.5 & 2.4 & 21.8 & 31.3 & 25.6 & 23.0 & 20.5\end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1941 | 18.4 | 20.0 | 19.5 | 18.3 | 12.2 | 10.0 | 6.5 | 2.0 | 4.3 | 31.0 | 34.0 | 33.0 | 31.0 |
| 1942 | 31.1 | 33.2 | 48.8 | 49.8 | 32.8 | 29.3 | 10.5 | 1.8 | 8.8 | - 36.8 | 41.4 | 43.5 | 40.3 |
| 1943 | 44.6 | 41.6 | 47.8 | 47.0 | 41.8 | 46.8 | 34.0 | 11.6 | 30.8 | - 62.3 | 61.8 | 60.5 | 53.0* |
| 1944 | 47.9 | 64.0 | 67.0 | 70.0 | 58.8 | 57.8 | 38.5 | 14.0 | 38.0 | 49.5 | 43.6 | 39.5 | 37.0 |
| 1945 | 39.6 | 44.4 | 52.5 | 50.5 | 50.8 | 45.8 | 44.5 | 18.6 | 30.3 | 50.5 | 32.2 | 30.5 | 28.3 |
| Barley ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1941 | 13.6 |  |  |  |  |  |  | 1.2 | 2.0 | 21.8 | 23.0 | 28.3 | 30.0 |
| 1942 | 17.2 | 22.8 | 23.0 | 18.0 | 7.0 | 3.8 | 2.3 | 1.0 | 9.5 | 37.5 | 23.0 | 29.0 | 33.3 |
| 1943 | 24.8 | 30.4 | 32.3 | 30.0 | 16.2 | 11.5 | 6.5 | 6.8 | 34.8 | 36.3 | 28.6 | 39.0 | 29.2* |
| 1944 | 23.7 | 30.2 | 30.8 | 27.3 | 15.0 | 10.3 | 5.5 | 4.0 | 28.5 | 42.0 | 32.6 | 31.3 | 30.5 |
| 1945 | 32.1 | 28.6 | 35.3 | 35.0 | 22.8 | 14.8 | 9.3 | 6.8 | 45.8 | 55.8 | 44.0 | 47.5 | 46.3 |
| Oats ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1941 | 4.5 |  |  |  |  |  |  | 1.7 | 1.2 | 5.6 | 6.2 | 7.8 | 8.3 |
| 1942 | 8.1 | 7.2 | 8.8 | 9.5 | 7.0 | 6.8 | 6.8 | 4.6 | 5.3 | 5.5 | 10.2 | 13.3 | 13.0 |
| 1943 | 10.8 | 14.0 | 15.5 | 16.0 | 14.2 | 14.5 | 11.8 | 8.6 | 4.8 | 3.3 | 8.8 | 9.0 | 9.8 * |
| 1944 | 6.9 | 9.6 | 9.8 | 8.8 | 8.0 | 5.8 | 6.0 | 4.0 | 2.8 | 5.3 | 7.2 | 8.3 | 7.5 |
| 1945 | 6.7 | 5.6 | 6.5 | 5.8 | 5.4 | 4.3 | 4.5 | 28 | 3.5 | 9.8 | 10.2 | 11.5 | 11.0 |
| Potatoes ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 63.9 |  | 72.0 | 68.5 | 72.2 | 54.8 | 38.0 | 54.4 | 53.5 | 60.5 | 69.8 | 72.8 | 80.5 |
| 1941 | 80.4 | 83.6 | 98.0 | 100.5 | 95.6 | 96.5 | 59.3 | 54.8 | 71.5 | 68.5 | 75.4 | 78.0 | 85.8 |
| 1942 | 97.1 | 87.6 | 121.3 | 112.3 | 88.6 | 90.8 | 94.0 | 98.8 | 81.3 | 92.3 | 91.2 | 102.3 | 110.5 |
| 1943 | 113.9 | 116.0 | 118.0 | 115.5 | 123.6 | 128.5 | 114.0 | 117.0 | 92.5 | 98.3 | 102.4 | 113.0 | $124.6{ }^{*}$ |
| 1944 | 122.8 | 139.8 | 141.0 | 14.5 | 142.2 | 110.0 | 113.3 | 107.0 | 103.0 | 116.0 | 114.2 | 123.3 | 120.8 |
| 1945 | 118.2 | 117.6 | 150.5 | 123.5 | 127.4 | 104.0 | 89.3 | 101.2 | 1028 | 127.5 | 117.6 | 137.5 | 121.8 |
| Sugar ${ }^{3}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1939 | 9.5 | 1.1 |  |  |  |  |  |  |  | 0.8 | 27.8 | 36.5 | 33.6 |
| 1940 | 9.64 | 12.8 | - | - |  | - |  |  |  |  | 31.5 | 34.3 | 33.8 |
| 1941 | 8.1 | 10.0 |  |  |  | - | - |  |  |  | 19.4 | 35.0 | 32.9 |
| 1942 | 9.1 | 18.2 | 0.7 | - |  |  |  |  |  |  | 22.8 | 35.9 | 31.7 |
| 1943 | 10.5 | 24.3 | 4.5 |  |  |  |  |  |  |  | 26.2 | 32.7 | 31.2* |
| 1944 | 7.5 | 14.4 | 0.5 |  |  |  |  |  |  | 0.3 | 20.9 | 28.5 | 24.3 |
| 1945 | 8.6 | 13.9 | 0.4 |  |  |  |  |  |  |  | 27.0 | 33.9 | 26.9 |

2. Recer human consumption, processing and stock feeding under Ministry schemes
3. Production of refined sugar from home-grown sugar beet

Average of five weeks.

## 4. I4 Animals purchased for slaughter'



## 4. I4 Animals purchased for slaughter'

| continued |  | Weekly averages |  |  |  |  |  |  |  |  |  | Thousands |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Year | Jan* | Feb | Mar | Apr* | May | Jun | Ju** | Aug | Sep | Oct* | Nov | Dec |
| Calves |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1939 | 15.4 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1940 | 16.5 | 10.4 | 19.0 | 21.4 | 19.1 | 12.5 | 11.6 | 15.6 | 16.1 | 20.9 | 21.6 | 15.9 | 14.4 |
| 1941 | 20.3 | 18.7 | 22.6 | 27.8 | 28.1 | 23.2 | 19.6 | 20.2 | 17.2 | 17.3 | 18.6 | 16.0 | 13.6 |
| 1942 | 21.5 | 16.3 | 20.8 | 28.0 | 25.4 | 20.5 | 16.9 | 19.6 | 19.7 | 22.5 | 26.7 | 22.0 | 19.0 |
| 1943 | 25.5 | 23.1 | 26.8 | 36.3 | 31.7 | 23.2 | 17.6 | 17.6 | 20.0 | 26.0 | 31.3 | 29.4 | 23.6* |
| 1944 | 25.9 | 24.9 | 30.2 | 36.0 | 25.2 | 15.9 | 14.9 | 17.3 | 22.1 | 30.0 | 36.6 | 33.2 | 24.2 |
| 1945 | 26.9 | 28.7 | 34.4 | 36.1 | 25.8 | 16.7 | 14.0 | 17.6 | 21.3 | 31.0 | 38.3 | 32.8 | 25.0 |
| Sheep and lambs |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1939 | 227.1 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1940 | 212.5 | 154.4 | 168.6 | 158.7 | 94.3 | 100.3 | 152.3 | 242.6 | 288.1 | 328.8 | 376.1 | 294.5 | 186.5 |
| 1941 | 158.4 | 186.7 | 149.0 | 142.9 | 141.0 | 101.3 | 106.4 | 172.5 | 172.9 | 139.3 | 149.5 | 264.8 | 170.1 |
| 1942 | 152.5 | 169.9 | 145.8 | 142.4 | 126.8 | 86.7 | 70.4 | 113.8 | 142.6 | 145.2 | 223.5 | 266.4 | 190.6 |
| 1943 | 140.7 | 181.7 | 139.7 | 136.9 | 139.6 | 89.9 | 72.5 | 83.5 | 102.5 | 121.3 | 162.7 | 232.3 | 207.6* |
| 1944 | 127.2 | 166.9 | 149.8 | 137.7 | 86.1 | 63.7 | 56.2 | 75.5 | 87.8 | 111.0 | 181.2 | 238.1 | 172.7 |
| 1945 | 121.4 | 163.5 | 131.3 | 131.7 | 97.2 | 64.2 | 48.6 | 65.0 | 83.2 | 120.3 | 160.7 | 221.0 | 169.3 |

Pigs3:
Bacon
Bas


1. Great Britain only, Fat cattle, sheep and lambs sent from Eire and Northern Ireland
2. Ire included. Detailed
3. Excluding pigss fattened by self supplers
4. The numbero of ipiss other than baconers slaughtered in 1939 was 3,011 thousand

* Average of five weeks.


## 4. I5 Milk: Sales through the Marketing Schemes

|  | Monthly averages or calendar months |  |  |  |  |  |  |  |  |  |  | Million gallons |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| Total sales |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1939 | 108.3 | 90.1 | 85.8 | 100.0 | 107.2 | 130.3 | 131.2 | 128.8 | 124.6 | 114.3 | 108.0 | 91.8 | 87.6 |
| 1940 | 102.3 | 85.0 | 82.6 | 93.6 | 99.6 | 129.3 | 127.8 | 121.3 | 118.0 | 101.2 | 95.1 | 85.7 | 87.7 |
| 1941 | 101.9 | 88.3 | 83.2 | 97.7 | 100.3 | 121.4 | 127.7 | 119.5 | 110.9 | 103.8 | 100.5 | 86.5 | 83.5 |
| 1942 | 105.8 | 83.8 | 79.1 | 95.5 | 104.3 | 130.1 | 137.4 | 129.3 | 119.4 | 109.3 | 102.6 | 89.5 | 88.8 |
| 1943 | 112.0 | 90.9 | 86.6 | 105.1 | 117.5 | 147.0 | 145.6 | 132.6 | 118.0 | 106.4 | 104.4 | 94.2 | 95.8 |
| 1944 | 114.8 | 99.3 | 97.4 | 112.2 | 122.2 | 152.6 | 142.8 | 129.3 | 116.6 | 104.9 | 105.0 | 96.3 | 99.4 |
| 1945 | 118.7 | 101.9 | 96.9 | 115.8 | 130.0 | 155.3 | 145.6 | 133.9 | 121.2 | 106.7 | 109.3 | 102.0 | 105.6 |
| Liquid sales |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1939 | 72.0 | 73.2 | 68.4 | 74.8 | 71.7 | 75.6 | 74.2 | 74.7 | 72.1 | 67.6 | 70.2 | 69.4 | 71.5 |
| 1940 | 78.1 | 73.2 | 70.0 | 74.6 | 74.4 | 77.6 | 77.4 | 77.9 | 80.9 | 80.1 | 83.9 | 82.9 | 84.2 |
| 1941 | 88.6 | 86.1 | 81.6 | 92.8 | 85.1 | 89.5 | 88.6 | 93.6 | 92.6 | 91.4 | 95.3 | 85.1 | 82.2 |
| 1942 | 92.9 | 82.7 | 76.1 | 87.7 | 90.0 | 97.4 | 101.7 | 105.0 | 100.9 | 98.2 | 99.1 | 88.5 | 87.0 |
| 1943 | 97.4 | 89.7 | 83.9 | 96.0 | 95.0 | 109.5 | 107.1 | 105.7 | 97.9 | 97.6 | 100.2 | 93.0 | 93.4 |
| 1944 | 100.4 | 95.7 | 91.1 | 98.0 | 95.9 | 113.2 | 110.7 | 105.0 | 101.4 | 100.4 | 103.1 | 95.2 | 95.4 |
| 1945 | 103.6 | 97.7 | 89.9 | 102.4 | 103.7 | 112.5 | 111.8 | 110.9 | 104.8 | 102.5 | 106.2 | 99.3 | 101.1 |

Used for manu-

| facturel |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1939 | 36.3 | 16.9 | 17.4 | 25.2 | 35.5 | 54.7 | 57.0 | 54.1 | 52.5 | 46.7 | 37.8 | 22.4 | 16.1 |
| 1940 | 24.2 | 11.8 | 12.6 | 19.0 | 25.2 | 51.7 | 50.4 | 43.4 | 37.1 | 21.1 | 11.2 | 2.8 | 3.5 |
| 1941 | 13.3 | 2.2 | 1.6 | 4.9 | 15.2 | 31.9 | 39.1 | 25.9 | 18.3 | 12.4 | 5.2 | 1.4 | 1.3 |
| 1942 | 12.9 | 1.1 | 3.0 | 7.8 | 14.3 | 32.7 | 35.7 | 24.3 | 18.5 | 1.1 | 3.5 | 1.0 | 1.8 |
| 1943 | 14.6 | 1.2 | 2.7 | 9.1 | 22.5 | 37.5 | 38.5 | 26.9 | 20.1 | 8.8 | 4.2 | 1.2 | 2.4 |
| 1944 | 14.4 | 3.6 | 6.3 | 14.2 | 26.3 | 39.4 | 32.1 | 24.3 | 15.2 | 4.5 | 1.9 | 1.1 | 4.0 |
| 1945 | 15.1 | 4.2 | 7.0 | 13.4 | 26.3 | 42.8 | 33.8 | 23.3 | 16.4 | 4.2 | 3.1 | 2.7 | 4.5 | | 1. Manufacture into mil products together with the quantity used on farms for |
| :--- |
| chese-making. |

## 4. 16 Processed food: Production'

| Thousand tons |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Wheat milled | 5,627 ${ }^{2}$ | 5,973 | 6,067 | 5,326 | 5,026 | 5,348 | 5,716 |
| Flour produced | 3,939 ${ }^{\text {2 }}$ | 4,391 | 4,600 | 4,394 | $4,527^{3}$ | 4,470 ${ }^{\text {3 }}$ | 4,524 |
| Oat milling: |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Oats milled by oatmeal millers |  |  | 219 | 314 | 449 | 396 | 321 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Oilseeds and nuts processed | 1,596 | 1,618 | 1,370 | . 448 | 1,264 | 1,292 | 1,336 |
| Crude oil produced | 515 | 622 | 578 | 599 | 529 | 538 | 570 |
| Oilcake and meal produced | $1,082^{4}$ | 969 | 766 | 810 | 671 | 715 | 735 |
| Vegetable oil consumption ${ }^{\text {a }}$ |  |  |  |  |  |  |  |
| Total disposals |  | 787 | 819 | 768 | 696 | 745 | 782 |
| For food |  | 475 | 517 | 447 | 425 | 456 | 475 |
| Whale, herring and seal oil consumptions: ${ }^{\text {s }}$ |  |  |  |  |  |  |  |
| Total disposals | . | 185 | 152 | 127 | 104 | 73 | 121 |
| For food |  | 157 | 128 | 108 | 86 | 55 | 93 |
| Production of home-killed meat ${ }^{6}$ : |  |  |  |  |  |  |  |
| Total | 1,180 | 1,072 | 902 | 772 | 754 | 783 | 812 |
| Beef | 602 | 557 | 523 | 453 | 445 | 487 | 517 |
| Veal | 23 | 25 | 28 | 28 | 33 | 32 | 34 |
| Mutton and lamb | 238 | 227 | 176 | 171 | 159 | 142 | 134 |
| Pork ${ }^{\text { }}$ | 201 | 155 | 74 | 29 | 27 | 30 | 34 |
| Offal | 116 | 108 | 101 | 91 | 90 | 92 | 93 |
| Production of bacon and ham ${ }^{7}$ | 199 | 207 | 174 | 121 | 123 | 139 | 149 |
| Production of animal fats: |  |  |  |  |  |  |  |
| Lard | . | 85 | 4 | 3 | 2 | 2 | 3 |
| Production of milk products: $\quad \cdots \begin{array}{lllllllllllll} \\ \end{array}$ |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Butter ${ }^{\text {8 }}$ | 21 | 16 | 8 | 10 | 9 | 10 | 8 |
| Cheese ${ }^{9}$ | 43 | 32 | 30 | 20 | 22 | 18 | 22 |
| Condensed milk |  | 178 | 72 | 96 | 97 | 111 | 94 |
| Milk powder |  | 15 | , | 14 | 23 | 23 | 29 |
| Cream | 33 | 15 |  | . |  |  |  |
| Sugar: production from home-grown |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Margarine | 226 | 359 | 419 | 406 | 392 | 399 | 406 |
| Compound cooking fat | 132 | 159 | 145 | 62 | 53 | 32 | 85 |
| Production of other processed foods: |  |  |  |  |  |  |  |
| Jam and marmalade | 22011 | 72 | 86 | 195 | 324 | 192 | 273 |
| Syrup and treacle | $95^{+1}$ | 72 | 86 | 82 | 96 | 108 | 106 |
| Canned vegetables | 160 | 190 | 209 | 195 | 177 | 192 | 204 |
| Canned and bottled fruit |  |  | 16 | 42 |  | 6 | 10 |
| Canned meat |  |  |  | 43 | 60 | 79 | 54 |
| Canned fish |  |  | 1 |  | 2 | 1 | 2 |
| Biscuits | 300 | 330 | 361 | 358 | 278 | 272 | 261 |
| Breakfast cereals |  |  | 45 | 47 | 45 | 47 | 47 |
| Chocolate confectionery |  | 173 | 187 | 162 | 145 | 148 | 127 |
| Sugar confectionery |  | 150 | 149 | 128 | 107 | 114 | 111 |
| Cocoa and drinking chocolate |  | 19 | 26 | 29 | 24 | 27 | 28 |
| Starch |  |  | 42 | 35 | 37 | 38 | 38 |
| Pearl barley and barley products | 4 | 13 | 16 | 12 | 13 | 19 | 27 |

1. Figures for 1939 relate to the calendar year except where othenwise:
stated. From 1940 onwards figures are for periods of 52 weeks ( 53 weeks in
1943) except for condensed milk and mik powder
2. Year ended 31 July.
3. Includuding castor cake whil produced from barley, rye and oats.
4. As crude oil. cake which is unft for animal feed.
5. Including production from fat cattle and fresh meat
. Including meat and offal produced by pig clubs, etc
6. Iccluding meat and offal pro
7. Including farmhouse cheese
8. Year ended January
9. Year ended 30 June.

## 4. I7 Food and animal feeding stuffs: Consumption'

|  | Thousand tons |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| Cereal products and sugar: |  |  |  |  |  |  |
| Flour: |  |  |  |  |  |  |
| Total disposals | 4,573 | 5,149 | 4,967 | 5,138 | 5,234 | 5,433 |
| For food in the United Kingdom | 4,497 | 5,086 | 4,856 | 4,982 | 5,095 | 5,161 |
| Rice 188 <br> l 156 |  |  |  |  |  |  |
| Sugar: |  |  |  |  |  |  |
| Total disposals | 1,657 | 1,550 | 1,533 | 1,540 | 1,765 | 1,761 |
| For food in thle United Kingdom | 1,588 | 1,453 | 1,478 | 1,519 | 1,641 | 1,629 |
| Syrup and treacle | 72 | 78 | 86 | 95 | 110 | 108 |
| Starch |  | 153 | 134 | 106 | 119 | 114 |
| Oatmeal and flakes |  | 167 | 210 | 257 | 223 | 217 |
| Other breakfast cereals |  | 45 | 51 | 45 | 47 | 47 |
| Meat and fish: |  |  |  |  |  |  |
| Fresh and frozen meat and offal | 2,151 | 1,728 | 1,681 | 1,672 | 1,826 | 1,706 |
| Canned corned meat | 31 | 40 | 81 | 105 | 89 | 117 |
| Other canned meat | 26 | 44 | 178 | 193 | 220 | 259 |
| Bacon and ham <br> Fresh, frozen and cured fish (landed weight): |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Total disposals | 495 | 425 | 493 | 504 | 560 | 735 |
| For food in the United Kingdom | 455 | 421 | 485 | 499 | 543 | 709 |
| Canned fish | 120 | 89 | 82 | 82 | 95 | 118 |
| Dairy products: |  |  |  |  |  |  |
| Butter | 290 | 205 | 166 | 170 | 161 | 183 |
| Cheese | 186 | 187 | 297 | 261 | 232 | 232 |
| Condensed milk. | 224 | 189 | 224 | 219 | 205 | 175 |
| Milk powder | 32 | 18 | 62 | 97 | 79 | 105 |
| Eggs in shell | 399 | 344 | 248 | 207 | 203 | 257 |
| Dried egg | 2 | 3 | 40 | 57 | 59 | 81 |
| Frozen liquid egg | 49 | 31 | 6 | 4 | 9 | 1 |
| Fats: |  |  |  |  |  |  |
| Margarine | 343 | 399 | 395 | 394 | 410 | 424 |
| Lard and compound cooking fat | 193 | 208 | 248 | 253 | 256 | 234 |
| Fruit and vegetables: |  |  |  |  |  |  |
| Dried fruit | 159 | 173 | 192 | 151 | 223 | 202 |
| Canned and bottled fruit |  | 39 | 59 | 75 | 25 | 18 |
| Jam and marmalade | 227 | 251 | 290 | 363 | 345 | 290 |
| Potatoes? ${ }^{\text {2 }}$ |  |  |  |  |  |  |
| Total disposals | 3,404 | 4,194 | 5,058 | 6,043 | 6,421 | 6,111 |
| For food in the United Kingdom | 3,356 | 3,850 | 4,602 | 5,460 | 6,154 | 5,820 |
| Canned vegetables |  | 174 | 255 | 201 | 211 | 244 |
| Dried peas, beans and lentils | 111 | 150 | 132 | 132 | 156 | 157 |
| Other foods: |  |  |  |  |  |  |
| Chocolate and sugar confectionery |  |  |  | 249 | 258 | 241 |
| Biscuits |  |  | 352 | 272 | 272 | 260 |
| Tea | 213 | 184 | 181 | 164 | 168 | 191 |
| Raw coffee | 26 | 25 | 27 | 31 | 40 | 47 |
| Cocoa beans |  |  |  | 115 |  | 127 |
|  |  |  |  |  |  |  |
| For brewing For food |  | - |  | 424 | 50 | 44 |
| For animal feed | . | . |  | 4 | 307 | 280 |
| Maize: |  |  |  |  |  |  |
| Total disposals | 2,037 | 809 | 180 | 124 | 116 | 406 |
| Animal feed | 1,889 | 702 | 61 | 6 | 6 | 294 |
| Oilcake and meal | 1,329 | 899 | 902 | 690 | 786 | 825 |
| Milling offals | 1,989 | 1,600 | 886 | 898 | 817 | 1,108 |
| Fish and meat meal | 118 | 67 | 51 | 55 | 69 | 69 |

1. Figures relate to periods of 52 weeks ( 53 weeks in 1943) except for fresh,
frozen and cured fish, condensed and powdered milk and cocoa beans, the
figures for which are for calendar years.
figures for which are for calendar yer

## 4. I8 Estimated food supplies per head of civilian population



## 4. 19 Arrivals of Lend-Lease foodstuffs from the United States of America ${ }^{1,2}$



AGRICULTURE
4. 9 Arrivals of Lend-Lease foodstuffs from the United States of America ${ }^{1,2}$


3 to 30 September 1945. There were no arrivals in the fourth quarter of 1945
4.20 Losses of food and feeding-stuffs at sea


| continued |  | Monthly averages or calendar months |  |  |  |  |  |  |  |  | Thousand tons |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Cereal products and sugar |  |  |  |  | Meat | $\begin{array}{r} \text { Dairy } \\ \text { products } \end{array}$ | Oilseeds, oils and fats | $\begin{gathered} \text { Fruit } \\ \text { and } \\ \text { veget- } \\ \text { ables } \end{gathered}$ | Beverages |  |  |
|  |  | $\begin{aligned} & \text { Total } \\ & \text { losses } \end{aligned}$ | $\begin{gathered} \text { Total } \\ \text { grains } \\ \text { and } \\ \text { pulses } \end{gathered}$ | Wheat | Animal feedingstuffs | Sugar |  |  |  |  | Tea | Other | Other food |
| 1943 | January | 15.4 | 10.3 | 9.7 |  |  |  |  | 4.6 | 0.5 |  |  |  |
|  | February | 23.9 | 14.1 | 13.5 |  |  | 3.3 | 2.2 |  | 1.3 | 2.4 |  | 0.6 |
|  | March | 169.8 | 45.4 | 38.7 | - | 31.6 | 32.3 | 15.6 | 34.0 | 2.5 | 2.4 | 0.9 | 5.1 |
|  | April | 64.8 | 11.7 | 7.8 | - | - | 20.1 | 4.7 | 23.1 | 0.1 | 3.4 |  | 1.7 |
|  | May | 48.1 | 23.7 | 21.2 |  | 2.3 | 1.4 | 0.1 | 18.3 | 0.1 | 1.9 | 0.1 | 0.2 |
|  | June | 4.4 | 1.3 | 1.1 | - | - | 0.1 | 0.2 | 2.1 | 0.5 |  |  | 0.2 |
|  | July | 13.6 | 5.7 | 5.7 | - |  |  | 0.5 | 7.4 |  |  |  |  |
|  | August | 2.0 | 0.2 | - |  | 0.9 | 0.3 | 0.5 | - | 0.1 |  | - |  |
|  | September | 10.1 | 4.2 | - |  |  | 3.6 | 0.2 | 0.9 | - | 1.2 | - |  |
|  | October | 8.0 | 4.1 | 4.1 | - | - |  | 0.3 | 1.1 |  | 2.3 | - | 0.2 |
|  | November |  |  | - | - |  |  |  |  |  |  | - |  |
|  | December | 11.3 | 1.2 | - |  | 2.6 | - | 0.8 | 6.7 | - | - | - |  |
| 1944 | January | 3.4 |  | - |  |  | 2.4 | 0.3 | 0.3 | 0.4 |  |  |  |
|  | February | 2.1 | - | - | - | - |  |  |  | 0.1 |  | 1.8 | 0.2 |
|  | March | 5.4 | - | - | - |  |  |  | 5.4 | - |  |  |  |
|  | April | 4.1 | - | - | - | 3.9 | - |  | - |  |  | 0.2 |  |
|  | May | - | - | - | - | - |  |  |  | - |  |  |  |
|  | ${ }^{\text {June }}$ July |  | - | - | - | - | - |  |  | 0.4 |  | 0.5 |  |
|  | August | 6.0 | - | - | - | - | - | - | 3.8 |  | 2.2 | - |  |
|  | September |  |  | - |  | - | - |  |  | - |  |  |  |
|  | October | 7.3 | 0.5 | - | - | - | 2.2 | - | 4.6 | - |  |  |  |
|  | November |  |  |  |  | - |  |  |  |  |  |  |  |
|  | December | 10,7 | 2.0 | 1.5 | - | - | 3.0 | - | 2.2 | 0.5 | - | 3.0 |  |
| 1945 | January | 11.2 | 11.2 | 10.6 | - | - | - | - | - | - |  |  |  |
|  | February |  | - | - | - |  |  |  | 3 | - |  |  |  |
|  | March | 0.9 | - | - | 0.6 | - | - | - | 0.3 | - | - | - |  |
|  | $\begin{aligned} & \text { April } \\ & \text { May } \end{aligned}$ |  | - | - | - | - | - | - | - | $\square$ | - | - |  |

## 5 FUEL AND POWER

problems emerged in 1941 but part of their origins can be traced back to the loss of labour earlier in the war. The fal of France in 1940 and the loss of other overseas markets of to a marked deline in exports from 37 million tons led to a marked decline in exports (from 37 milion tons
1939 to 20 million tons in 1940 and to a mere 5 million tons in 1941) and this had serious repercussions on th industry: unemployment in the export-orientated coal regions rose and miners left to find employment in other industries or in the Armed Forces (Supple 1987: 503-5; table 9.12). Thus, the labour force fell from a peak of 767000 in June 1940 to 690000 by May 1941 and although state intervention (including the 'Bevin Boys' scheme which recruited approximately 20,000 new workers for the industry in 1944 and 1945) did reverse this trend, it never managed to restore the former level of employment (Court 1951: 304-6; table 5.6).

Furthermore, the percentage of total manshifts worked at the coal face was also declining and these factors, combined with increasing absenteeism and poor industria relations (the coal industry accounted for by far the largest share of total days lost through industrial disputes, peaking in 1944 when 2.5 million days were lost) resulted in the falling output and productivity that characterised the industry during the war (Supple 1987: 504-16, 525-7 tables 5.6 and 3.30 ).
5. War-time performance of the coal industry


FUEL AND POWER
The shortfall in energy supplies created by problems in the coal industry was compensated by expansion in the gas industry and, particularly, the electricity industry: gas output increased by 18 per cent between 1939 and 1944 (tables 5.9 and 5.11). However, their expansion was not without its cost: about a fifth of the demand for coal came from the gas and electricity industries and their combined consumption rose from 39 million tons in 1939 to 45 million tons by 1944 (table 5.4). Whilst coal consumption by both industrial and domestic users declined continuously from 1940 , electricity sales to industrial users increased by 71 per cent between 1939 and 1944 and by 32 per cent to domestic users (the latter helped by changes in the price structure which saw domestic electricity prices remain stable while domestic coal prices rose by two-thirds) (Hannah 1979: 305; court 1951: 147-62; tables 5.4 and 5.12).

In the early period of the war electricity sales had been adversely affected by the 'blackout' but the expansion of munitions production led to a rapid increase in
consumption after 1940 (Hannah 1979:291). To meet this increased demand the capacity of power stations was increased by 35 per cent; furthermore, the National Grid was extended to service factories that were relocated to Wales and the north to reduce the threat from bombing (Hannah 1979: 295,298). Although employment fell from 120,000 to 90,000 labour was used more intensively (longer hours were worked, there was more shift working and holidays were staggered) and productivity rose (Hannah 1979: 298-300).

The Second World War was a mechanised war and the aircraft, tanks and other motorised vehicles of the British
forces needed oil and, given the disruption of wartime trade routes, that oil would, primarily come from the USA. Although the production of petroleum products from indigenous materials increased during the war in terms of the overall supply it remained unimportant (table 5.15). There was some domestic processing of imported oil but this declined and was of significance to the overall supply only in the cases of bitumen and lubricating oils (PayntonSmith 1971: 187-93, 273-7; table 5.14). Thus, the supply of petroleum products was heavily reliant on imports, which increased from 11.4 million tons in 1940 to 20.2 million tons in 1944 ( 77 per cent), although most of this increase came in 1943 and 1944 (table 5.13). These imports were dominated by aviation, motor and industrial spirits (which increased by an impressive 162 per cent and whose share of total petroleum imports increased from approximately one-third to a half) and fuel oil (which increased in volume by 65 per cent and accounted for more than a quarter of total imports) (table 5.13).

Although the supply did increase, most of it was used to meet the rising demands from both the British and American forces (by mid-1944 the United States Army Air Force accounted for nearly half of the total aviation spirit consumption), and civilian consumption was squeezed (for example civilian consumption of motor spirit fell by approximately a third between 1941 and 1943)(PayntonSmith 1971: 288-93, 389-97; table 5.17). The defining event of the war, from the perspective of petroleum, was the build-up to D-Day and the invasion of Europe which required increased supplies of motor fuel and aviation spirit; as this process began in mid-1943 monthly oil consumption dramatically rose by 25 per cent (PayntonSmith 1971: 391).

### 5.2 Electricity production



### 5.3 Coal: production, consumption and stocks



### 5.3 Coal: production, consumption and stocks

| continued |  |  |  |  |  |  |  | Thousand tons |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Production ${ }^{\text {1 }}$ |  |  | Consumption (including exports) |  |  | Stocks 1 (end of period) |  |  |
|  |  | Total | Saleable mined coal | Opencast coal ${ }^{2}$ | Total | $\begin{gathered} \text { Inland } \\ \text { consump- } \\ \text { tion } \end{gathered}$ | Overseas shipments bunkers ${ }^{4}$ bunkers | Distributed | Opencast on sites or central stocking grounds | Colliery stocks held on pitbanks and in trucks ${ }^{5}$ |
| 1943 | January <br> February <br> March <br> April <br> May <br> June <br> July <br> August <br> September <br> November <br> December | $\begin{aligned} & 3,995 \\ & 4,010 \\ & 4,339 \\ & 3,726^{*} \\ & 4,021 \\ & 3,684 \\ & 3,801 * \\ & 3,278 \\ & 3,931^{*} \\ & 4.015 \\ & 3,903 \\ & 3,532^{*} \end{aligned}$ | $\begin{aligned} & 3,967 \\ & 3,976 \\ & 4,020 \\ & 3,657^{*} \\ & 3,937 \\ & 3,606 \\ & 3,682^{*} \\ & 3,166 \\ & 3,808^{*} \\ & 3,888 \\ & 3,796 \\ & 3,455^{*} \end{aligned}$ | $\begin{gathered} 28 \\ 34 \\ 56 \\ 69^{*} \\ 84 \\ 78 \\ 119^{*} \\ 121 \\ 123^{*} \\ 127 \\ 107 \\ 77^{*} \end{gathered}$ | $\begin{aligned} & 4,107 \\ & 4,119 \\ & 4,038 \\ & 4,038 \\ & 3,821 \\ & 3,556 \\ & 3,500 \\ & 3,276 \\ & 3,669 \\ & 3,852 \\ & 3,982 \\ & 4,034 \end{aligned}$ | $\begin{aligned} & 3,974 \\ & 3,986 \\ & 3,899 \\ & 3,656^{*} \\ & 3,605 \\ & 3,378 \\ & 3,324^{*} \\ & 3,156 \\ & 3,491^{*} \\ & 3,685 \\ & 3,840 \\ & 3,885^{*} \end{aligned}$ | $\begin{array}{rl}  & 133 \\ & 133 \\ * \\ * & 139 \\ * & 165 \\ & 171 \\ \hline & 178 \\ * & 176 \\ * & 120 \\ * & 178 \\ & 167 \\ * \quad 142 \\ * & 149 \end{array}$ | $\begin{aligned} & 17,800 \\ & 17,757 \\ & 17,377 \\ & 1,7784 \\ & 17,745 \\ & 18,264 \\ & 19,434 \\ & 1,9510 \\ & 20,283 \\ & 20,328 \\ & 1,757 \\ & 17,656 \end{aligned}$ | 1,602 | $\begin{aligned} & 3,009 \\ & 3,103 \\ & 3,043 \\ & 2,932 \\ & 3,033 \\ & 3,197 \\ & 2,973 \\ & 2,957 \\ & 2,976 \\ & 2,980 \\ & 3,025 \\ & 2,946 \end{aligned}$ |
| $1944$ | January <br> February <br> March <br> April <br> May <br> June <br> July <br> August <br> September <br> October <br> November <br> December | $\begin{aligned} & 3,793 \\ & 3,847 \\ & 3,634^{*} \\ & 3,460 \\ & 3,969 \\ & 3,794 * \\ & 3,686 \\ & 3,1,185 \\ & 3,8188^{*} \\ & 3,876 \\ & 3,911 \\ & 3,538^{*} \end{aligned}$ | $\begin{aligned} & 3,705 \\ & 3,778 \\ & 3,508^{*} \\ & 3,338 \\ & 3,772 \\ & 3,538^{*} \\ & 3,447 \\ & 2,944 \\ & 3,622^{*} \\ & 3,680 \\ & 3,744 \\ & 3,425^{*} \end{aligned}$ | $\begin{aligned} & 88 \\ & 109 \\ & 126^{*} \\ & 122 \\ & 197 \\ & 211^{*} \\ & 239 \\ & 241 \\ & 196^{*} \\ & 196 \\ & 167 \\ & 113^{*} \end{aligned}$ | $\begin{aligned} & 4,049 \\ & 4,103 \\ & 4,023 \\ & 3,533 \\ & 3,666 \\ & 3,437 \\ & 3,313 \\ & 3,097 \\ & 3,495 \\ & 3,753 \\ & 4,011 \\ & 3,994 \end{aligned}$ | $\begin{aligned} & 3,906 \\ & 3,959 \\ & 3,893^{*} \\ & 3,425 \\ & 3,569 \\ & 3,324^{*} \\ & 3,218 \\ & 3,005 \\ & 3,381^{*} \\ & 3,648 \\ & 3,887 \\ & 3,864^{*} \end{aligned}$ |  | $\begin{aligned} & 16,047 \\ & 1,4727 \\ & 13,134 \\ & 1,2999 \\ & 13,643 \\ & 15,017 \\ & 16,373 \\ & 16,886 \\ & 18,072 \\ & 18,47 \\ & 18,017 \\ & 16,031 \end{aligned}$ | 1,602 1,716 1,854 1,953 1,956 1,526 1,721 1,931 2,155 2,284 2,327 2,323 2,324 | $\begin{aligned} & 3,041 \\ & 2,997 \\ & 2,820 \\ & 2,714 \\ & 2,713 \\ & 2,701 \\ & 2,733 \\ & 2,620 \\ & 2,646 \\ & 2,648 \\ & 2,602 \\ & 2,552 \end{aligned}$ |
| $1945$ | January <br> February <br> March <br> April <br> May <br> June <br> July <br> August | $\begin{aligned} & 3,506 \\ & 3,693 \\ & 3,717 * \\ & 3,591 \\ & 3,161 \\ & 3,777^{*} \\ & 3,386 \\ & 2,501 \end{aligned}$ | $\begin{aligned} & 3,385 \\ & 3,578 \\ & 3,529 * \\ & 3,414 \\ & 3,010 \\ & 3,599 * \\ & 3,222 \\ & 2,363 \end{aligned}$ | $\begin{aligned} & 121 \\ & 115 \\ & 188^{*} \\ & 177 \\ & 151 \\ & 179 * \\ & 164 \\ & 138 \end{aligned}$ | $\begin{aligned} & 4,108 \\ & 4,147 \\ & 3,918 \\ & 3,590 \\ & 3,333 \\ & 3,463 \\ & 3,201 \\ & 2,877 \end{aligned}$ | $\begin{aligned} & 3,978 \\ & 3,993 \\ & 3,745 * \\ & 3,436 \\ & 3,186 \\ & 3,293 * \\ & 3,033 \\ & 2,716 \end{aligned}$ |  | $\begin{aligned} & 13,205 \\ & 11,772 \\ & 10,376 \\ & 10,142 \\ & 10,079 \\ & 11,562 \\ & 12,644 \\ & 12,058 \end{aligned}$ | $\begin{aligned} & 2,367 \\ & 2,360 \\ & 2,402 \\ & 2,353 \\ & 2,197 \\ & 1,917 \\ & 1,640 \\ & 1,358 \end{aligned}$ | $\begin{aligned} & 2,732 \\ & 2,612 \\ & 2,550 \\ & 2,516 \\ & 2,394 \\ & 2,374 \\ & 2,401 \\ & 2,286 \end{aligned}$ |

[^6]
### 5.4 Coal: Inland consumption



### 5.4 Coal: Inland consumption



### 5.5 Coal: Distributed stocks'

|  |  | End of period |  |  |  |  |  |  |  |  |  | Thousand tons |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Public utility undertakings |  |  |  | Coke ovens | Industrial consumers ${ }^{2}$ |  |  | Merchants' stocks |  | $\begin{array}{r} \text { Govern- } \\ \text { ment } \\ \text { dumps } \end{array}$ | Miscellaneous ${ }^{3}$ |
|  |  | Gas | Water | $\begin{aligned} & \text { Elec- } \\ & \text { tricitv } \end{aligned}$ | Rail- ways |  | $\begin{aligned} & \text { Iron } \\ & \text { and } \\ & \text { steel } \end{aligned}$ | Engineering and other metal trades | Other industries | House coal | Anthracite and boiler fuel |  |  |
| 1939 |  | 2,811 | 117 | 2,827 | 1,306 | 393 |  |  |  | L ... |  |  |  |
| 1940 |  | 3,467 | 147 | 3,477 | 1,634 | 476 | 587 | 761 | 3,312 | 1,500 |  | 768 | 1,130 |
| 1941 |  | 3,079 | 170 | 3,367 | 1,765 | 537 | 734 | 912 | 3,688 | 1,671 | 185 | 1,625 | 946 |
| 1942 |  | 2,887 | 154 | 3,712 | 1,021 | 596 | 737 | 1,067 | 3,475 | 1,808 | 248 | 1,772 | 1,148 |
| 1943 |  | 2,188 | 134 | 3,305 | 1,401 | 454 | 650 | 706 | 3,171 | 1,664 | 143 | 2,389 | 1,451 |
| 1944 |  | 2,391 | 136 | 3,247 | 898 | 484 | 701 | 736 | 3,184 | 1,073 | 114 | 2,217 | 850 |
| 1945 |  | 1,838 | 117 | 2,839 | 614 | 422 | 471 | 501 | 2,493 | 1,324 | 153 | 848 | 694 |
| 1939 | September | $\begin{aligned} & 3,235 \\ & 3,186 \\ & 3,123 \\ & 2,928 \end{aligned}$ |  | 2,900 | 1,293 | 434 | . |  |  |  |  |  |  |
|  | October |  |  | 2,945 | 1,295 | 423 | . | . |  |  |  |  |  |
|  | November |  |  | 2,966 | 1,317 | 445 |  |  |  |  |  |  |  |
|  | December |  |  | 2,827 | 1,306 | 393 |  | . |  |  |  |  |  |
| 1940 | January | $\begin{aligned} & 2,314 \\ & 1,956 \\ & 1,938 \end{aligned}$ |  | 2,324 | 1,201 | 298 |  | . |  |  |  |  | 235 |
|  | February |  |  | 2,111 | 1,031 | 301 |  |  |  |  |  |  | 213 |
|  | March |  |  | 2,161 | 914 | 312 |  |  |  |  |  |  | 244 |
|  | April |  |  | 2,292 | 925 | 336 |  |  |  |  | 665 |  | 262 |
|  | May | 2,1202,606 |  | 2,576 | 1,002 | 376 | 354 | 459 | 1,999 |  | 992 |  | 315 |
|  | June | 3,141 |  | 2,891 | 1,128 | 417 | 436 | 566 | 2,462 |  | 1,225 |  | 365 |
|  | july |  |  | 3,336 | 1,308 | 462 | 533 | 692 | 3,012 |  | 1,266 | 150 | 474 |
|  | August | $\begin{aligned} & 3,845 \\ & 4,095 \end{aligned}$ |  | 3,587 | 1,398 | 488 | 598 | 776 | 3,376 |  | 1,413 | 232 | 600 |
|  | September | 4,244 |  | 3,740 | 1,535 | 524 | 642 | 833 | 3,627 |  | 1,592 | 374 | 761 |
|  | October | 4,241 |  | 3,800 | 1,669 | 547 | 647 | 840 | 3,654 |  | 1,670 | 489 | 936 |
|  | November | 4,059 |  | 3,691 | 1,707 | 562 | 632 | 820 | 3,567 |  | 1,585 | 628 | 1,060 |
|  | December | 3,614 |  | 3,477 | 1,634 | 476 | 587 | 761 | 3,312 |  | 1,500 | 768 | 1,130 |
| 1941 | January | $\begin{aligned} & 2,965 \\ & 2,556 \\ & 2,226 \\ & 1,939 \\ & 1,977 \\ & 2,070 \\ & 2,442 \\ & 2,698 \\ & 3,104 \\ & 3,457 \end{aligned}$ |  | 2,992 | 1,469 | 486 | 531 | 689 | 2,999 |  | 1,008 | 916 | 967 |
|  | February |  |  | 2,740 | 1,367 | 465 | 500 | 647 | 2,814 |  | 840 | 1,003 | 808 |
|  | March |  |  | 2,570 | 1,277 | 487 | 490 | 635 | 2.765 |  | 744 | 1,047 | 734 |
|  | April |  |  | 2,463 | 1,166 | 477 | 491 | 637 | 2,771 |  | 591 | 1,084 | 726 |
|  | May |  |  | 2,572 | 1,193 | 520 | 515 | 569 | 3,004 |  | 679 | 1.095 | 828 |
|  | June |  |  | 2,773 | 1,255 | 520 | 565 | 661 | 3,196 |  | 743 | 1,108 |  |
|  | July |  |  | 3,149 | 1,404 | 556 | 639 | 743 | 3,456 |  | 1,092 | 1,1135 | 996 |
|  |  |  |  | 3,269 | 1,484 | 491 | 657 |  | 3.725 3 |  | 1,226 | 1,157 1,194 | 1,006 1 1 |
|  | September |  |  | 3,422 | 1,620 | 531 | 708 | 1,003 | 3,960 |  | 1,479 | 1,194 | 1,020 |
|  | October |  |  | 3,565 | 1,730 | 571 | 722 | 998 | 3,962 |  | 1,778 | 1,299 | 1,042 |
|  | November | $\begin{aligned} & 3,469^{4} \\ & 3,249 \end{aligned}$ |  | 3,5474 | 1,772 | 583 | 744 | 955 | 3,822 |  | 1,982 | 1,437 | 1,007 |
|  | December |  |  | 3,367 | 1,765 | 537 | 734 | 912 | 3,688 |  | 1,856 | 1,625 | 946 |
| 1942 | January | $\begin{aligned} & 2,723 \\ & 2,453 \\ & 2,238 \\ & 2,106 \\ & 2,227 \\ & 2,340 \\ & 2,662 \\ & 2,741 \\ & 3,049 \\ & 3,268 \\ & 3,248 \\ & 3,041 \end{aligned}$ |  | 2,783 | 1,627 | 496 | 665 | 758 | 3,172 |  | 1.502 | 1.683 | 905 |
|  | February |  |  | 2.452 | 1,504 | 496 | 614 | 672 | 2,968 |  | 974 | 1,688 | 787 |
|  | March |  |  | 2,272 | 1,358 | 532 | 612 | 641 | 2,849 |  | 713 | 1,602 | 733 |
|  | April |  |  | 2,234 | 1,210 | 494 | 599 | 721 | 2,711 |  | 563 | 1,521 | 691 |
|  | May |  |  | 2,341 | 1.159 | 453 | 622 | 778 | 2,824 |  | 606 | 1,436 | 700 |
|  | June |  |  | 2,547 | 1,100 | 504 | 667 | 871 | 2,988 |  | 738 | 1,388 | 775 |
|  | July |  |  | 2,884 | 1,054 | 587 | 705 | 987 | 3,215 |  | 966 | 1,394 | 863 |
|  | August |  |  | 3,050 | 936 | 478 |  | 1,016 |  |  | 1,143 | 1,375 | 944 |
|  | September |  |  | 3,391 | 947 | 539 | 747 | 1,129 | 3,598 |  | 1,623 | -1,439 | 1,053 |
|  | October |  |  | 3,599 | 924 | 581 | 768 | 1,147 | 3,664 |  | 1,946 | 1.555 | 1.168 |
|  | November |  |  | 3,608 | 955 | 615 | 773 | 1,124 | 3,609 |  | 2,155 | 1,698 | 1,174 |
|  | December |  |  | 3,712 | 1,021 | 596 | 737 | 1,067 | 3,475 |  | 2,056 | 1,772 | 1,148 |
| See fo | footnotes on pas |  |  |  |  |  |  |  |  |  | Source | Ministry of | wel and Power |

### 5.5 Coal: Distributed stocks ${ }^{\prime}$

|  | End of period |  |  |  |  |  |  |  |  |  | Thousand tons |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Public utility undertakings |  |  |  | Coke ovens | Industrial consumers2 |  |  | Merchants' stocks |  | Govern ment dumps | $\begin{aligned} & \text { Miscel- } \\ & \text { laneous }{ }^{3} \end{aligned}$ |
|  | Gas | Water | $\begin{aligned} & \text { Elec- } \\ & \text { tricity } \end{aligned}$ | $\begin{aligned} & \text { Rail- } \\ & \text { ways } \end{aligned}$ |  | $\begin{aligned} & \text { Iron } \\ & \text { and } \\ & \text { steel } \end{aligned}$ | Engineering and other metal trades | Other industries | House coal | Anthracite and boiler fuel |  |  |
| 1943 January |  | , 634 | 3,558 | 1,038 | 555 | 698 | 986 | 3,265 | 1,701 | 240 | 1,843 | 1,282 |
| February |  | 880 | 3,581 | 1,098 | 564 | 651 | 940 | 3,155 | 1,646 | 223 | 1,888 | 1,291 |
| March |  | , 394 | 3,632 | 1,106 | 537 | 636 | 883 | 3,119 | 1,681 | 193 | 1,948 | 1,248 |
| April |  | 335 | 3,691 | 1,105 | 511 | 641 | 862 | 3,138 | 1,608 | 174 | 2,010 | 1,209 |
| May |  |  | 3,813 | 1,176 | 556 | 654 | 897 | 3,248 | 1,617 | 162 | 2,065 | 1,214 |
| June |  | 405 | 3,924 | 1,231 | 520 | 678 | 933 | 3,374 | 1,676 | 151 | 2,130 | 1,242 |
| July |  | 544 | 4.071 | 1,343 | 540 | 734 | 982 | 3'656 | 1,808 | 148 | 2,241 | 1,367 |
| August |  | 461 | 4,042 | 1,314 | 434 | 727 | 998 | 3,721 | 1,834 | 138 | 2,313 | 1,528 |
| September |  | 27 | 4,105 | 1,380 | 477 | 740 | 980 | 3,962 | 1,940 | 134 | 2,392 | 1,546 |
| October |  | 14 | 4,062 | 1,412 | 495 | 748 | 956 | 3,883 | 2,000 | 140 | 2,408 | 1,510 |
| November |  | 80 | 3,839 | 1,449 | 503 | 724 | 860 | 3,672 | 2,022 | 153 | 2,405 | 1,450 |
| December |  | 322 | 3,305 | 1,401 | 454 | 650 | 706 | 3,171 | 1,664 | 143 | 2,389 | 1,451 |
| 1944 January | 1,918 | 127 | 2,894 | 1,317 | 452 | 612 | 605 | 2,840 | 1,551 | 133 | 2,366 | 1,232 |
| February | 1,808 | 125 | 2,549 | 1,247 | 464 | 546 | 524 | 2.573 | 1,413 | 116 | 2,341 | 1,021 |
| March | 1,698 | 121 | 2,242 | 1,109 | 450 | 461 | 453 | 2,167 | 1,165 | 87 | 2,311 | 870 |
| April | 1,673 | 126 | 2,25 | 1,026 | 453 | 484 | 529 | 2,035 | 971 | 96 | 2,262 | 793 |
| May | 1,939 | 135 | 2,530 | 1,133 | 510 | 538 | 590 | 2,250 | 911 | 101 | 2,218 | 78 |
| June | 2,214 | 138 | 2,898 | 1,202 | 519 | 623 | 681 | 2,671 | 1,014 | 110 | 2,202 | 745 |
| July | 2,470 | 146 | 3,244 | 1,252 | 537. | 663 | 785 | 3,027 | 1,159 | 124 | 2,197 | 769 |
| August | 2.492 | 146 | 3,449 | 1,151 | 414 | 673 | 842 | 3,220 | 1,305 | 123 | 2,195 | 876 |
| September | 2.741 | 150 | 3,676 | 1,040 | 450 | 715 | 915 | 3,550 | 1.505 | 127 | 2,217 | 986 |
| October | 2,893 | 150 | 3,794 | 1,009 | 484 | 732 | 900 | 3,626 | 1,532 | 130 | 2,221 | 986 |
| November | 2,807 | 148 | 3,707 | 989 | 525 | 733 | 843 | 3,520 | 1,467 | 131 | 2,218 | 929 |
| December | 2,391 | 136 | 3,247 | 898 | 484 | 701 | 736 | 3,184 | 1,073 | 114 | 2,217 | 850 |
| 1945 January | 1,815 | 125 | 2,574 | 734 | 401 | 619 | 570 | 2,688 | 734 | 105 | 2,114 | 726 |
| February | 1,406 | 114 | 2,212 | 580 | 423 | 558 | 481 | 2,383 | 562 | 98 | 1,914 | 641 |
| March | 1,199 | 110 | 2.191 | 461 | 467 | 545 | 479 | 2,229 | 439 | 102 | 1,574 | 580 |
| April | 1,090 | 107 | 2,247 | 513 | 442 | 533 | 529 | 2.197 | 399 | 110 | 1,391 | 584 |
| May | 1,038 | 106 | 2,322 | 510 | 363 | 524 | 550 | 2,215 | 417 | 111 | 1,289 | 634 |
| June | 1,278 | 113 | 2.789 | 543 | 445 | 567 | 629 | 2,533 | 717 | 121 | 1,097 | 730 |
| July | 1,406 | 123 | 3,099 | 532 | 443 | 590 | 694 | 2,791 | 1,028 | 134 | 1,023 | 781 |
| August | 1,183 | 125 | 3,041 | 410 | 273 | 552 | 718 | 2,823 | 1,059 | 132 | 966 | 776 |

Great Britain.
Undertakings with an annual consumption of
Including coal held by Service departments.
From November 194 cool held in wagons at the sidings of the gas, water and electricity
undertakings and in barges alonsside power stations is included $A$ the
the stocks in these categories were estimated to be 50,000 tons for gas and 55,000 tons for
electricity.

### 5.6 Mined coal: Productivity'

|  | Number of wage-earners on colliery | Average number of shifts worked per | Average number of shifts possible per | Absenteeism | Average mans | utput in tons per hift worked2 | Manshifts at the coal face as |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousands | week ${ }^{2}$ | week ${ }^{2}$ |  | Overall | At the coal face |  |
| 1939 | 766 | 5.15 | 5.53 | 6.94 | 1.14 | 3.00 | 37.85 |
| 1940 | 749 | 5.27 | 5.75 | 8.26 | 1.10 | 2.97 | 37.04 |
| 1941 | 698 | 5.37 | 5.91 | 9.03 | 1.07 | 2.99 | 35.96 |
| 1942 | 709 | 5.34 | 5.96 | 10.40 | 1.05 | 2.91 | 35.94 |
| 1943 | $708{ }^{3}$ | $5.12{ }^{4}$ | $5.85{ }^{4}$ | $12.46{ }^{4}$ | 1.03 | $2.75{ }^{4}$ | $37.48{ }^{4}$ |
| 1944 | 710 | 4.96 | 5.74 | 13.61 | 1.00 | 2.70 | 37.19 |
| 1945 | 709 | 4.73 | 5.65 | 16.31 | 1.00 | 2.70 | 36.96 |
| 1939 September | 748.6 | 5.36 | 5.77 | 7.08 | 1.12 | 2.98 | 37.57 |
| October | 755.2 | 5.40 | 5.80 | 6.92 | 1.14 | 3.02 | 37.74 |
| November | 759.1 | 5.60 | 6.00 | 6.74 | 1.15 | 3.05 | 37.84 |
| December | 759.8 | 4.88 | 5.24 | 6.95 | 1.13 | 3.01 | 37.54 |
| 1940*) anuary | 759.0 | 5.17 | 5.71 | 9.44 | 1.12 | 2.98 | 37.43 |
| February | 760.4 | 5.22 | 5.87 | 11.16 | 1.13 | 3.04 | 37.33 |
| March | 762.3 | 5.01 | 5.51 | 9.15 | 1.13 | 3.03 | 37.13 |
| April | 763.1 | 5.70 | 6.15 | 7.35 | 1.15 | 3.07 | 37.58 |
| *May | 763.3 | 5.62 | 6.08 | 7.66 | 1.14 | 3.03 | 37.55 |
| June | 766.9 | 5.46 | 5.89 | 7.26 | 1.11 | 2.95 | 37.50 |
| *July | 761.1 | 5.41 | 5.84 | 7.48 | 1.11 | 2.99 | 36.97 |
| August | 757.1 | 5.14 | 5.61 | 8.34 | 1.07 | 2.90 | 36.88 |
| September | 746.0 | 5.13 | 5.58 | 8.02 | 1.07 | 2.90 | 36.76 |
| * October | 731.2 | 5.35 | 5.79 | 7.60 | 1.09 | 2.96 | 36.63 |
| November | 712.4 | 5.18 | 5.60 | 7.62 | 1.09 | 2.99 | 36.36 |
| December | 702.7 | 4.86 | 5.30 | 8.22 | 1.08 | 2.98 | 36.06 |
| 1941*January | 698.9 | 5.29 | 5.85 | 9.49 | 1.08 | 2.99 | 36.26 |
| February | 694.6 | 5.29 | 5.86 | 9.72 | 1.09 | 3.00 | 36.15 |
| March | 692.0 | 5.31 | 5.87 5 | 9.57 870 | 1.09 | 3.02 <br> 3.00 | 35.99 35.89 |
| *April | 690.4 | 5.32 | 5.83 | 8.70 | 1.08 | 3.00 | 35.89 3578 |
| May | 690.2 | 5.58 | 6.11 | 8.73 | 1.08 | 3.02 | 35.78 <br> 35 |
| June | 690.6 | 5.29 | 5.74 | 7.78 | 1.06 | 2.97 | 35.67 |
| * July August | 692.1 | 5.55 4.86 | 6.02 5.30 | 7.87 8.25 | 1.07 1.06 | 3.00 2.98 | 35.85 35.58 |
| September | 704.0 | 5.60 | 6.16 | 9.16 | 1.08 | 2.98 | 36.14 |
| * October | 706.7 | 5.67 | 6.27 | 9.53 | 1.08 | 2.99 | 36.13 |
| November | 707.5 | 5.37 | 5.94 | 9.66 | 1.08 | 2.99 | 36.17 |
| December | 707.9 | 5.32 | 5.90 | 9.76 | 1.06 | 2.96 | 35.93 |
| 1942* January | 707.5 | 5.36 | 6.09 | 11.94 | 1.05 | 2.92 | 36.12 |
| February | 706.8 | 5.49 | 6.18 | 11.13 | 1.07 | 2.94 | 36.26 |
| March | 705.6 | 5.41 | 6.05 | 10.63 | 1.07 | 2.96 | 36.18 35.92 |
| *April | 706.0 | 5.25 | 5.81 | 9.59 | 1.05 | 2.92 | 35.92 35.86 |
| May | 707.9 | 5.07 | 5.64 | 10.13 | 1.04 | 2.91 | 35.86 35.88 |
| * June | 708.9 | 5.52 | 6.14 | 10.06 | 1.04 1.05 1 | 2.91 2.92 | 35.88 35.82 |
| * July August | 709.6 7017 | 5.46 4.64 | 6.04 5.20 | 9.62 10.80 | 1.05 <br> 1.02 | 2.92 2.87 | 35.82 35.45 |
| *September | 711.4 | 5.58 | 6.20 | 10.02 | 1.05 | 2.93 | 35.97 |
| October | 711.0 | 5.58 | 6.21 | 10.21 | 1.06 | 2.95 | 36.01 |
| November | 712.93 |  |  | 10.41 | 1.06 | 2.94 | 35.95 |
| * December | 713.3 | 5.35 | 5.97 | 10.31 | 1.05 | 2.90 | 36.05 |

### 5.6 Mined coal: Productivity'



[^7]
### 5.7 Coke: Production, consumption and stocks

| Thousand tons |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Production 1 |  |  | Consumption |  |  | Stocks '(end of period) |  |  |
|  | Total | $\begin{array}{r} \text { At } \\ \text { coke } \\ \text { ovens } \end{array}$ | $\begin{array}{r} \text { At } \\ \text { gas- } \\ \text { works } \end{array}$ | Total | Inland consumption ${ }^{2}$ | Overseas shipments ${ }^{3}$ | Total | $\begin{array}{r} \text { At } \\ \text { coke } \\ \text { ovens } \end{array}$ | $\begin{array}{r} \text { At } \\ \text { gas- } \\ \text { works } \end{array}$ |
| Annual totals 1939 1940 1941 1942 1943 1944 1945 | $\begin{aligned} & 24,226 \\ & 25,268 \\ & 25,069 \\ & 26,104 \\ & 25,86 \\ & 25,566 \\ & 25,622 \end{aligned}$ | $\begin{aligned} & 14,026 \\ & 15,351 \\ & 1,4547 \\ & 14,900 \\ & 14,453 \\ & 14,081 \\ & 13,986 \end{aligned}$ | $\begin{array}{r} 10,200 \\ 9,917 \\ 1,0,52 \\ 11,204 \\ 11,04 \\ 11,45 \\ 1,4636 \end{array}$ | $\begin{aligned} & 24,226 \\ & 25,488 \\ & 25,1,10 \\ & 26,100 \\ & 25,40 \\ & 26,546 \\ & 25,545 \end{aligned}$ | $\begin{aligned} & 21,758 \\ & 24,544 \\ & 24,667 \\ & 25,819 \\ & 2,5192 \\ & 26,433 \\ & 25,362 \end{aligned}$ | $\begin{array}{r} 2,468 \\ 944 \\ 443 \\ 281 \\ 293 \\ 113 \\ 183 \end{array}$ | $\begin{aligned} & 2,731 \\ & 2,690 \\ & 2,694 \\ & 3,070 \\ & 2,100 \\ & 2,177 \end{aligned}$ | $\begin{aligned} & 487 \\ & 441 \\ & 160 \\ & 183 \\ & 332 \\ & 82 \\ & 77 \end{aligned}$ | $\begin{aligned} & 706 \\ & 532 \\ & 572 \\ & 453 \\ & 680 \\ & 290 \\ & 279 \end{aligned}$ |
| Weekly averages 1939 1940 1941 1942 1943 1944 1945 | 465 484 481 501 496 489 491 | $\begin{aligned} & 269 \\ & 294 \\ & 279 \\ & 286 \\ & 277 \\ & 269 \\ & 268 \end{aligned}$ | 196 190 202 215 219 220 223 | 465 488 482 501 489 508 490 | $\begin{aligned} & 417 \\ & 470 \\ & 474 \\ & 495 \\ & 483 \\ & 506 \\ & 486 \end{aligned}$ | 48 18 8 6 6 2 4 | $\begin{aligned} & 2,731 \\ & 2,690 \\ & 2,694 \\ & 3,070 \\ & 2,100 \\ & 2,177 \end{aligned}$ | $\begin{aligned} & 487 \\ & 441 \\ & 160 \\ & 183 \\ & 332 \\ & 82 \\ & 77 \end{aligned}$ | 706 532 572 453 680 290 279 |
| 1939 September October November December | $\begin{aligned} & \hline 429 \\ & 463 \\ & 488 \\ & 59 \end{aligned}$ | $\begin{aligned} & 271 \\ & 286 \\ & 293 \\ & 292 \end{aligned}$ | $\begin{aligned} & 158 \\ & 177 \\ & 195 \\ & 217 \end{aligned}$ | $\begin{aligned} & 473 \\ & 489 \\ & 512 \\ & 520 \end{aligned}$ | $\begin{aligned} & 424 \\ & 440 \\ & 464 \\ & 465 \end{aligned}$ | 49 49 48 55 |  | $\begin{aligned} & 590 \\ & 545 \\ & 487 \\ & 487 \end{aligned}$ | $\begin{aligned} & 868 \\ & 811 \\ & 749 \\ & 706 \end{aligned}$ |
| 1940 January <br> February <br> March <br> April <br> May <br> June <br> July <br> August <br> September <br> October <br> November <br> December | 535* <br> 525 <br> 508 <br> 505 <br> 468 <br> 463* <br> 442 <br> 45।* <br> 468 485 | $\begin{aligned} & 295^{*} \\ & 295 \\ & 299 \\ & 305 \\ & 305^{*} \\ & 302 \\ & 296^{*} \\ & 289 \\ & 283 \\ & 282^{*} \\ & 284 \\ & 279 \end{aligned}$ | $\begin{aligned} & 240^{*} \\ & 230 \\ & 209 \\ & 200 \\ & 174^{*} \\ & 166 \\ & 167^{*} \\ & 168 \\ & 159 \\ & 169^{*} \\ & 184 \\ & 206 \end{aligned}$ | $\begin{aligned} & 586^{*} \\ & 579 \\ & 537 \\ & 518 \\ & 469^{*} \\ & 449 \\ & 424^{*} \\ & 431 \\ & 435 \\ & 447^{*} \\ & 481 \\ & 487 \end{aligned}$ | $\begin{aligned} & 543^{*} \\ & 541^{2} \\ & 502 \\ & 480 \\ & 441^{*} \\ & 440 \\ & 420^{*} \\ & 429 \\ & 431 \\ & 443^{*} \\ & 475 \\ & 481 \end{aligned}$ | 43 38 35 38 38 28 9 4 2 4 4 6 6 |  | 400 331 305 266 243 243 379 437 486 517 463 441 | $\begin{aligned} & 540 \\ & 364 \\ & 305 \\ & 291 \\ & 362 \\ & 438 \\ & 496 \\ & 548 \\ & 527 \\ & 515 \\ & 516 \\ & 5 \end{aligned}$ |
| 1941 January February March April May June July August September October November December | $\begin{aligned} & 505^{*} \\ & 505 \\ & 496 \\ & 481^{*} \\ & 470 \\ & 457 \\ & 445^{*} \\ & 450 \\ & 462 \\ & 480 * \\ & 509 \\ & 515 \end{aligned}$ | $\begin{aligned} & 281^{*} \\ & 278 \\ & 278 \\ & 276^{*} \\ & 275 \\ & 278 \\ & 276^{*} \\ & 274 \\ & 278 \\ & 282^{*} \\ & 285 \\ & 286 \end{aligned}$ | $\begin{aligned} & 224^{*} \\ & 227 \\ & 218 \\ & 205^{*} \\ & 195 \\ & 179 \\ & 169^{*} \\ & 176 \\ & 184 \\ & 198^{*} \\ & 224 \\ & 229 \end{aligned}$ | $\begin{aligned} & 520^{*} \\ & 522 \\ & 517 \\ & 500^{*} \\ & 478 \\ & 447 \\ & 434^{*} \\ & 444 \\ & 419 \\ & 462^{*} \\ & 507 \\ & 501 \end{aligned}$ | $510^{*}$ 518 506 $490^{*}$ 466 434 $424^{*}$ 437 443 $455{ }^{*}$ 501 496 | 10 4 11 10 12 13 10 7 6 7 6 5 | 2,690 | 428 423 381 303 252 227 198 160 143 141 148 160 | 450 370 313 274 275 325 388 433 484 557 544 572 |
| 1942 January February March April May June July August September October November December | 534* <br> 541 <br> 531 $505 *$ <br> 487 <br> 478 $470 *$ <br> 463 <br> 481* <br> 517 $520^{*}$ | $\begin{aligned} & 286^{*} \\ & 288 \\ & 288 \\ & 286^{*} \\ & 285 \\ & 283 \\ & 283^{*} \\ & 281 \\ & 290^{*} \\ & 291 \\ & 291 \\ & 288^{*} \end{aligned}$ | $248^{*}$ 253 243 $219^{*}$ 202 195 $187 *$ $1822^{*}$ $191^{*}$ 204 $226{ }^{*}$ $232^{*}$ | $526^{*}$ 563 561 $533^{*}$ 462 472 $461 *$ 451 $466 *$ 484 525 $518^{*}$ | $520^{*}$ <br> 559 <br> 556 <br> $527 *$ <br> 455 <br> 467 <br> $455 *$ <br> 443 <br> $460 *$ <br> 480 <br> 521 <br> $516^{*}$ | 6 4 5 6 7 5 6 8 6 4 4 2 | $2,694$ | $\begin{aligned} & 163 \\ & 154 \\ & 140 \\ & 130 \\ & 124 \\ & 131 \\ & 142 \\ & 150 \\ & 160 \\ & 181 \\ & 186 \\ & 183 \end{aligned}$ | 601 <br> 515 <br> 402 <br> 263 <br> 359 <br> 369 <br> 391 <br> 424 <br> 481 <br> 497 <br> 452 <br> 453 |
| See footnotes on page 96. |  |  |  |  |  |  | Surce: Min | of fu | Power |

### 5.7 Coke: Production, consumption and stocks

| continued |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |

### 5.8 Coal tar products: Production

|  | Unit | 1942 | 1943 | 1944 | 1945 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Road tar (including refined tar) | Thousand tons | 640 | 650 | 606 | 628 |
| Creosote/pitch mixture |  | 530 | 624 | 591 | 559 |
| Creosote oil | Thousand gallons | 64,000 | 49,000 | 55,000 | 60,000 |
| Pitch | Thousand tons | 467 | 380 | 404 | 412 |
| White naphthalene | " " | 7.6 | 9.0 | 7.4 | 7.4 |
| Hot-pressed naphthalene |  | 8.4 | 9.2 | 9.3 | 10.0 |
| Crude naphthalene | " " | 15.2 | 14.5 | 14.1 | 14.9 |
| Pyridine bases | Thousand gallons | 157 | 137 | 132 | 132 |
| Natural phenol | Thousand tons | 8.2 | 8.7 | 9.2 | 8.2 |
| Refined cresylic acid (all grades) | Thousand gallons | 6,176 | 7,242 | 7.056 | 6,990 |
| Anthracene 40/50 per cent | Thousand tons | 1.9 | 2.4 | 2.5 | 1.9 |

Source: Ministry of Fuel and Power

### 5.9 Gas: Production

|  | Total gas available |  |  | Gas made |  |  |  | Materials used for gas making |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Total | Coal gas | Water gas | Other gas | Coal | Gas oil |
|  | Million therms |  |  | Million cubic feet |  |  |  |  | Thousand tons |  |
| 1939 | 1,655 | 352,072 | 33,010 | 319,062 | 284,570 | 27,489 | 7,003 | 18,866 | 128.91 |
| 1940 | 1,579 | 343,440 | 36,883 | 306,557 | 268,781 | 30,192 | 7,584 | 17,983 | 152.21 |
| 1941 | 1,725 | 370,123 | 40,647 | 329,476 | 287,795 | 33,425 | 8,256 | 19,319 | 177.79 |
| 1942 | 1,813 | 388.755 | 45,693 | 343,062 | 296,363 | 38,097 | 8,602 | 20,634 | 200.22 |
| 1943 | 1,840 | 395,457 | 47,478 | 347,979 | 298,521 | 40,784 | 8,674 | 20,732 | 190.71 |
| 1944 | 1,948 | 414,342 | 49,188 | 365,154 | 296,600 | 60,424 | 8,130 | 20,620 | 353.15 |
| 1945 | 2,021 | 427,941 | 51,691 | 376,250 | 302,430 | 65,331 | 8,489 | 20,845 | 401.02 |

## $5.10^{\text {Gas: Sales }}$



## 5. | Electricity: Production

|  | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Million units (million kilo-watt hours) |  |  |  |  |  |  |
| Electricity generated: |  |  |  |  |  |  |  |
| Total | 27,733 | 29,976 | 33,577 | 36,903 | 38,217 | 39,649 | 38,611 |
|  |  |  |  |  |  |  |  |
| Public authorities | 14,340 | 15,971 | 17,977 | 19,607 | 20,225 | 21,480 | 20,702 |
| Companies | 12,069 | 12,802 | 14,383 | 16,047 | 16,726 | 16,883 | 16,582 |
| Railway and transport authorities | 1,324 | 1,203 | 1,217 | 1,249 | 1,266 | 1,286 | 1,327 |
| Method of generation: |  |  |  |  |  |  |  |
| Steam plant | 26,578 | 29,003 | 32,616 | 35,699 | 36,800 | 38,378 | 37,373 |
| Oil engines | 51 | 57 | 32,616 | -46 | -368 | - 45 | 574 |
| Gas engines | 3 | 3 | 3 | 2 | 2 | 3 | 2 |
| Water power | 982 | 800 | 831 | 1,097 | 1,329 | 1,176 | 1,144 |
| Destructor plant, waste heat, etc | 119 | 113 | 70 | 59 | 48 | 47 | 48 |
|  | Thousand tons |  |  |  |  |  |  |
| Materlals used: |  |  |  |  |  |  |  |
| Coal | 15,925 | 18,112 | 20,435 |  |  |  | 23,493 |
| Coke and coke breeze | 235 | 258 | 275 | 320 | 318 | 337 | 330 |
| Oil | 19 | 26 | 20 | 18 | 14 | 8 | 20 |

## 5. 12 Electricity: Sales ${ }^{\text {² }}$

| Great Britain |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Million units |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |  |  |  |  |  |  |  |  |
| Total | 22,234 | 24,263 | 27,308 | 30,286 | 31,449 | 32,519 | 31,363 |  |  |  |  |  |  |  |  |
|  | 5,936 | 6,228 | 6,637 | 6,720 | 6,709 | 7,835 | 8,805 |  |  |  |  |  |  |  |  |
| Domestic and farm premises | 3,117 | 2,997 | 3,266 | 3,256 | 3,062 | 3,510 | 3,482 |  |  |  |  |  |  |  |  |
| Shops, foflces and other commercial premises | 11,672 | 13,874 | 16,244 | 19,142 | 20,516 | 19,976 | 17,679 |  |  |  |  |  |  |  |  |
| Fartories and other industrial premises | 248 | 17 | 18 | 20 | 20 | 29 | 161 |  |  |  |  |  |  |  |  |
| Public lighting | 1,261 | 1,147 | 1,143 | 1,148 | 1,142 | 1,169 | 1,236 |  |  |  |  |  |  |  |  |
| Traction |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

[^8]
## 5. 13 Arrivals of petroleum products

| Thousand tons |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | fined petrol | um products |  |  |  |
|  | Total | Aviation, motor and industrial | White spirit | Kerosine | Gas/Diesel | Fuel oil | $\begin{gathered} \text { Lubri- } \\ \text { cating } \\ \text { oils } \end{gathered}$ | $\begin{array}{r} \text { Crude } \\ \text { and } \\ \text { process } \\ \text { oils } \\ \hline \end{array}$ |
| $\overline{\text { Annual totals }}$ |  |  |  |  |  |  |  |  |
| 1940 | 11,381 | 3,592 | 64 | 999 | 1,367 | 3,235 | 578 | 1,546 |
| 1941 | 13,05 1 | 4,741 | 58 | 1,062 | 1,790 | 3,850 | 491 | 1,060 |
| 1942 | 10,232 | 4,083 | 103 | 856 | 1,364 | 2.407 | 565 | 854 |
| 1943 | 14,828 | 5,306 | 69 | 1,214 | 1,887 | 5,122 | 433 | 798 |
| 1944 | 20,176 | 9,417 | 111 | 1,334 | 2,210 | 5,336 | 575 | 1,194 |
| 1945 | 15,924 | 6,999 | 98 | 1,292 | 2,101 | 3,703 | 337 | 1,394 |
| Weekly averages |  |  |  |  |  |  |  |  |
|  | 217.7 | 68.7 | 1.2 | 19.1 | 26.1 | 61.9 | 1.1 | 29.6 |
| 1941 | 250.3 | 90.9 | 1.1 | 20.4 | 34.3 | 73.9 | 9.4 | 20.3 |
| 1942 | 196.2 | 78.3 | 2.0 | 16.4 | 26.1 | 46.2 | 10.8 | 16.4 |
| 1943 | 284.4 | 101.8 | 1.3 | 23.3 | 36.2 | 98.2 | 8.3 | 15.3 |
| 1944 | 385.9 | 180.1 | 2.1 | 25.5 | 42.3 | 102.1 | 11.0 | 22.8 |
| 1945 | 305.4 | 134.2 | 1.9 | 24.8 | 40.3 | 71.0 | 6.5 | 26.7 |
| 1939 September | 131.4 | 58.1 |  | 4.5 | 17.5 | 24.2 | 3.5 | 23.6 |
| * October | 128.6 | 57.2 |  | 3.7 | 20.6 | 29.9 | 8.7 | 8.5 |
| November | 185.5 | 63.9 |  | 36.2 | 18.1 | 37.1 | 1.6 | 28.6 |
| December | 215.4 | 64.0 | 0.5 | 25.1 | 16.2 | 65.9 | 4.9 | 38.8 |
| 1940 * January | 216.3 | 88.9 | 0.8 | 14.6 | 19.5 | 53.0 | 12.9 | 26.6 |
| February | 192.7 | 59.8 | 1.8 | 8.2 | 16.1 | 56.5 | 6.0 | 44.3 |
| March | 263.3 | 91.7 | 1.2 | 21.3 | 33.1 | 58.5 | 21.7 | 35.8 |
| * April | 221.3 | 76.7 | 1.0 | 19.8 | 36.8 | 56.6 | 5.8 | 24.6 |
| May | 286.2 | 99.9 | 2.2 | 15.1 | 42.5 | 64.6 | 19.9 | 42.0 |
| June | 326.5 | 91.1 | 1.1 | 21.5 | 30.3 | 94.9 | 15.8 | 71.8 |
| * July | 200.0 | 57.4 | 0.7 | 16.0 | 25.5 | 67.3 | 15.6 | 17.5 |
| August | 215.7 | 69.0 |  | 6.9 | 31.4 | 76.3 | 6.1 | 26.0 |
| * September | 150.0 | 38.3 | 2.6 | 16.8 | 15.9 | 53.2 | 6.9 | 16.3 |
| October | 132.9 | 46.3 | 0.5 | 24.9 | 10.1 | 34.3 | 5.5 | 11.3 |
| November | 218.2 | 53.5 | 1.9 | 32.3 | 23.3 | 76.3 | 8.1 | 22.8 |
| * December | 180.3 | 48.2 | 0.8 | 28.4 | 26.3 | 47.8 | 7.9 | 20.9 |
| 1941 January | 99.9 | 38.2 |  | 9.6 | 3.8 | 30.0 | 3.3 | 15.0 |
| February | 204.3 | 72.4 |  | 11.9 | 30.8 | 60.4 | 2.5 | 26.3 |
| * March | 196.0 | 55.8 |  | 17.4 | 28.2 | 65.4 | 3.4 | 25.8 |
| April | 230.0 | 71.3 | 0.9 | 6.9 | 34.1 | 81.2 | 10.4 | 25.2 |
| May | 198.6 | 89.5 |  | 5.0 | 25.4 | 48.2 | 5.1 | 25.4 |
| * June | 279.9 | 99.7 | 2.8 | 6.3 | 43.1 | 91.1 | 10.8 | 26.1 |
| July | 275.2 | 91.2 | 1.1 | 24.8 | 44.7 | 83.0 | 18.0 | 12.4 |
| August | 280.1 | 104.4 | 1.4 | 25.2 | 43.4 | 75.1 | 12.1 | 18.5 |
| * September | 367.9 | 136.5 | 1.8 | 41.2 | 38.3 | 118.5 | 15.0 | 16.6 |
| October | 298.9 | 105.2 | 0.4 | 30.4 | 37.5 | 94.1 | 6.2 | 25.1 |
| November | 270.0 | 112.9 | 2.5 | 35.7 | 43.2 | 60.5 | 4.4 | 10.8 |
| * December | 280.7 | 108.0 | 1.9 | 27.8 | 38.1 | 68.9 | 19.4 | 16.6 |
| 1942 January | 207.8 | 78.9 | 1.7 | 19.4 | 48.4 | 39.5 | 6.8 | 13.1 |
| February | 239.9 | 99.9 | 1.4 | 19.7 | 29.5 | 60.7 | 9.7 | 19.0 |
| * March | 140.3 | 67.5 | 1.6 | 14.8 | 6.1 | 24.0 | 15.6 | 10.7 |
| April | 209.4 | 93.1 | 3.9 | 14.5 | 27.5 | 31.3 | 12.6 | 26.5 |
| May | 119.8 | 49.9 |  | 8.7 | 17.2 | 19.7 | 13.9 | 10.4 |
| * June | 163.1 | 71.1 | 2.7 | 9.9 | 24.1 | 25.2 | 12.7 | 17.4 |
| July | 234.4 | 92.1 | 4.9 | 23.6 | 28.5 | 57.4 | 10.5 | 17.4 |
| * August | 180.6 | 47.7 | 3.1 | 12.1 | 23.9 | 52.3 | 18.1 | 23.4 |
| September | 268.1 | 96.8 | 2.4 | 32.5 | 30.8 | 85.1 | 2.9 | 17.6 |
| October | 173.9 | 48.4 | 1.3 | 25.3 | 21.4 | 50.2 | 13.3 | 14.0 |
| * November | 197.5 | 72.0 | 0.6 | 9.3 | 34.4 | 57.8 | 7.2 | 16.2 |
| December | 253.0 | 139.0 |  | 12.9 | 27.1 | 58.5 | 4.7 | 10.8 |

## 5. I 3 Arrivals of petroleum products


5. I4 Production of petroleum products from imported crude and process oils


## FUEL AND POWER

## 5. |4 Production of petroleum products from imported crude and process oils

| Thousand tons |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Aviation, motor and industrial spirit | White spirit | Kerosine | Gas /Diesel oils ${ }^{1}$ | Fuel oil2 | Lubricating oils | Bitumen |
| 1943 | January | 15.3 | 5.7 |  |  | 1.1 | 1.8 | 3.1 | 3.6 |
|  | February | 13.7 | 4.7 | - |  | 0.9 | 1.9 | 2.6 | 3.6 |
|  | *March | 15.1 | 4.6 |  | 0.3 | 1.2 | 1.9 | 3.3 | 3.8 |
|  | April | 12.2 | 4.3 |  | 0.2 | 0.2 | 2.0 | 2.8 | 2.7 |
|  | * May | 11.7 | 2.4 | - |  | 0.7 | 1.9 | 3.9 | 2.8 |
|  | June | 12.3 | 5.0 | - |  | 0.6 | 1.5 | 3.1 | 2.1 |
|  | July | 14.0 | 5.8 | - |  | 0.7 | 1.7 | 2.8 | 3.0 |
|  | * August | 13.7 | 4.1 | - |  | 0.9 | 1.8 | 3.7 | 3.2 |
|  | September | 17.6 | 6.2 | - | 0.1 | 0.7 | 2.6 | 4.2 | 3.8 |
|  | October | 17.6 | 5.9 | - |  | 1.0 | 2.7 | 3.7 | 4.3 |
|  | *November | 17.9 | 5.8 | - | - | 0.9 | 2.7 | 4.8 | 3.7 |
|  | December. | 19.5 | 7.1 | - | - | 0.8 | 2.5 | 5.1 | 4.0 |
| 1944 | * ${ }^{\text {anuary }}$ | 18.5 | 7.2 | - | - | 0.7 | 2.8 | 4.1 | 3.7 |
|  | February | 20.0 | 7.7 | - | - | 1.0 | 2.7 | 4.4 | 4.2 |
|  | March | 21.5 | 9.0 | - |  | 1.1 | 3.5 | 3.1 | 4.8 |
|  | April | 21.8 | 7.7 |  |  | 1.3 | 3.1 | 4.8 | 4.9 |
|  | *May | 22.0 | 7.6 | - |  | 0.9 | 3.4 | 4.6 | 5.5 |
|  | June | 22.3 | 6.7 | - | - | 1.2 | 3.6 | 4.7 | 6.1 |
|  | *uly | 24.0 | 9.0 | - | 0.1 | 1.2 | 3.8 | 4.1 | 5.8 |
|  | August | 22.7 | 9.1 | - |  | 0.8 | 3.7 | 4.2 | 4.9 |
|  | September | 23.2 | 8.9 | - | 0.1 | 0.9 | 4.4 | 3.0 | 5.9 |
|  | * October | 20.6 | 8.4 | - | - | 0.8 | 3.7 | 3.8 | 3.9 |
|  | November | 19.8 | 7.8 | - | 0.1 | 0.7 | 3.5 | 3.5 | 4.2 |
|  | December | 20.5 | 9.6 | - | - | 0.9 | 3.1 | 3.4 | 3.5 |
| 1945 | * anuary | 20.6 | 9.0 |  |  | 0.7 | 3.8 | 4.3 | 2.8 |
|  | February | 21.2 | 8.6 |  | 0.1 | 0.8 | 3.8 | 4.6 | 3.3 |
|  | March | 21.2 | 7.9 | - | 0.1 | 1.2 | 3.5 | 3.4 | 5.1 |
|  | *April | 22.0 | 8.6 | 0.1 | 0.1 | 1.4 | 3.5 | 4.1 | 4.2 |
|  | May | 19.2 | 6.6 |  | 0.1 | 1.0 | 3.0 | 3.4 | 5. |
|  | June | 23.9 | 8.6 |  | 0.1 | 1.1 | 3.8 | 3.6 | 6.7 |
|  | *)uly | 22.9 | 9.2 | - | 0.1 | 1.1 | 3.3 | 4.2 | 5.0 |
|  | August | 23.4 | 7.1 | 0.1 | - | 1.5 | 3.8 | 4.1 | 6.8 |

[^9]2. Including the cuantity of fuel oil consumed by refineries fram thei

Average of five weeks.

## 5. 15 Production from indigenous materials of petroleum products and substitutes



## 5. 5 Production from indigenous materials of petroleum products



### 5.16 Deliveries into consumption of petroleum products

| Thousand tons |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Aviation, motor and industrial spirit | White spirit | Kerosine | Gas /Diesel oils | Fuel oill | Lubricating oils | Bitumen |
| Annual totals |  |  |  |  |  |  |  |  |  |
| 1940 |  | 11,649 | 3,786 | 82 | 874 | 1,448 | 4,562 | 517 | 380 |
| 1941 |  | 12,326 | 4,433 | 90 | 943 | 1,547 | 4,318 | 647 | 348 |
| 1942 |  | 12,603 | 4,367 | 101 | 1,012 | 1,575 | 4,672 | 628 | 248 |
| 1943 |  | 13,204 | 5,069 | 93 | 1,067 | 1,510 | 4,696 | 592 | 177 |
| 1944 |  | 19,447 | 8,519 | 106 | 1,134 | 1,745 | 6,981 | 699 | 263 |
| 1945 |  | 15,358 | 5,992 | 113 | 1,263 | 1,786 | 5,408 | 553 | 243 |
| Weekly averages |  |  |  |  |  |  |  |  |  |
| 19401941 |  | 222.8 | 72.4 | 1.5 | 16.7 | 27.7 | 87.2 | 10.0 | 7.3 |
|  |  | 236.4 | 85.0 | 1.7 | 18.1 | 29.7 | 82.8 | 12.4 | 6.7 |
| 1942 |  | 241.7 | 83.8 | 1.9 | 19.4 | 30.2 | 89.6 | 12.0 | 4.8 |
| 1943 |  | 253.2 | 97.2 | 1.8 | 20.5 | 28.9 | 90.0 | 11.4 | 3.4 |
| 19441945 |  | 371.9 | 162.9 | 2.0 | 21.7 | 33.4 | 133.5 | 13.4 | 5.0 |
|  |  | 294.5 | 114.9 | 2.2 | 24.2 | 34.2 | 103.7 | 10.6 | 4.7 |
| 1939 | September | 266.2 | 97.8 | 1.6 | 16.8 | 32.6 | 89.0 | 17.1 | 11.3 |
|  | * October | 199.3 | 62.4 | 0.7 | 15.2 | 24.9 | 71.8 | 15.6 | 8.7 |
|  | November | 201.7 | 64.1 | 1.4 | 15.0 | 28.3 | 74.6 | 9.8 | 8.5 |
|  | December | 205.6 | 59.3 | 1.5 | 15.9 | 29.0 | 80.4 | 12.2 | 7.3 |
| 1940 | * January | 207.2 | 58.2 | 1.6 | 22.5 | 32.0 | 78.0 | 9.9 | 5.0 |
|  | February | 208.1 | 59.1 | 1.2 | 19.7 | 33.0 | 80.1 | 9.7 | 5.3 |
|  | March | 209.4 | 64.9 | 1.4 | 17.2 | 29.6 | 79.9 | 9.2 | 7.2 |
|  | * April | 245.8 | 72.8 | 1.9 | 18.5 | 28.5 | 104.3 | 11.4 | 8.6 |
|  | May | 231.4 | 71.6 | 2.4 | 14.0 | 25.2 | 97.5 | 11.9 | 8.8 |
|  | June | 227.6 | 72.7 | 1.8 | 12.2 | 28.2 | 91.7 | 11.4 | 9.6 |
|  | * July | 214.3 | 77.3 | 1.9 | 12.1 | 26.9 | 79.7 | 8.9 | 7.5 |
|  | August | 213.4 | 76.8 | 1.4 | 14.7 | 27.6 | 76.5 | 9.1 | 7.3 |
|  | * September | 223.5 | 79.4 | 1.4 | 16.9 | 26.4 | 84.5 | 8.1 | 6.8 |
|  | October | 223.5 | 78.8 | 1.3 | 17.8 | 29.6 | 77.5 | 10.4 | 8.1 |
|  | November | 226.5 | 76.4 | 1.6 | 16.3 | 30.7 | 83.0 | 10.6 | 7.9 |
|  | * December | 221.1 | 77.2 | 1.4 | 18.3 | 31.9 | 76.0 | 9.6 | 6.7 |
| 1941 | January | 221.6 | 71.2 | 1.2 | 20.5 | 32.8 | 81.0 | 9.8 | 5.1 |
|  | February | 239.4 | 75.8 | 1.5 | 18.5 | 36.2 | 88.9 | 11.7 | 6.8 |
|  | * March | 256.1 | 83.6 | 1.5 | 20.4 | 37.4 | 93.4 | 11.6 | 8.2 |
|  | April | 255.6 | 88.8 | 1.5 | 21.8 | 32.2 | 92.5 | 10.5 | 8.3 |
|  | May | 254.1 | 92.9 | 1.7 | 17.6 | 31.7 | 90.0 | 12.9 | 7.3 |
|  | * June | 226.7 | 89.8 | 1.6 | 12.6 | 28.0 | 75.4 | 11.9 | 7.4 |
|  | July | 226.0 | 88.3 | 1.8 | 13.0 | 27.7 | 74.4 | 13.5 | 7.3 |
|  | August | 222.7 | 87.4 | 1.7 | 14.8 | 24.9 | 75.0 | 12.2 | 6.7 |
|  | * September | 234.8 | 90.7 | 1.9 | 18.7 | 28.1 | 76.8 | 12.2 | 6.4 |
|  | October | 231.2 | 84.6 | 2.1 | 21.6 | 28.7 | 74.8 | 13.2 | 6.2 |
|  | November | 236.6 | 83.1 | 2.2 | 20.2 | 30.7 | 82.6 | 11.9 | 5.9 |
|  | * December | 225.0 | 80.3 | 1.9 | 17.9 | 29.8 | 78.6 | 11.7 | 4.8 |
| 1942 | January | 231.6 | 76.1 | 1.9 | 18.7 | 32.5 | 86.7 | 11.7 | 4.0 |
|  | February | 243.7 | 80.8 | 1.9 | 19.2 | 37.0 | 89.9 | 10.8 | 4.1 |
|  | * March | 256.8 | 83.6 | 2.2 | 22.5 | 36.3 | 92.0 | 15.2 | 5.0 |
|  | April | 248.3 | 85.5 | 2.0 | 25.8 | 31.2 | 86.5 | 12.2 | 5.1 |
|  | May | 248.5 | 86.9 | 2.3 | 19.6 | 29.5 | 91.8 | 13.3 | 5.1 |
|  | * June | 235.2 | 89.7 | 1.7 | 14.0 | 29.2 | 81.7 | 14.3 | 4.6 |
|  | July | 232.0 | 85.0 | 2.0 | 14.0 | 29.3 | 86.2 | 10.8 | 4.7 |
|  | *August | 232.9 | 83.9 | 1.9 | 17.5 | 30.4 | 84.1 | 10.4 | 4.7 |
|  | September | 245.4 | 87.5 | 1.9 | 20.8 | 30.8 | 88.7 | 10.1 1.7 | 5.6 5.4 |
|  | October | 265.1 232.7 | $\begin{aligned} & 87.2 \\ & 830 \end{aligned}$ | 2.0 2.0 | $\begin{aligned} & 23.3 \\ & 20.5 \end{aligned}$ | 33.6 33.3 | 101.9 76.6 | 11.7 12.4 | 5.4 4.9 |
|  | December | 222.9 | 75.4 | 1.7 | 18.0 | 29.9 | 83.9 | 10.2 | 3.8 |

## 5. I6 Deliveries into consumption of petroleum products

| Thousa |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total |  | White spirit | Kerosine | Gas/Diesel oils | Fuel oill | Lubricating oils | Bitumen |
| 1943 | January | 228.9 | 74.4 | 1.7 | 19.0 | 32.3 | 87.7 | 10.2 | 3.6 |
|  | February | 236.3 | 82.5 | 1.6 | 20.0 | 32.1 | 85.8 | 10.5 | 3.6 3.8 |
|  | *March | 251.7 | 91.9 | 1.8 | 29.4 | 31.9 | 81.7 | 11.5 | 3.5 |
|  | April | 234.5 | 88.3 | 1.6 | 23.2 | 28.1 | 80.6 | 10.3 | 2.4 |
|  | May | 249.3 | 96.5 | 1.8 | 17.0 | 29.7 | 88.8 | 12.6 | 2.9 |
|  | June | 259.8 | 100.2 | 1.6 | 14.4 | 29.4 | 100.2 | 11.5 | 2.5 |
|  | July | 231.2 | 98.0 | 1.9 | 16.1 | 27.1 | 74.6 | 10.9 | 2.6 |
|  | *August | 243.3 | 106.2 | 1.7 | 19.8 | 25.8 | 76.4 | 10.3 | 3.1 |
|  | September | 259.2 | 109.5 | 1.9 | 22.5 | 29.9 | 79.6 | 11.8 | 4.0 |
|  | October | 272.0 | 104.6 | 2.0 | 24.5 | 33.8 | 90.9 | 11.8 | 4.4 |
|  | November | 281.8 | 104.4 | 2.1 | 21.1 | 34.4 | 102.7 | 12.7 | 4.4 |
|  | *December | 276.6 | 105.1 | 1.6 | 18.4 | 35.2 | 101.5 | 11.3 | 3.5 |
| 1944 * | * anuary | 305.1 | 117.1 | 1.9 | 21.2 | 38.4 | 108.7 | 13.7 |  |
|  | February | 337.1 | 135.9 | 2.1 | 23.3 | 38.1 | 118.6 | 14.7 | 4.4 |
|  | March | 374.8 | 156.6 | 2.2 | 29.5 | 42.1 | 124.0 | 15.2 | 5.2 |
|  | April | 386.4 | 164.5 | 2.0 | 26.7 | 38.3 | 134.9 | 15.1 | 4.9 |
|  | * May | 437.9 | 201.8 | 2.2 | 20.9 | 37.8 | 151.5 | 17.4 | 6.3 |
|  | June | 447.9 | 212.2 | 2.3 | 17.0 | 35.8 | 156.2 | 18.1 | 6.3 |
|  | * July | 392.3 | 181.2 | 1.9 | 16.4 | 31.1 | 141.7 | 13.9 | 6.1 6.1 |
|  | August | 384.7 | 178.8 | 1.8 | 22.3 | 30.0 | 136.2 | 10.5 | 5.1 |
|  | September | 372.2 | 165.9 | 2.0 | 22.5 | 32.0 | 132.4 | 11.5 | 5.9 |
|  | * October | 368.4 | 160.5 | 2.2 | 23.1 | 36.4 | 131.4 | 10.3 | 4.5 |
|  | November | 348.6 | 148.1 | 2.0 | 21.2 | 39.0 | 123.9 | 10.3 | 4.1 |
|  | December | 329.5 | 137.9 | 1.9 | 18.5 | 36.5 | 120.1 | 11.1 | 3.5 |
| 1945 * | * January | 338.6 |  |  |  | 39.4 |  |  |  |
|  | February | 384.3 | 166.5 | 2.3 | 25.2 | 44.4 | 131.5 | 10.7 | 3.7 |
|  | March | 411.5 | 186.4 | 2.9 | 38.4 | 39.5 | 126.1 | 13.0 | 5.2 |
|  | * April | 370.0 | 157.9 | 2.4 | 30.2 | 35.1 | 129.1 | 10.6 | 4.7 |
|  | May | 318.1 | 119.2 | 2.0 | 18.9 | 34.7 | 131.0 | 7.9 | 4.4 |
|  | June | 274.7 | 106.9 | 2.4 | 18.0 | 33.3 | 98.5 | 10.2 | 5.4 |
|  | *uly | 258.2 | 103.3 | 2.4 | 19.5 | 32.3 | 84.0 | 10.6 | 6.1 |
|  | August | 233.5 | 85.9 | 1.8 | 22.4 | 33.2 | 76.0 | 8.9 | 5.3 |

Source: Ministry of Fuel and Power

## 5. I7 Deliveries into civilian consumption of motor spirit'

|  | Thousand tons |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Great Britain |  |  |  |  |  | Northern Ireland |
|  |  | Total | Private cars and motor cycles |  | Commercial vehicles | Industrial uses | Agricultural uses |  |
|  |  |  | $\begin{aligned} & \text { Basic } \\ & \text { ration2 } \end{aligned}$ | Supplementary ration |  |  |  |  |
| Annual totals |  |  |  |  |  |  |  |  |
| 1940 |  | 2,939 | 359 | 464 | 1,696 | 314 | 106 | 56 |
| 1941 |  | 3,001 | 336 | 429 | 1,783 | 347 | 106 | 68 |
| 1942 |  | 2,501 | 116 | 357 | 1,640 | 286 | 102 | 67 |
| 1943 |  | 2,139 | 4 | 296 | 1,545 | 194 | 100 | 58 |
| 1944 |  | 2,264 | 5 | 323 | 1,605 | 215 | 116 | 57 |
| 1945 |  | 2,734 | 217 | 430 | 1,742 | 204 | 141 | 66 |
| Weekly averages ${ }^{3}$ <br> 1940 <br> 190 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1941 |  | 57.6 | 6.5 | 8.2 | 34.2 | 6.7 | 2.0 | 1.3 |
| 1942 |  | 48.0 | 2.2 | 6.8 | 31.5 | 5.5 | 2.0 | 1.3 |
| 1943 |  | 41.0 | 0.1 | 5.7 | 29.6 | 3.7 | 1.9 | 1.1 |
| 1944 |  | 43.3 | 0.1 | 6.2 | 30.7 | 4.1 | 2.2 | 1.1 |
| 1945 |  | 52.4 | 4.2 | 8.2 | 33.4 | 3.9 | 2.7 | 1.3 |
| 1940 | January | 50.6 | 7.8 | 8.1 | 29.2 | 3.8 | 1.7 | 1.0 |
|  | February | 52.1 | 6.6 | 8.4 | 30.5 | 4.6 | 2.0 | 1.0 |
|  | March | 55.1 | 7.0 | 9.0 | 32.2 | 4.8 | 2.1 | 1.0 |
|  | April | 61.9 | 8.0 | 10.4 | 35.7 | 5.5 | 2.3 | 1.3 |
|  | May | 59.0 | 7.6 | 10.0 | 34.0 | 5.2 | 2.2 | 1.1 |
|  | June | 53.4 | 7.0 | 9.1 | 29.9 | 5.3 | 2.1 | 1.0 |
|  | July | 57.6 | 7.6 | 9.9 | 32.2 | 5.7 | 2.2 | 1.2 |
|  | August | 56.1 | 7.0 | 9.4 | 31.8 | 5.7 | 2.2 | 1.1 |
|  | September | 55.2 | 6.8 | 9.2 | 31.4 | 5.7 | 2.1 | 11.1 |
|  | October | 57.9 | 7.0 | 9.2 | 33.8 | 5.7 | 2.2 | 1.1 |
|  | November | 58.9 | 6.7 | 9.0 | 35.5 | 5.5 | 2.2 | 1.1 |
|  | December | 56.3 | 6.5 | 8.7 | 33.8 | 5.2 | 2.1 | 1.1 |
| 1941 | January | 54.8 | 6.5 | 8.6 | 32.8 | 5.0 | 1.9 | 1.1 |
|  | February | 56.5 | 6.3 | 9.0 | 33.7 | 5.4 | 2.1 | 1.2 |
|  | March | 58.2 | 6.6 | 9.3 | 34.7 | 5.4 | 2.2 | 1.3 |
|  | April | 61.8 | 7.4 | 9.4 | 37.3 | 5.5 | 2.2 | 1.4 |
|  | May | 63.5 | 7.6 | 9.7 | 38.2 | 5.7 | 2.3 | 1.5 |
|  | June | 57.9 | 7.7 | 8.4 | 34.3 | 5.3 | 2.2 | 1.4 |
|  | July | 59.8 | 7.9 | 8.7 | 35.4 | 5.6 | 2.2 | 1.4 |
|  | August | 56.1 | 7.1 | 8.0 | 34.1 | 4.8 | 2.1 | 1.3 |
|  | September | 59.0 | 7.6 | 8.4 | 35.6 | 5.2 | 2.2 | 1.4 |
|  | October | 55.5 | 3.8 | 8.4 | 35.9 | 5.2 | 2.2 | 1.3 |
|  | November | 52.7 | 6.2 | 7.6 | 32.4 | 4.5 | 2.0 | 1.3 |
|  | December | 53.6 | 5.6 | 7.6 | 33.8 | 4.7 | 1.9 | 1.3 |
| 1942 | January | 50.8 | 5.7 | 7.4 | 31.3 | 4.5 | 1.9 | 1.3 |
|  | February | 52.3 | 5.6 | 7.6 | 32.1 | 4.9 | 2.1 | 1.3 |
|  | March | 52.3 | 5.6 | 7.6 | 32.1 | 4.9 | 2.1 | 1.3 |
|  | April | 51.1 | 2.9 | 7.1 | 33.9 | 5.1 | 2.1 | 1.4 |
|  | May | 48.5 | 2.7 | 6.8 | 32.2 | 4.8 | 2.0 | 1.4 |
|  | June | 51.1 | 1.7 | 7.6 | 34.8 | 4.9 | 2.1 | 1.4 |
|  | July | 47.7 | 1.6 | 7.1 | 32.4 | 4.6 | 2.0 | 1.3 |
|  | August | 42.0 | 0.7 | 7.1 | 27.5 | 4.6 | 2.1 | 1.2 |
|  | September | 46.4 | 0.6 | 7.2 | 32.2 | 4.3 | 2.1 | 1.3 |
|  | October | 46.2 | 0.6 | 7.1 | 32.1 | 4.3 | 2.1 | 1.3 |
|  | November | 43.7 | 0.1 | 6.8 | 30.6 | 4.2 | 2.0 | 1.2 |
|  | December | 43.5 | 0.1 | 6.7 | 30.9 | 3.9 | 1.9 | 1.2 |

## 5. 17 Deliveries into civilian consumption of motor spirit


based on total co spit. The analysis of deliveries by consumer categories is
2. During the period June 1942 to May 1945 , the figures in this column relate to
supplementary rations for domestic purposes only. The higher figures for June to
October 1942 reflet the completion of the consumption of the last basic ration issue.
Based on calendar months.
5. I8 Deliveries into consumption of fuel for diesel-engined road vehicles


## 5. I 8 Deliveries into consumption of fuel for diesel-engined road vehicles



[^10]Based on calendar months.

## 5. 9 Deliveries into consumption of gas, diesel and fuel oil



2. Includes smoke-screens until I Aprili 194

Based on calendar months. The weekly average for any given month
shown in this table will not pe exaety the
shown in this table will not be exactly the same as the weekly average
for the four of five weeks period under the same name in Table 5.16.

economy placed great pressures on the raw material supplies of the nation. Despite this, it has been judged that the supply of raw materials did not act as a constraint on munitions production during the war (Hargreaves and Gowing 1952: 127). This was mainly because of the success of the state in finding alternative suppliers, increasing domestic production and decreasing nonessential uses, and its relatively efficient framework for controlling and allocating the available supplies.

The loss of European and eastern supplies due to the victories of Germany and Japan was crucial for many raw materials ; for example, more than three-quarters of the pre-war British imports of materials such as flax, ferroalloys, bauxite, iron ore and softwood, rubber, raw silk and tungsten ore had been supplied by territories which were effectively cut off from Britain during the war (Hurstield 1953: 158,167 ). Some of these lost supplies were replaced by new or increased supplies from Canada (for example, aluminium, abrasives, and paper making materials), other Empire countries (antimony, chrome and tungsten ores, bauxite, flax, and hemp) and especially the USA (iron and steel, chemicals and fertilisers, non-ferrous metals, and synthetic rubber).
6. I Home production of iron ore


## man matralis

### 6.2 Home production of virgin aluminium



Even before the passage of the Lend-Lease Act in March 194I the USA proved a vital source of increased supplies, raising their exports of raw materials to the UK from 1.9 million tons in 1939 to 5.4 million tons in 1940 (Hurstfield 1953: 160-4, 169-72). Despite this, the need to conserve 1953: $160-4,169-72$ ). Despite this, the need to conserve
scarce shipping capacity, and the impact of enemy action, meant that raw material imports fell from more than 22 million tons in 1940 to less than 12 million tons in 1942 , although much of this loss (more than 8 million tons) was due to reductions in the import of just one material, due to reductions in the import of just one materia,
timber (Hargreaves and Gowing 1952: 126; Ford 1951: timber (Hargrea
144; table 6.23)

The option of increasing the domestic production to replace the lost supplies was simply not available for many raw materials but where this was practical (for example, in the cases of iron ore, ferro-chrome, magnesium and magnesium alloys, virgin aluminium and timber) it occurred (Hurstield 1953: 239-41; tables 6.3 and 6.7-6.10). In many of these industries, given that labour, capital, raw materials, energy and transport were all in short supply, increased production had to rely on a greater utilisation of the existing capacity; however, in the case of certain strategic materials (such as alloy steel and aluminium) and synthetic materials (such as alloy steel and aluminium) and synthetic
substitutes (rubber and plastics) there was little alternative but to build new plant (Hornby 1958: 279-84; Howlett 1994b: 527-8; tables 6.9, 6.13, 6.16). In the case of timber the response to the loss of imported supplies was to dramatically increase home production (from 444,000 tons in 1940 to a wartime peak of 745,000 tons for softwood, and from 496,000 tons to 1.13 million tons for hardwoods) (House 1965: 318-9; Meiggs 1949:43).

The pressure on raw material supplies was eased by the use of scrap or other recycled material (such as waste) rubber and by using substitute materials, although this latter option often merely represented an ordering of the current relative scarcity of materials (as in the case of pit props in 1940 where scarce steel was substituted for the props in 1940 where scarce steel was substituted for the
even more scarce timber) (Hurstield 1953:356-62; tables 6.5 and 6.13 ). The pressure was further lessened by reducing the quantity and quality of finished goods that were considered less essential to the war effort.

Thus, the production of many consumer goods (such as textiles, clothing, leather, wood and paper) was deliberately curtailed by the state and quality was sacrificed by simply using less of the raw material input (for example, reducing the height of ladies' shoe heels, which saved several thousand tons of shipping space, and slimming the thickness of coffins, which saved 0.5 million cubic feet of wood per year) or by producing a much limited and more basic range of designs (as was the case with the utility schemes in furniture and clothing) (Ford 1951: 149; schemes in furniture and clothing) (Ford 1951: 149;
Hargreaves and Gowing 1952: 335-7, 431-79, 507-10; tables 6.17-6.22),

The role the state played in the supply of raw materials during the war was crucial: it monitored production, imports (through a licensing system), exports (which, after 1940, were severely curtailed on state direction), stocks and distribution, and it centrally allocated most of them. This monitoring (including the collection of a vast amount of statistical information), and some of the allocation, was carried out by the raw material Controls (Hargreaves and Gowing 1952: 127-8; House 1965). The first Controls to

be created were the Iron and Steel Control and the Flax Control in October 1939 and the last to be established was the Tin Control in March 1942; typically the Head Controller was a businessman with many years of experience in the relevant industry (Hurstifild 1953:414, 447). The most important body in this process was, however, the Materials Committee (originally a War Cabinet sub-committee and later part of the Ministry of Cabinet sub-committee and later part of the Ministry of
Production) which was responsible for the allocation of scarce materials.

Government departments made bids to the Materials Committee for the amount of a particular raw material (for example steel) that they felt they needed to fuffil their production programme in the coming quarter; the Committee would then assess these bids in the light of the
supply position as detailed by the relevant Control (the Iron and Steel Control) and the strategic priorities set by the War Cabinet and decide how much material (steel) each department would actually be allocated (Howlett 1993; Howlett 1994b). The process at the level of the firm was controlled by licences which were issued, depending was controled by licences which were issued, depending
on the raw material, either by government departments (up to an amount equal to their allocation as decided by the Materials Committee) or by the relevant material Control (Howlett 1994b: 531-2; Ford 1951: 146). Finally, with the entry of the USA into the war a Combined Raw Materials Board was established in Washington to allow the allies to assess requirements and supplies globally, although within Britain the Materials Committee still remained the linchpin of the allocation system (Duncan Hall and Wrigley 1956: 262-311).

RAW MATERIALS

### 6.3 Iron ore and manganese ore

|  |  | Home iron ore |  |  |  |  | Imported iron ore |  |  |  |  | Manganese ore |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { Pro- } \\ & \text { duction } \end{aligned}$ | Consumption | Stocks (end of period) |  |  | Arrivals | Consumption |  | Stocks (end of period) |  | Consumption | $\begin{aligned} & \text { Stocks } \\ & \text { (end of } \\ & \text { period) } \end{aligned}$ |
|  |  |  |  | Total | $\begin{array}{r} \text { At } \\ \text { mines } \end{array}$ | At blast furnaces and steel works |  | Total | $\begin{aligned} & \text { Blast } \\ & \text { furn- } \\ & \text { aces } \end{aligned}$ | Total | At blast furnaces and stee works |  |  |
| Annual totals ${ }^{3}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & 1937 \\ & 1938 \end{aligned}$ |  | $\begin{aligned} & 14,215 \\ & 11,589 \end{aligned}$ | $\begin{aligned} & 13,93^{4} \\ & 11,715^{4} \end{aligned}$ |  |  |  |  | $\begin{aligned} & 6,193^{4} \\ & 4,632^{4} \end{aligned}$ | $\begin{aligned} & 5,736 \\ & 4,380 \end{aligned}$ |  |  |  |  |
| 1939 |  | 14,486 |  | 1,988 | 1,464 | 524 |  |  |  | 871.1 | 758.9 | 250 |  |
| 1940 |  | 17,702 | 16,006 | 2,582 | 1.386 | 1,196 | 4,508 | 4,712 | 4,052 | 736.4 | 698.5 | 290 | 104.0 |
| 1941 |  | 18,974 | 17,826 | 2,475 | 1,200 | 1,275 | 2,241 | 2,085 | 1,596 | 882.3 | 855.6 | 291 | 115.8 |
| 1942 |  | 19,906 | 18,692 | 2,451 | 1,302 | 1,149 | 1,935 | 2,061 | 1,564 | 752.3 | 749.5 | 407 | 94.3 |
| 1943 |  | 18,494 | 17,124 | 2,677 | 1,644 | 1,033 | 1,924 | 1,877 | 1,456 | 787.4 | 756.0 | 307 | 208.1 |
| 1944 |  | 15,472 | 14,908 | 2,216 | 1,532 | 684 | 2,148 | 2,433 | 2,070 | 515.9 | 482.2 | 375 | 117.2 |
| 1945 |  | 14,175 | 13,671 | 2,142 | 1,436 | 706 | 4,191 | 4,020 | 3,656 | 633.8 | 549.1 | 296 | 120.5 |
| Weekly averages |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 279.0 |  | 1,988 | 1,464 | 524 |  |  |  | 871.1 | 758.9 | 4.8 |  |
| 1940 |  | 340.0 | 308.0 | 2,582 | 1,386 | 1,196 | 86.7 | 90.6 | 78.0 | 736.4 | 698.5 | 5.6 | 104.0 |
| 1941 |  | 365.0 | 343.0 | 2,475 | 1,200 | 1,275 | 43.1 | 40.1 | 30.7 | 882.3 | 855.6 | 5.6 | 115.8 |
| 1942 |  | 376.0 | 353.0 | 2,451 | 1,302 | 1,149 | 36.5 | 39.0 | 29.5 | 752.3 | 749.5 | 7.7 | 94.3 |
| 1943 |  | 355.8 | 329.3 | 2,677 | 1,644 | 1,033 | 37.0 | 36.0 | 28.0 | 787.4 | 756.0 | 5.9 | 208.1 |
| 1944 |  | 297.6 | 286.7 | 2,216 | 1,532 | 684 | 41.3 | 46.7 | 39.8 | 515.9 | 482.2 | 7.2 | 117.2 |
| 1945 |  | 272.5 | 262.9 | 2,142 | 1,436 | 706 | 80.6 | 77.2 | 70.3 | 633.8 | 549.1 | 5.8 | 120.5 |
| 1939 | October | 322.0 | 288.0 | 1,947 | 1,437 | 510 |  | 124.2 |  |  | 987 | 4.1 |  |
|  | November | 323.0* | 289.0* | *2,031 | 1,461 | 570 |  | 116.2 |  |  | 871 | 5.2* |  |
|  | December | 288.0 | 286.0 | 1,988 | 1,464 | 524 |  | 115.0 | $\cdots$ |  | 759 | 6.0 |  |
| 1940 | January | 269.0* | 270.0* | * 1,858 | 1,414 | 444 |  | 119.5* | 103.0* | 761.4 | 703.8 | 5.9* | 183.0 |
|  | February | 293.0 | 267.0 | 1,932 | 1,421 | 511 |  | 116.9 | 101.2 | 745.8 | 684.7 | 5.9 | 166.0 |
|  | March | 335.0 | 304.0 | 1,936 | 1,398 | 565 | . | 107.3 | 91.0 | 780.0 | 716.1 | 5.0 | 166.0 |
|  | April | 363.0 | 327.0 | 2,054 | 1,399 | 655 | . | 103.6 | 87.3 | 951.0 | 853.6 | 5.2 | 157.0 |
|  | May | 365.0* | 335.0* | *,076 | 1,373 | 703 |  | 111.0* | 95.4* | 1,077.2 | 979.7 | 5.3* | 141.0 |
|  | June | 366.0 | 320.0 | 2,163 | 1,371 | 792 |  | 112.7 | 99.0 | 1,179.0 | 1,104.4 | 4.6 | 164.0 |
|  |  | 363.0 | 317.0 | 2,263 | 1,359 | 904 | .. | 97.7 | 86.3 | 1,040.4 | 989.3 | 4.8 | 171.0 |
|  | August | 358.0* | 306.0* | *2,402 | 1,330 | 1,072 |  | 77.8* | 68.2* | 931.2 | 898.1 | 5.3* | 169.0 |
|  | September | 356.0 | 303.0 | 2,512 | 1,347 | 1,165 |  | 64.2 | 55.4 | 846.0 | 812.3 | 6.6 | 159.0 |
|  | October | 344.0* | 307.0* | * 2,608 | 1,388 | 1,220 |  | 61.1 * | 52.7* | 802.5 | 777.4 | 5.5* | 147.0 |
|  | November | 343.0 | 318.0 | 2,601 | 1,390 | 1,211 | .. | 57.0 | 47.9 | 749.2 | 717.3 | 7.0 | 126.0 |
|  | December | 337.0 | 323.0 | 2,582 | 1,386 | 1,196 |  | 56.7 | 47.3 | 736.4 | 698.5 | 6.0 | 104.0 |
| 1941 | January | 326.0* | 329.0* | * 2,444 | 1,347 | 1,097 | 28.6* | 49.9* | 40.0* | 638.4 | 598.8 | 5.8* | 74.9 |
|  | February | 346.0 | 339.0 | 2,357 | 1,286 | 1,070 | 30.1 | 39.9 | 30.3 | 608.9 | 578.1 | 5.1 | 53.7 |
|  | March | 363.0 | 346.0 | 2,336 | 1,254 | 1,083 | 37.2 | 38.4 | 29.6 | 580.1 | 561.7 | 5.1 | 47.6 |
|  | April | 366.0* | 338.0* | *2,352 | 1,212 | 1,140 | 38.4* | 40.3* | 31.4* | 598.5 | 566.9 | 4.3* | 48.2 |
|  | May | 368.0 | 339.0 | 2,361 | 1,167 | 1,193 | 61.9 | 37.0 | 28.4 | 707.6 | 678.7 | 3.7 | 62.4 |
|  | June | 359.0 | 338.0 | 2,347 | 1,161 | 1,185 | 48.2 | 38.2 | 29.0 | 760.5 | 719.5 | 5.4 | 70.4 |
|  | July | 369.0* | 339.0* | *2,380 | 1,182 | 1,198 | 28.0* | 37.9* | 28.9* | 761.3 | 725.7 | 5.8* | 64.3 |
|  | August | 368.0 | 343.0 | 2,364 | 1,152 | 1,212 | 55.0 | 40.0 | 31.5 | 788.5 | 768.9 | 6.1 | 71.4 |
|  | September | 395.0 | 353.0 | 2,428 | 1,157 | 1,271 | 49.0 | 39.5 | 30.1 | 822.4 | 797.5 | 5.7 | 78.3 |
|  | October | 379.0* | 352.0* | * 2,462 | 1,156 | 1,306 | 49.2* | 39.8* | 29.9* | 876.0 | 828.6 | 6.2* | 94.5 |
|  | November | 379.0 | 350.0 | 2,497 | 1,170 | 1,327 | 44.8 | 41.5 | 31.3 | 881.3 | 853.1 | 6.1 | 90.8 |
|  | December | 366.0 | 353.0 | 2,475 | 1,200 | 1,275 | 39.8 | 36.4 | 26.6 | 882.3 | 855.6 | 7.4 | 115.8 |
| See footnotes on page 117 |  |  |  |  |  |  |  |  |  |  |  | Source: Ministry of Supply |  |

### 6.3 Iron ore and manganese ore

| Thousand tons |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Home iron ore |  |  |  |  | Imported iron ore |  |  |  |  | Manganese ore |  |  |
|  |  | Pro- | Consumption | Stocks (end of period) |  |  | Arrivals | Consumption |  | Stocks (end of period) |  | Consumption |  | Stocks ${ }^{4}$ (end of period) |
|  |  |  |  | Total | At Atblast mines furnaces and stee works |  |  | Total | $\begin{aligned} & \text { Blast } \\ & \text { furn- } \\ & \text { aces } \end{aligned}$ | Total | At blast furnaces and steel works |  |  |  |
| 1942 | January | 348.5* | 346.9* | 2,367 | 1,197 | 1,170 | 43.8* | 36.8* | 27.7* | 927.9 | 877.4 |  | 7* |  |
|  | February | 358.1 | 341.3 | 2,326 | 1,181 | 1,145 | 29.6 | 38.0 | 28.4 | 882.7 | 866.4 | 7.4 | . 4 | 129.3 |
|  | March | 374.9 | 352.7 | 2,315 | 1,195 | 1,120 | 45.9 | 37.4 | 27.0 | 898.3 | 8881.8 |  |  | 23.9 |
|  | April | 383.2* | 357.4* | 2,341 | 1,184 | 1,158 | 43.8* | 43.4 | 33.1* | 913.6 | 887.4 |  | .7* | 27.4 |
|  | May | 376.6 | 355.5 | 2,339 | 1,165 | 1,174 | 38.2 | 43.1 | 33.4 | 915.1 | 889.0 |  | 1 | 136.1 |
|  | June | 397.7 | 356.1 | 2,386 | 1,147 | 1,239 | 56.7 | 44.2 | 33.9 | 947.3 | 906.1 |  | 9 | 136.8 |
|  |  | 398.2* | 353.8* | 2,516 | 1,199 | 1,318 | 30.7* | 39.8* | 30.6* | 887.1 | 882.5 |  | . ${ }^{*}$ | 152.1 |
|  | August | 376.3 | 343.3 | 2,531 | 1,230 | 1,301 | 59.4 | 41.2 | 32.9 | 967.6 | 945.1 |  | 2 | 142.1 |
|  | September | 394.5 | 358.1 | 2,583 | 1,264 | 1,319 | 30.6 | 42.8 | 33.5 | 918.2 | 910.4 |  | 3 | 165.7 |
|  | October | 384.3* | 356.9* | 2,600 | 1,290 | 1,311 | 34.7* | 34.7* | 25.9* | 92.1 | 913.2 |  | .1* | 157.3 |
|  | November | 372.0 | 357.9 | 2,578 | 1,312 | 1,266 | 11.3 | 34.4 | 25.6 | 834.2 | 832.1 |  | 5 | 132.3 |
|  | December | 348.9* | 351.7* | 2,451 | 1,302 | 1,149 | 16.3* | 32.6* | 24.2* | 752.3 | 749.5 |  | 7* | 94.3 |
| 1943 | January | 372.0 | 348.4 | 2,446 | 1,323 | 1,124 | 26.4 | 31.8 | 28.4 | 714.4 | 700.5 | 7.1 | 1 | 77.6 |
|  | February | 367.3 | 343.1 | 2453 | 1,324 | 1,128 | 18.7 | 31.3 | 21.8 | 675.7 | 658.5 |  | . 5 | 62.3 |
|  | March | 368.3* | 345.8* | 2,453 | 1,348 | 1,105 | 383* | 33.9* | 24.2* | 693.3 | 675.8 |  | . ${ }^{*}$ | 79.2 |
|  | April | 334.1 | 325.9 | 2,429 | 1,351 | 1,078 | 43.0 | 31.7 | 23.1 | 727.9 | 697.9 | 5.4 | 4 | 106.9 |
|  | May | 371.1 | 337.2 | 2,470 | 1,364 | 1,105 | 14.1 | 29.8 | 21.4 | 682.4 | 682.3 |  | 7 | 129.0 |
|  | June | 362.8* | 328.8* | 2,517 | 1,399 | 1,118 | 57.5* | 30.3* | 21.8* | 819.1 | 813.3 |  | 7* | 163.2 |
|  | July | 353.7 | 318.0 | 2,565 | 1,414 | 1,151 | 33.9 | 38.2 | 29.7 | 804.3 | 801.4 | 5.9 | 5 | 180.6 |
|  | August | 328.5 | 312.0 | 2,571 | 1,467 | 1,104 | 45.0 | 38.2 | 30.7 | 801.8 | 764.8 |  | 2 | 211.4 |
|  | September | 365.3* | 325.1* | 2.668 | 1,561 | 1,107 | 35.4* | 38.6* | 30.5* | 798.7 | 773.3 |  | .5* | 222.0 |
|  | October | 364.4 | 326.4 | 2,719 | 1,609 | 1,110 | 39.8 | 42.2 | 34.0 | 795.3 | 772.8 |  |  | 229.3 |
|  | November | 355.3 | 330.6 | 2,706 | 1,625 | 1,280 | 44.5 | 42.9 | 35.1 | 798.6 | 769.9 | 5.4 | 4 | 224.8 |
|  | December | 326.7* | 312.2* | 2,677 | 1,644 | 1,033 | 40.9* | 44.2* | 36.8* | 787.4 | 756.0 |  | 9* | 208.1 |
| 1944 | January | 339.2 | 311.5 | 2,691 | 1,662 |  | 45.3 |  |  | 791.7 |  |  |  |  |
|  | February | 344.9 | 313.4 | 2,729 | 1,692 | 1,036 | 41.0 | 42.0 | 34.5 | 797.4 | 758.1 | 7.2 | 2 | 187.6 |
|  | March | 305.1* | 284.0* | 2,763 | 1,734 | 1,028 | 40.9* | 40.5* | 32.2* | 802.3 | 791.3 |  | .* | 183.2 |
|  | April | 272.5 | 271.9 | 2,691 | 1,737 | 954 | 57.8 | 44.2 | 36.9 | 863.4 | 843.8 |  | + | 158.4 |
|  | May | 286.9 | 284.6 | 2,601 | 1,738 | 863 | 58.6 | 42.1 | 34.7 | 897.7 | 864.0 | 8.1 |  | 159.1 |
|  | June | 279.3* | 275.4* | 2.530 | 1,736 | 794 | 29.7* | 47.9* | 40.8* | 831.1 | 814.2 |  | 3* | 141.6 |
|  | July | 293.1 | 269.8 | 2,554 | 1,755 | 799 | 40.1 | 50.7 | 44.0 | 781.2 | 776.9 |  |  | 152.0 |
|  | August | 263.8* | 266.0* | 2,447 | 1,698 | 750 | 25.7* | 50.0* | 43.7* | 671.0 | 660.9 |  | 2* | 137.0 |
|  | September | 302.8 | 290.1 | 2,396 | 1,641 | 755 | 30.1 | 47.6 | 41.1 | 594.4 | 584.3 |  |  | 122.7 |
|  | October | 311.5 | 294.0 | 2,392 | 1,609 | 783 | 40.0 | 47.6 | 41.4 | 556.7 | 543.5 | 7.0 | 0 | 103.0 |
|  | November | 301.7* | 299.3* | 2,300 | 1,569 | 732 | 44.6* | 53.5* | 46.5* | 532.5 | 510.6 |  | .1* | 100.2 |
|  | December | 286.5 | 285.9 | 2,216 | 1,532 | 684 | 48.6 | 52.2 | 45.7 | 515.9 | 482.2 | 6.5 | 5 | 117.2 |
| 1945 | January | 279.8* | 280.5* | 2,117 | 1,520 | 597 | 46.0* | 52.2* | $46.7 *$ | 484.5 | 411.0 |  |  |  |
|  | February | 31.2.3 | 294.9 | 2,106 | 1,510 | 596 | 66.2 | 57.6 | 51.1 | 505.0 | 466.9 | 6.5 |  | 113.4 |
|  | March | 329.6 | 294.8 | 2,164 | 1,507 | 656 | 54.7 | 60.3 | 53.3 | 531.8 | 502.6 | 6.4 | 4 | 119.6 |
|  | April | 316.0 | 279.4 | 2,234 | 1,507 | 727 | 68.4 | 64.2 | 57.2 | 535.5 | 498.1 |  |  | 121.1 |
|  | May | 290.7* | 260.2* | 2,299 | 1,506 | 793 | 68.7* | 61.4* | 55.1* | 576.7 | 531.5 |  | 3* | 114.2 |
|  | June | 288.0 | 261.2 | 2,337 | 1.523 | 813 | 111.0 | 68.7 | 61.6 | 714.5 | 638.5 | 4.6 | 6 | 116.4 |
|  | July | 274.5 | 252.2 | 2,372 | 1,556 | 816 | 104.0 | 77.5 | 70.8 | 786.5 | 716.6 | 4.9 |  | 122.4 |
|  | August | 221.4* | 223.5* | 2,306 | 1,540 | 767 | 104.5* | 77.9* | 71.7* | 896.6 | 855.4 | 5.1* | .* | 123.4 |

Raw and calcined ore as charged, except in the case of the figures of home iron ore in 1937
and 1938 which relate to raw and raw equivalent of calcined ore.
and 1938 which relate to raw and raw equivalent of calcined ore.
Including consumption in sinter plant.
. Incluaing consumption in sinter plant
Production and consumption fifures relate to calendar years for 1937, 1938 and 1939, to a period
of weeks for 1942 and to periods of 52 .
4. Including consumption of manganese ore. Excluding consumationg year
consumption of fotth home manganese ore. Excluding consumption in steel works. The average weekly
11400 ore in steel works amounted to 15,300 tons in 1937 and
Average of five week

### 6.4 Pig Iron



### 6.4 Pig Iron



1. Inluding production of blast furmace ferro-alloys and
2. Inluding refned pig iron consumed in iron foundries.
3
3. Including stocks at wrought iron and refined inon works and Ministry of Supply stockyards.
4. Production and consumption figures relate to calendar years for 1937, 1938 and 1939 to
a period of 53 weeks for 1942 and to periods of 52 weeks for the remaining years

### 6.5 Iron and steel scrap and steel ingots and castings


6.5


### 6.6 Semi-finished and finished iron and steel

| Thousand tons |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1935 | 1936 | 1937 | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| Production of semi-finished and finished iron and steel |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{llllllllllll}\text { Iron castings } \\ \text { Wrought iron: } & \text {.. } & \text {. }\end{array}$ |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  | 346 | 424 | 462 | 317 | 355 | 302 | 278 | 275 | 257 | 226 | 193 |
| Forge Production | 188 | 232 | 259 | 177 | 199 | 178 | 166 | 164 | 147 | 130 | 111 |
| Finishing mills production | 158 | 192 | 203 | 140 | 156 | 124 | 112 | 111 | 110 | 96 | 82 |
| Semi-finished steel: |  |  |  |  |  |  |  |  |  |  |  |
| Billets, blooms and slabs2 | 5,928 | 7,318 | 8,065 | 6,775 |  |  | 5,325 | 5,510 | 6,160 | 6,013 | 5,876 |
| Finished steel principal products ${ }^{3}$ |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Bright steel bars | 117 | 132 | 179 | 119 | 140 | 238 | 289 | 363 | 413 | 390 | 246 |
| Heavy rails and sleepers | 442 | 547 | 518 | 491 | 395 | 247 | 215 | 260 | 292 | 337 | 400 |
| Heavy and medium plates | 1,101 | 1,431 | 1,624 | 1,372 | 1,430 | 1,612 | 1,582 | 1,589 | 1,723 | 1,602 | 1,394 |
| Armour and bullet proof plate |  |  |  |  | 71 | 64 | 80 | 145 | 113 | 99 | 56 |
| Other heay steel products |  |  |  | 1,543 | 2,007 | 1,725 | 1,382 | 1,462 | 1,416 | 1,444 | 1,431 |
| Shell steel |  |  |  |  | 111 | 636 | 1,029 | 1,073 | 702 | 543 | 313 |
| Light róled products |  |  |  | 2,251 | 2,909 | 3,416 | 3,217 | 3,387 | 3,387 | 3,273 | 2,907 |
| Cold rolled strip | 91 | 114 | 130 | 73 | 110 | 154. | 163 | 216 | 231 | 220 | 225 |
| Sheets coated and uncoated | 1,097 | 1,163 | 1,272 | 816 | 1,649 | 1,257 | 1,263 | 1,185 | 1,169 | 1,137 | 1,076 |
| Tin, terne and black plates | 708 | 815 | 958 | 610 | 919 | 977 | 720 | 678 | 532 | 521 | 512 |
| Tubes, pipes and fittings | 718 |  | 837 | $665{ }^{4}$ | 675 | 684 | 685 | 677 | 659 | 666 | 595 |
| Steel castings | $115{ }^{4}$ | $145^{4}$ | 1704 | $142^{4}$ | 159 | 227 | 248 | 338 | 365 | 355 | 285 |
| Steel forgings | 109 | 136 | 173 | $250{ }^{4}$ |  | 342 | 469 | 596 | 617 | 563 | 387 |
| Wire | 442 |  | 562 | 5004 | 583 | 648 | 642 | 694 | 644 | 639 | 537 |
| Tyres, wheels and axles | 155 | 160 | 158 | 159 | 131 | 134 | 89 | 114 | 122 | 136 | 158 |
| Net deliveries of finished steel |  |  |  |  |  |  |  |  |  |  |  |
| Total |  |  |  |  |  |  | 10.497 | 11,387 |  | 10,270 |  |
| Home produced5 |  |  |  |  |  |  | 10,127 | 10,647 | 10,282 | 10,010 | 8,865 |
| Imported |  |  |  |  |  |  | 371 | 739 | 724 | 261 | 57 |
| Deliveries for home consumption | . |  | . | . |  |  |  | 11,086 | 10,860 | 10,044 | 8,136 |
| Stocks of steel6 |  |  |  |  |  |  | 2,754 | 2,179 | 2,171 | 1,684 | 1,224 |

Production and consumption figures relate to calendar years for 1935 to 1939 inclusive
to a period of 53 weeks for 1942 and to periods of 52 weeks for the remaining years.
to a period of 53 weeks for 1942 and to periods of 52 weeks for the remaining years.
Figures for stocks are for the end of the period in all cases.
. From 1941, excluding allo stee
3. Including $m$
5. Total United Kingdom production less deliveries to other steel firms for further conversion
6. Ingots, semi-fnished and finished steel. Excluding stocks held by consumers

### 6.7 Chrome ore and ferro-alloys

| Production and consumption: calendar years or 52 week periods 1 |  |  |  | Stocks end o |  | Thousand tons |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| Chrome ore |  |  |  |  |  |  |
| Home consumption: Total |  | 64.4 | 70.0 | 72.1 | 73.3 | $74.1{ }^{2}$ |
| Refractory |  | 31.8 | 36.1 | 34.9 | 30.6 | 34.1 |
| Chemical |  | 22.9 | 22.4 | 19.8 | 20.4 | 21.3 |
| Metallurgical |  | 9.7 | 11.5 | 17.5 | 22.3 | 18.7 |
| Stocks:Total | 52.53 | 45.1 | 75.1 | 40.1 | 56.3 | 30.6 |
| Refractory |  | 15.9 | 32.4 | 14.6 | 25.8 | 12.4 |
| Chemical |  | 11.9 | 9.0 | 11.0 | 13.8 | 7.6 |
| Metallurgical |  | 17.2 | 33.7 | 14.5 | 16.7 | 10.6 |
|  |  |  |  |  |  |  |
| Production ${ }^{4}$ |  | 4.47 | 2.91 | 1.40 | 2.08 | 2.70 |
| Total disposals ${ }^{4}$ |  | 4.36 | 2.12 | 1.88 | 2.50 | 2.82 |
| Home consumption ${ }^{4}$ |  | 3.46 | 2.01 | 1.87 | 2.48 | 2.53 |
| Stocks: Ore (metal content) | 2.88 | 1.80 | 2.10 | 4.00 | 5.09 | 2.98 |
| Finished product ${ }^{4}$ |  | 1.43 | 2.21 | 1.94 | 1.54 | 1.49 |
| Molybdenum ${ }^{\text {d }}$ ( ${ }^{\text {a }}$ |  |  |  |  |  |  |
| Production 4 |  | 1.87 | 3.39 | 2.77 | 1.24 | 0.81 |
| Total disposals ${ }^{4}$ |  | 2.24 | 3.95 | 2.99 | 1.78 | 1.14 |
| Home consumption ${ }^{4}$ |  | 2.09 | 3.93 | 2.99 | 1.78 | 1.05 |
| Stocks: Ore (metal content) | 1.27 | 0.61 | 0.56 | 1.18 | 0.38 | 0.09 |
| Finished product ${ }^{4}$ |  | 0.68 | 1.06 | 1.37 | 0.82 | 0.52 |
| Vanadium |  |  |  |  |  |  |
| Production ${ }^{4}$ |  | 0.51 | 0.58 | 0.53 | 0.22 | 0.19 |
| Total disposals ${ }^{4}$ |  | 0.55 | 0.57 | 0.51 | 0.29 | 0.24 |
| Home consumption ${ }^{\text {Sta }}$ |  | 0.53 | 0.53 | 0.45 | 0.28 | 0.21 0.30 |
| Stocks: Ore metal content Finished product ${ }^{4}$ | $]^{0.40}$ | $\begin{aligned} & 0.21 \\ & 0.19 \end{aligned}$ | $\begin{aligned} & 0.17 \\ & 0.21 \end{aligned}$ | $\begin{aligned} & 0.29 \\ & 0.22 \end{aligned}$ | $\begin{aligned} & 0.41 \\ & 0.16 \end{aligned}$ | 0.30 0.12 |
| Ferro-chrome |  |  |  |  |  |  |
| Production |  | 3.83 | 4.88 | 6.38 | 8.48 | 6.49 |
| Consumption |  | 24.40 | 27.84 | 28.16 | 20.49 | 16.26 |
| Stocks | 12.64 | 19.20 | 11.98 | 19.07 | 17.69 | 10.91 |
| Silico-manganese |  |  |  |  |  |  |
| Consumption |  | 14.0 | 14.9 | 10.8 | 10.1 | 9.8 |
| Stocks | 6.5 | 14.0 | 6.3 | 7.1 | 4.5 | 5.5 |
| Refined ferro-manganese |  |  |  |  |  |  |
| Production |  | 0.58 |  |  | 3.90 |  |
| Home consumption |  | 2.71 | 3.85 | 4.77 | 4.17 | 4.055 |
| Stocks | 1.24 | 1.21 | 1.62 | 4.21 | 3.96 | 2.60 |
| Ferro-silicon 400 |  |  |  |  |  |  |
| Production |  | 4.9 | 7.2 | 8.0 | 5.0 | 6.0 |
| Consumption |  | 43.5 | 50.9 | 62.5 | 51.8 | 41.8 |
| Stocks | 20.4 | 23.9 | 15.0 | 43.6 | 23.5 | 16.8 |
| Calcium silicide |  |  |  |  |  |  |
| Consumption |  | 0.70 0.74 | 1.03 0.47 | 0.80 0.52 | 0.54 0.38 | 0.58 0.29 |
| Stocks | 0.42 | 0.74 | 0.47 | 0.52 | 0.38 | 0.29 |

Figures for chrome ore relate to calendar years. For all other items figures
relate to a calendar year in 1941 and to periods of 52 weeks in subseqeunt years.
relate to a calendar year in 1941 and to periods of 52 . In addition 7.5 thousand tons were exported in 1945 .
In addition 7.5 thousand to
Including stocks in transit:
Non-ferrous metal content of ferro-alloy and other finished product
In addition 1,040 tons were exported in 1945.

### 6.8 Non-ferrous metals



### 6.9 Aluminium



RAW MATERIALS

### 6.9 Aluminium

| continued |  |  |  |  |  | Thousand tons |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Production |  | Consumption |  | Stocks (end of period) |  |
|  |  | $\begin{gathered} \text { Virgin } \\ \text { aluminium } \end{gathered}$ | Secondary aluminium ${ }^{\prime}$ | $\begin{array}{r} \text { Virgin } \\ \text { aluminium² } \end{array}$ | Secondary aluminium | $\begin{gathered} \text { Virgin } \\ \text { aluminium } \end{gathered}$ | Secondary aluminium |
| 1943 | January | 4.84 | 7.05 | 20.2 | 5.80 | 72.1 | 28.1 |
|  | February | 4.49 | 6.91 | 14.6 | 6.20 | 65.0 | 27.2 |
|  | March | 4.72 | 7.66 | 23.2 | 6.92 | 64.8 | 28.6 |
|  | April | 4.52 | 6.99 | 19.3 | 6.73 | 70.8 | 31.3 |
|  | May | 4.48 | 7.19 | 15.6 | 6.55 | 78.4 | 31.5 |
|  | June | 4.56 | 7.17 | 11.2 | 6.94 | 87.4 | 30.5 |
|  | July | 4.88 | 7.46 | 15.7 | 6.42 | 102.4 | 30.4 |
|  | August | 4.50 | 6.90 | 15.1 | 6.97 | 119.5 | 29.8 |
|  | September | 4.49 | 8.68 | 14.8 | 8.00 | 125.0 | 30.1 |
|  | October | 4.73 | 9.35 | 17.5 | 8.49 | 122.2 | 27.9 |
|  | November | 4.65 | 9.37 | 20.6 | 8.56 | 123.7 | 28.0 |
|  | December | 4.80 | 8.75 | 20.4 | 7.91 | 130.5 | 31.0 |
| 1944 | January | 4.71 | 10.13 | 17.3 | 8.76 | 131.3 | 32.3 |
|  |  | 3.48 | 9.57 | 17.8 | 8.83 | 127.1 | 32.4 |
|  | March | 3.25 | 10.17 | 17.8 | 8.17 | 125.8 | 32.1 |
|  | April | 2.45 | 7.54 | 16.3 | 5.59 | 126.4 | 33.1 |
|  | May | 2.47 | 8.32 | 14.7 | 6.57 | 130.0 | 36.3 |
|  | June | 2.72 | 8.42 | 12.9 | 5.38 | 156.0 | 39.3 |
|  | July | 2.61 | 8.53 | 12.7 | 5.29 | 146.2 | 42.7 |
|  | August | 2.84 | 7.53 | 7.5 | 4.95 | 142.2 | 45.0 |
|  | September | 2.65 | 8.65 | 9.7 | 5.22 | 136.6 | 48.0 |
|  | October | 2.66 | 8.90 | 7.0 | 4.81 | 148.1 | 51.0 |
|  | November | 2.54 | 9.28 | 9.3 | 4.47 | 145.8 | 54.7 |
|  | December | 3.09 | 7.44 | 7.1 | 3.64 | 142.4 | 58.7 |
| 1945 | January | 3.03 | 8.79 | 8.7 | 3.27 | 137.3 | 63.3 |
|  | February | 2.74 | 7.71 | 9.4 | 3.05 | 130.9 | 66.7 |
|  | March | 2.96 | 7.67 | 9.3 | 3.77 | 124.7 | 73.7 |
|  | April | 2.66 | 6.53 | 8.7 | 4.06 | 119.6 | 76.9 |
|  | May | 2.68 | 6.15 | 10.2 | 3.42 | 112.1 | 79.7 |
|  | June | 2.61 | 7.36 | 11.6 48 | 3.30 3 | 103.3 | 84.5 |
|  | July | 2.86 | 6.81 5.12 | 4.8 | 3.88 3.06 | 101.8 96.9 | 87.0 <br> 90.5 |
|  | August | 2.32 | 5.12 | 7.9 | 3.06 | 96.9 | 90.5 |

Including production from crashed a ircraft.
2. Including the aluminium content of virgin alloys.

### 6.10 Soffwood and hardwood



RAW MATERALS

## 6. $10^{\text {Softwood and hardwood }}$



## 6. I I Pitwood and plywood



## 6.| Pitwood and plywood

|  |  | Production of pitwood |  |  |  |  | $\begin{array}{r} \text { Con- } \\ \text { sump- } \\ \text { tion } \\ \text { of sawn } \\ \text { and } \\ \text { round } \\ \text { pitwood } \end{array}$ | Stocksof sawnandroundpit-wood(end ofperiod) |  | Plywo |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Sawn |  | Round |  |  |  |  | onstruction |  | Tech- |
|  |  |  | Trade | Home Timber Production Department | Trade | Home Timber Production Department |  |  | Production | $\begin{gathered} \text { Con- } \\ \text { sump- } \\ \text { tion } \end{gathered}$ | Stocks end of period | Prod- uction |
|  |  | Thousand standards ${ }^{\prime}$ |  |  |  |  |  |  | Million square feet |  |  |  |
| 1942 | January | 37.65 | 9.52 | 4.72 | 13.69 | 9.72 | 72.19 | 414.1 | 0.32 | 22.94 | 84.4 |  |
|  | February | 38.21 | 9.67 | 3.58 | 13.85 | 11.11 | 65.80 | 386.9 | 0.32 | 17.14 | 67.1 |  |
|  | March | 45.13 | 11.39 | 4.58 | 15.95 | 13.21 | 66.80 | 365.3 | 0.51 | 21.56 | 49.8 |  |
|  | April | 53.88 | 12.15 | 4.19 | 18.55 | 18.99 | 69.06 | 351.2 | 0.56 | 18.08 | 40.7 |  |
|  | May | 58.04 | 12.80 | 4.80 | 20.04 | 20.40 | 67.69 | 340.8 | 0.39 | 9.98 | 41.1 |  |
|  | June | 60.88 | 13.90 | 3.33 | 22.85 | 20.80 | 67.13 | 334.8 | 0.93 | 10.49 | 43.9 |  |
|  | July | 59.47 | 12.03 | 3.37 | 22.17 | 21.90 | 69.67 | 328.0 | 0.61 | 12.04 | 47.7 |  |
|  | August | 56.82 | 12.53 | 3.56 | 20.98 | 19.75 | 60.63 | 324.2 | 0.52 | 12.24 | 40.8 |  |
|  | September | 62.84 | 13.23 | 4.84 | 22.21 | 22.56 | 66.22 | 320.3 | 0.81 | 13.84 | 43.3 |  |
|  | October | 60.35 | 12.25 | 4.33 | 22.15 | 21.62 | 71.51 | 310.0 | 0.79 | 10.66 | 46.7 |  |
|  | November | 53.17 | 11.33 | 4.84 | 18.81 | 18.19 | 66.31 | 296.4 | 0.85 | 9.73 | 45.2 |  |
|  | December | 50.33 | 10.81 | 3.50 | 18.29 | 17.73 | 60.57 | 286.7 | 0.69 | 8.90 | 43.0 |  |
| 1943 | January | 44.47 | 9.74 | 3.51 | 15.37 | 15.85 | 56.46 | 290.3 | 0.50 | 9.20 | 42.3 |  |
|  | February | 49.44 | 11.03 | 3.44 | 16.99 | 17.98 | 57.48 | 290.2 | 0.53 | 7.89 | 46.8 |  |
|  | March | 66.72 | 11.45 | 3.78 | 23.10 | 28.39 | 62.32 | 293.1 | 0.59 | 9.75 | 51.6 |  |
|  | April | 67.35 | 12.55 | 3.51 | 23.61 | 27.68 | 55.53 | 303.3 | 0.29 | 10.60 | 55.9 |  |
|  | May | 64.66 | 13.04 | 4.51 | 20.45 | 26.66 | 60.31 | 307.0 | 0.33 | 7.72 | 68.8 |  |
|  | June | 69.52 | 13.24 | 4.76 | 21.97 | 29.55 | 60.62 | 313.5 | 0.27 | 8.70 | 78.5 |  |
|  | July | 68.87 | 12.59 | 4.36 | 23.85 | 28.07 | 63.82 | 317.7 | 0.34 | 9. 18 | 94.2 |  |
|  | August | 62.59 | 12.48 | 3.84 | 20.92 | 25.35 | 54.09 | 326.9 | 0.14 | 9.99 | 112.2 |  |
|  | September | 65.34 | 13.41 | 3.65 | 22.07 | 26.21 | 65.04 | 331.3 | 0.45 | 7.84 | 126.2 |  |
|  | October | 61.75 | 13.23 | 4.42 | 21.57 | 22.53 | 62.03 | 336.1 | 0.25 | 12.99 | 147.0 |  |
|  | November | 52.86 | 12.22 | 4.52 | $17.88$ | 18.24 | 61.02 | 331.7 | 0.27 | 12.82 | 173.7 |  |
|  | December | 47.00 | 11.64 | 3.57 | 15.80 | 15.99 | 61.72 | 332.6 | 0.25 | 14.34 | 192.0 |  |
| 1944 | January | 45.98 | 11.62 | 4.50 | 14.57 | 15.29 | 53.46 | 326.4 | 0.19 | 14.50 | 217.5 |  |
|  | February | 50.88 | 12.11 | 3.82 | 14.90 | 20.05 | 63.74 | 322.4 | 0.17 | 19.17 | 237.1 |  |
|  | March | 57.47 | 14.10 | 4.22 | 17.61 | 21.54 | 62.82 | 319.5 | 0.20 | 22.93 | 247.6 |  |
|  | April | 50.96 | 12.63 | 5.00 | 16.18 | 17.15 | 56.92 | 314.4 | 0.22 | 17.91 | 268.8 |  |
|  | May | 57.17 | 13.36 | 4.91 | 18.86 | 20.04 | 65.56 | 312.0 | 0.15 | 21.63 | 284.9 |  |
|  | June | 54.78 | 14.07 | 4.82 | 18.16 | 17.73 | 64.39 | 301.0 | 0.21 | 24.02 | 285.7 |  |
|  | July | 52.42 | 12.33 | 4.05 | 16.74 | 19.30 | 60.96 | 291.0 | 0.09 | 23.24 | 272.2 |  |
|  | August | 55.10 | 13.27 | 4.38 | 15.61 | 21.84 | 58.62 | 290.7 | 0.12 | 22.02 | 266.2 |  |
|  | September | 50.40 | 13.39 | 4.50 | 15.39 | 17.12 | 63.54 | 284.0 | 0.16 | 28.62 | 253.8 |  |
|  | October | 47.55 | 12.76 | 4.16 | 14.66 | 15.97 | 62.71 | 28.1 | 0.53 | 37.56 | 234.9 |  |
|  | November | 43.03 | 12.11 | 4.27 | 11.44 | 15.21 | 64.11 | 269.6 | 1.14 | 41.66 | 206.5 |  |
|  | December | 36.60 | 11.43 | 2.84 | 10.10 | 12.23 | 60.49 | 25.1 | 1.06 | 30.96 | 190.9 |  |
| 1945 | January | 27.73 | 8.32 | 2.20 | 7.58 | 9.63 | 53.32 | 226.1 | 1.68 | 38.5 | 176.8 | 5.50 |
|  | February | 35.92 | 9.69 | 3.39 | 9.10 | 13.74 | 64.62 | 198.3 | 2.42 | 35.4 | 159.4 | 4.34 |
|  | March | 49.01 | 12.49 | 3.57 | 13.46 | 19.49 | 59.17 | 195.0 | 2.88 | 40.2 | 142.3 | 5.16 |
|  | April | 49.44 | 12.52 | 4.21 | 13.65 | 19.06 | 58.31 | 186.5 | 2.37 | 31.9 | 130.8 | 4.30 |
|  | May | 44.42 | 12.31 | 3.41 | 12.52 | 16.18 | 53.19 | 182.1 | 2.18 | 29.9 | 123.0 | 4.20 |
|  | June | 50.74 | 13.40 | 4.33 | 13.38 | 19.63 | 58.66 | 180.0 | 3.47 | 31.1 | 124.3 | 3.29 |
|  | July | 47.19 | 12.61 | 3.86 | 13.10 | 17.62 | 56.46 | 183.7 | 3.35 | 26.9 | 133.4 | 3.59 |
|  | August | 39.01 | 11.34 | 2.61 | 11.05 | 14.01 | 46.81 | 197.9 | 3.46 | 24.0 | 136.2 | 1.94 |

## 6. 12 Hides, skins and finished leather


W. Wet, dry and dry salted cattle and buffalo hide
3. Kips and cafskins are included in the figures for "cattle hides"
4. Leathers sold by weight
5. Leathers sold by area
$6.13^{\text {Rubber }}$

$6.13^{\text {Rubber }}$


Crumb is included in waste rubber in 1942 . In 1943 it is included in the monthly
figures for reclaimed rubber but not in the annual figures. Thereater it is excluded
from the table.
Monthly figures for 1942 exclude latex and exports
2. Monthly figures for 1942 exclude latex and exports.
3. Excluding "Novoplas" and "Thiokol" from July 1944 onwards
3. Excluding "Novoplas" and "
5. Processed into reclamed rubber
6. Until June 1994, including direct usage of waste rubber
. Op to and including May 1942 computed from figures relating to calendar months.
8. Excluding Government lend-l-ase stocks.
9. From july 1944 the figures relate only to Govermment waste depots.
*Average of five weeks.

### 6.14 Chemicals

| Production and consumption: calendar years Stocks: end of year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Unit | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| Industrial alcohol ${ }^{1}$ Production Consumption Stocks | $\begin{gathered} \text { Million } \\ \text { bulk } \\ \text { gallons } \end{gathered}$ | $\begin{array}{r} 27.24 \\ 27.36 \\ 1.79 \end{array}$ | $\begin{array}{r} 29.88 \\ 30.24 \\ 1.90 \end{array}$ | $\begin{array}{r} 29.42 \\ 30.25 \\ 2.65 \end{array}$ | $\begin{array}{r} 32.40 \\ 35.11 \\ 5.50 \end{array}$ | $\begin{array}{r} 22.48 \\ 40.03 \\ 5.24 \end{array}$ | $\begin{array}{r} 7.78 \\ 34.67 \\ 7.37 \end{array}$ | $\begin{array}{r} 32.50 \\ 40.58 \\ 7.94 \end{array}$ | $\begin{array}{r} 20.83 \\ 27.24 \\ 3.28 \end{array}$ |
| Industrial methylated spirit Production Consumption Stocks | " | 7.84 | 9.40 | $\begin{array}{r} 10.94 \\ 10.97 \\ 0.31 \end{array}$ | $\begin{aligned} & 9.03 \\ & 8.87 \\ & 0.34 \end{aligned}$ | $\begin{aligned} & 8.55 \\ & 8.58 \\ & 0.37 \end{aligned}$ | $\begin{aligned} & 9.63 \\ & 9.74 \\ & 0.34 \end{aligned}$ | $\begin{aligned} & 9.48 \\ & 9.57 \\ & 0.34 \end{aligned}$ | $\begin{aligned} & 8.65 \\ & 8.75 \\ & 0.32 \end{aligned}$ |
| Methanol Production Consumption Stocks | Thousand tons |  |  | 7.2 | $\begin{gathered} 28.0 \\ 23.3 \\ 11.9 \end{gathered}$ | $\begin{aligned} & 36.6 \\ & 36.7 \\ & 11.8 \end{aligned}$ | $\begin{aligned} & 48.7 \\ & 46.7 \\ & 13.9 \end{aligned}$ | $\begin{aligned} & 54.5 \\ & 53.9 \\ & 14.5 \end{aligned}$ | $\begin{array}{r} 30.1 \\ 40.6 \\ 4.0 \end{array}$ |
| Urea Production Consumption Stocks | "" |  |  | 2.7 | $\begin{aligned} & 4.3 \\ & 4.5 \\ & 2.5 \end{aligned}$ | $\begin{aligned} & 4.7 \\ & 5.2 \\ & 2.0 \end{aligned}$ | $\begin{aligned} & 4.4 \\ & 5.0 \\ & 1.4 \end{aligned}$ | $\begin{aligned} & 4.5 \\ & 4.6 \end{aligned}$ | $\begin{aligned} & 7.5 \\ & 7.2 \\ & 1.4 \end{aligned}$ |
| Nitric acid Production Consumption Stocks | " |  |  |  | $\begin{array}{r}254.5 \\ \hline .6\end{array}$ | $\begin{array}{r} 349.4 \\ 344.0 \\ 11.4 \end{array}$ | $\begin{array}{r} 380.7 \\ 381.0 \\ 10.3 \end{array}$ | $\begin{array}{r} 341.7 \\ 338.7 \\ 12.1 \end{array}$ | $\begin{array}{r} 281.0 \\ 283.2 \\ 4.8 \end{array}$ |
| Pyrites ${ }^{2}$ Production ${ }^{3}$ Consumption Stocks | " | 279.6 | $\begin{aligned} & 313.2 \\ & 318.0 \end{aligned}$ | $\begin{array}{r} 6.4 \\ 335.8 \\ 353.1 \end{array}$ | $\begin{array}{r} 7.6 \\ 294.8 \\ 279.9 \end{array}$ | $\begin{array}{r} 15.4 \\ 279.5 \\ 212.4 \end{array}$ | $\begin{array}{r} 26.9 \\ 243.1 \\ 174.6 \end{array}$ | $\begin{array}{r} 26.0 \\ 222.8 \\ 131.7 \end{array}$ | $\begin{array}{r} 20.1 \\ 201.1 \\ 88.9 \end{array}$ |
| Sulphur (for acid) Production ${ }^{3}$ Consumption Stocks | "" | 74.4 | $\begin{gathered} 92.9 .6 \\ 63.6 \end{gathered}$ | $\begin{array}{r} 2.0 \\ 127.9 \\ 64.4 \end{array}$ | $\begin{array}{r} 3.9 \\ 153.5 \\ 129.6 \end{array}$ | $\begin{array}{r} 4.3 \\ 170.6 \\ 59.0 \end{array}$ | $\begin{array}{r} 3.0 \\ 159.4 \\ 101.2 \end{array}$ | $\begin{array}{r} 3.8 \\ 171.5 \\ 81.2 \end{array}$ | $\begin{array}{r} 3.7 \\ 173.8 \\ 61.8 \end{array}$ |
| Sulphur (regular) Production ${ }^{4}$ Consumption Stocks | " |  |  | $\begin{gathered} 3.3 \\ 28 . i \end{gathered}$ | $\begin{array}{r} 5.6 \\ 67.2 \\ 49.2 \end{array}$ | $\begin{array}{r} 6.0 \\ 62.4 \\ 26.7 \end{array}$ | $\begin{array}{r} 9.5 \\ 68.3 \\ 37.7 \end{array}$ | $\begin{aligned} & 11.2 \\ & 65.6 \\ & 35.6 \end{aligned}$ | $\begin{array}{r} 7.3 \\ 59.4 \\ 30.0 \end{array}$ |
| Spent oxide ${ }^{2}$ Production ${ }^{3}$ Consumption Stocks | $\stackrel{\prime}{\prime \prime}$ | 145.2 | $\begin{aligned} & 155.4 \\ & 74.6 \end{aligned}$ | $\begin{array}{r} 154.1 \\ 16.27 \\ 162.7 \\ 65.9 \end{array}$ | $\begin{array}{r} 171.4 \\ 150.1 \\ 150.1 \\ 87.3 \end{array}$ | $\begin{aligned} & 182.4 \\ & 153.3 \\ & 153.3 \\ & 116.0 \end{aligned}$ | $\begin{aligned} & 191.7 \\ & 192.1 \\ & 192.1 \\ & 155.5 \end{aligned}$ | $\begin{aligned} & 195.4 \\ & 19.9 \\ & 190.9 \\ & 120.2 \end{aligned}$ | $\begin{aligned} & 1966.8 \\ & 187.0 \\ & 187.0 \\ & 130.2 \end{aligned}$ |
| Anhydrite ${ }^{2}$ Production ${ }^{3}$ Consumption Stocks | $\stackrel{"}{*}$ |  |  |  | $\begin{array}{r} 139.7 \\ 139.9 \\ 0.5 \end{array}$ | $\begin{array}{r} 143.6 \\ 143.2 \\ 0.9 \end{array}$ | $\begin{array}{r} 134.2 \\ 134.3 \\ 0.8 \end{array}$ | $\begin{array}{r} 150.5 \\ 150.8 \\ 0.4 \end{array}$ | $\begin{array}{r} 161.1 \\ 161.1 \\ 0.4 \end{array}$ |
| Sulphuric acid ${ }^{5}$ Production Consumption Stocks | " | 994.8 | 1,119.6 | $\begin{array}{r} 1,196.4 \\ 1,206.0 \\ 65.5 \end{array}$ | $\begin{array}{r} 1,200.0 \\ 1,213.7 \\ 67.5 \end{array}$ | $\begin{array}{r} 1,284.0 \\ 1,284.8 \\ 81.8 \end{array}$ | $\begin{array}{r} 1,250.4 \\ 1,273.4 \\ 81.7 \end{array}$ | $\begin{aligned} & 1,268.2 \\ & 1,281.7 \\ & 82.2 \end{aligned}$ | $\begin{array}{r} 1,216.1 \\ 1,248.9 \\ 67.6 \end{array}$ |
| Calcium carbide Production Consumption Stocks | Thousand metric tons | 65.0 |  | 17.3 | 3.1 24.2 | $\begin{array}{r} 24.8 \\ 107.9 \\ 22.3 \\ \hline \end{array}$ | $\begin{array}{r} 62.4 \\ 106.3 \\ 44.4 \\ \hline \end{array}$ | $\begin{array}{r} 70.2 \\ 129.0 \\ 37.1 \end{array}$ | $\begin{array}{r} 72.1 \\ 100.6 \\ 27.6 \end{array}$ |

[^11]Excluding material used
Arrivals of hom-produce
Arivivals of hom-pro
Recovered sulphur
5. As 100 per cent. acid. Including from 1941 acid made at Government factories

### 6.15 Fertilizers, ammonia and molasses

|  | Production and consumption: calendar year |  | Stocks: end of period |  |  | Thousand tons |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| Nitrogenous fertilizers (nitrogen content) ${ }^{2}$ |  |  |  |  |  |  |  |
| Production |  | 123.4 | 133.5 | 144.6 | 170.8 | 210.7 | 186.3 |
| Total disposals |  | 127.0 | 132.5 | 171.9 | 177.3 | 194.3 | 215.5 |
| Home consumption |  | 77.1 | 127.7 | 168.0 | 171.0 | 181.5 | 172.1 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Production | 157.2 | 188.7 | 225.0 | 259.4 | 251.9 | 274.9 | 296.9 |
| Consumption | 162.4 | 194.7 | 232.7 | 287.4 | 302.6 | 343.8 | 345.5 |
| Stocks | 19.4 | 14.1 | 8.8 | 10.9 | 20.8 | 23.2 | 15.5 |
| Superphosphate ( $\mathrm{P}_{2} \mathrm{O}_{5}$ content): |  |  |  |  |  |  |  |
| Production | 63.2 | 83.0 | 118.9 | 144.9 | 148.0 | 175.9 | 184.8 |
| Consumption | 68.9 | 86.8 | 121.4 | 144.1 | 144.3 | 175.4 | 186.7 |
| Ground basic slag ( $\mathrm{P}_{2} \mathrm{O}_{5}$ content): |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Production | 59.0 | 73.6 | 69.7 | 72.1 | 77.4 | 64.2 | 66.0 |
| Consumption | 56.3 | 71.6 | 72.6 | 72.6 | 77.3 | 62.4 | 67.8 |
| StocksGround phosphate ( $\mathrm{P}_{2} \mathrm{O}_{5}$ content):Production |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Consumption | 16.6 | 12.3 | 9.3 | 6.1 | 3.8 | 10.6 | 19.7 |
| Stocks |  |  |  | 0.2 | 0.1 | 0.2 | 0.9 |
|  |  |  |  |  |  |  |  |
| Production | 20.1 | 20.1 | 27.2 | 36.1 | 22.9 | 24.3 | 25.7 |
| Consumption | 20.7 | 24.0 | 29.5 | 64.6 | 77.2 | 95.3 | 71.3 |
| $\begin{array}{llllllll}\text { Prash (K2O content) }{ }^{3} & 4.0 & 2.7 & 2.1 & 2.3 & 6.3 & 6.0 \\ \text { Pota }\end{array}$ |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Consumption |  |  | 48.0 | 60.0 | 72.9 | 103.7 | 115.0 |
| Compound fertilizers ${ }^{4}$ |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Consumption |  | 714.1 | 804.7 | 929.5 | 1,051.2 | $1,185.5$ $1,147.4$ | $1,181.2$ $1,191.1$ |
| Stocks | $30.0{ }^{5}$ | 55.0 | 24.2 | 46.9 | 71.0 | 105.2 | ${ }^{1} 92.8$ |
|  |  |  |  |  |  |  |  |
| Consumption |  | 490.1 | 534.5 | 624.5 | 599.3 | 649.8 | 753.9 |
| Ammonia ${ }^{\text {² }}$ |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Production Consumption |  | 190.8 | 253.4 | 276.4 | 339.1 | 313.9 | 300.6 |
| Stocks |  | 2.9 | 253.4 | ${ }^{276.2} 5.6^{8}$ | 336.6 7.6 | 315.8 5.7 | 301.7 5.0 |
| StacksMolassesProdiole |  |  |  |  |  |  |  |
| Production: |  |  |  |  |  |  |  |
| Cane |  | 50.2 | 109.4 | 99.5 | 52.3 | 247.8 | 99.3 |
| Beet | ] 111.610 | 135.0 | 111.4 | 137.1 | 197.9 | 156.1 | 171.0 |
| Consumption: $]$ |  |  |  |  |  |  |  |
| Total |  | 882.9 | 802.9 | 594.9 | 347.8 | 709.1 | 541.6 |
| Distilling |  | 526.9 | 550.4 | 332.8 | 116.3 | 492.1 | 315.6 |
| Cattle food |  |  | 162.0 | 128.2 | 122.4 | 104.4 | 120.0 |
| Other uses |  |  | 90.5 | 133.9 | 109.2 | 112.8 | 106.0 |
| Stocks | 426.2 | 370.1 | 419.0 | 351.9 | 292.1 | 316.2 | 317.6 |

[^12]3. Agricultural potash.
4. Total weight of product. Excluding concentrated compound fertilizers. The nitrogen
$\mathrm{P}_{2} \mathrm{O}_{5}$ and for consumption, $\mathrm{K}_{2} \mathrm{O}$ content are included under appropriate headings above.
Estimated.
6. For agricultural and industrial purposes.
3. Including consumers' stocks.
. In terms of blackstrap containing 52 per cent, sugars.
0. Year ended 30 Seotembe

## RAW MATERIALS

## 6. I6 Plastics and materials for plastics

|  | Production and consumption: calendar years | Stocks: end of year |  |  | $\frac{\text { Tons }}{1945}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1941 | 1942 | 1943 | 1944 |  |
| Total synthetic resins |  |  |  |  |  |
| Production <br> Total disposals Home consumption Stocks | $\begin{aligned} & 16,096 \\ & 15,766 \\ & 15,560 \\ & 1,124 \end{aligned}$ | $\begin{aligned} & 20,931 \\ & 20,291 \\ & 20,202 \\ & 1,764 \end{aligned}$ | $\begin{array}{r} 23,979 \\ 24,069 \\ 24,005 \\ 1,674 \end{array}$ | $\begin{aligned} & 24,424 \\ & 2,551 \\ & 24,502 \\ & 1,547 \end{aligned}$ | $\begin{aligned} & 25,424 \\ & 25,696 \\ & 25,186 \\ & 1,275 \end{aligned}$ |
| Phenolic: Production Total disposals Home consumption Stocks | $\because$ $\because$ $\ddots$ |  | $\begin{aligned} & 8,937 \\ & 9,033 \\ & 9,016 \\ & 912 \end{aligned}$ | $\begin{array}{r} 9,644 \\ 9,640 \\ 9,636 \\ 916 \end{array}$ | $\begin{array}{r} 10,058 \\ 10,279 \\ 10,064 \\ 695 \end{array}$ |
| Cresylic: Production Total disposals Home consumption Stocks | U $\because$ $\because$ | $\because$ | $\begin{array}{r} 8,723 \\ 8,737 \\ 8,695 \\ 606 \end{array}$ | $\begin{aligned} & 8,293 \\ & 8,465 \\ & 8,436 \\ & 434 \end{aligned}$ | $\begin{array}{r} 6,996 \\ 7,114 \\ 6,964 \\ 316 \end{array}$ |
| Urea: <br> Production <br> Total disposals <br> Home consumption <br> Stocks | $\ldots$ | $\because$ $\because$ $\because$ | $\begin{aligned} & 5,924 \\ & 5,898 \\ & 5,894 \\ & 120 \end{aligned}$ | $\begin{array}{r} 5,905 \\ 5,905 \\ 5,890 \\ 120 \end{array}$ | $\begin{array}{r} 7,902 \\ 7,823 \\ 7,701 \\ 199 \end{array}$ |
| Other synthetic resins: <br> Production <br> Total disposals <br> Home consumption <br> Stocks | $\because$ | $\because$ $\because$ $\because$ $\square$ | $\begin{aligned} & 395 \\ & 401 \\ & 400 \\ & 36 \end{aligned}$ | $\begin{aligned} & 582 \\ & 541 \\ & 540 \\ & 77 \end{aligned}$ | 468 480 457 65 |
| Moulding powders |  |  |  |  |  |
| Phenolic and cresylic: Production Total disposals Home consumption Stocks | $\begin{array}{r} 13,521 \\ 12,593 \\ 11,117 \\ 2,926 \end{array}$ | $\begin{array}{r} 13,124 \\ 1,100 \\ 11,952 \\ 2,910 \end{array}$ | $\begin{array}{r} 14,289 \\ 14,195 \\ 13,679 \\ 3,090 \end{array}$ | $\begin{aligned} & 15,249 \\ & 15,330 \\ & 14,742 \\ & 3,009 \end{aligned}$ | $\begin{array}{r} 17,531 \\ 17,487 \\ 15,814 \\ 1,078 \end{array}$ |
| Urea: Production Total disposals Home consumption Stocks | $\begin{aligned} & 4,136 \\ & 4,039 \\ & 2,456 \\ & 714 \end{aligned}$ | $\begin{aligned} & 4,080 \\ & 4,046 \\ & 3,243 \\ & 748 \end{aligned}$ | $\begin{aligned} & 3,869 \\ & 3,948 \\ & 3,447 \\ & 727 \end{aligned}$ | $\begin{array}{r} 2,760 \\ 2,824 \\ 2,396 \\ 663 \end{array}$ | 3,996 4,067 3,115 351 |
| Cellulose acetate: <br> Production <br> Total disposals <br> Home consumption <br> Stocks | $\begin{array}{r} 1,207 \\ 1,204 \\ 1,063 \\ 262 \end{array}$ | $\begin{array}{r} 1,343 \\ 1,335 \\ 1,279 \\ 270 \end{array}$ | $\begin{array}{r} 1,489 \\ 1,344 \\ 1,326 \\ 415 \end{array}$ | $\begin{array}{r} 1,307 \\ 1,324 \\ 1,262 \\ 398 \end{array}$ | 2,162 <br> 1,967 <br> 1,784 <br> 271 |

See footnotes on page 137.

### 6.16 Plastics and materials for plastics

| continued | Production and consumption: calendar years | Stocks: end of year |  |  | Tons |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1941 | 1942 | 1943 | 1944 | 1945 |
| Cellulose acetate sheet, and film Production Total disposals Home consumption Stocks | $\begin{array}{r} 2,335 \\ 2,255 \\ 1,938 \\ 323 \end{array}$ | $\begin{array}{r} 2,718 \\ 2,772 \\ 2,041 \\ 212 \end{array}$ | $\begin{array}{r} 3,059 \\ 2,941 \\ 2,928 \\ 244 \end{array}$ | $\begin{array}{r} 2,623 \\ 2,573 \\ 2,571 \\ 277 \end{array}$ | $\begin{aligned} & 1,133 \\ & 1,279 \\ & 1,215 \\ & 131 \end{aligned}$ |
| Acrylic sheet Production Total disposals Home consumption Stocks | $\begin{array}{r} 1,463 \\ 1,182 \\ 1,011 \\ 358 \end{array}$ | $\begin{aligned} & 2,507 \\ & 2,594 \\ & 1,102 \\ & 260 \end{aligned}$ | $\begin{array}{r} 3,796 \\ 3,629 \\ 2,764 \\ 424 \end{array}$ | $\begin{array}{r} 4,718 \\ 4,370 \\ 3,407 \\ 772 \end{array}$ | $\begin{array}{r} 1,832 \\ 1,851 \\ 1,798 \\ 753 \end{array}$ |
| Celluloid <br> Production <br> Total disposals Home consumption Stocks | $\begin{array}{r} 1,719 \\ 1,723 \\ 1,019 \\ 281 \end{array}$ | $\begin{array}{r} 1,531 \\ 1,651 \\ 1,518 \\ 165 \end{array}$ | $\begin{aligned} & 1,486 \\ & 1,544 \\ & 1,501 \\ & 112 \end{aligned}$ | $\begin{array}{r} 1,572 \\ 1,450 \\ 1,331 \\ 234 \end{array}$ | $\begin{array}{r} 1,976 \\ 1,857 \\ 1,391 \\ 353 \end{array}$ |
| Polyvinyl chloride (unplas Production Consumption Stocks |  |  | $\begin{array}{r} 745 \\ 3,875 \\ 1,118 \end{array}$ | $\begin{aligned} & 3,365 \\ & 5,892 \\ & 1,834 \end{aligned}$ | $\begin{aligned} & 4,122 \\ & 5,122 \\ & 4,227 \end{aligned}$ |
| Polyvinyl chloride (plastic Production Consumption Stocks |  |  | 894 | $\begin{array}{r} 10,082 \\ 10,025 \\ 951 \end{array}$ | $\begin{array}{r} 8,463 \\ 8,736 \\ 678 \end{array}$ |
| Casein plastic materials Production Total disposals Home consumption Stocks | $\begin{array}{r} 1,480 \\ 2,018 \\ 1,801 \\ 266 \end{array}$ | $\begin{array}{r} 1,724 \\ 1,851 \\ 1,735 \\ 139 \end{array}$ | $\begin{array}{r} 1,523 \\ 1,566 \\ 1,530 \\ 96 \end{array}$ | $\begin{array}{r} 1,433 \\ 1,443 \\ 1,370 \\ 86 \end{array}$ | $\begin{array}{r} 2,051 \\ 1,899 \\ 1,421 \\ 238 \end{array}$ |
| Laminated material ${ }^{2}$ Production Consumption Stocks |  |  | $\begin{array}{r} 7,672 \\ 7,422 \\ 359 \end{array}$ | $\begin{array}{r} 8,474 \\ 8,446 \\ 387 \end{array}$ | $\begin{aligned} & 5,929 \\ & 5,895 \\ & 421 \end{aligned}$ |

## 6. I 7 Paper and paper-making materials



## 6. I8 Raw cotton, cotton waste and cotton linters



## 6. I8 Raw cotton, cotton waste and cotton linters

| continued |  |  |  |  |  |  |  |  | sand tons |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Raw cotton |  |  | Cotton wastel |  |  | Cotton linters |  |
|  |  | $\xrightarrow{\text { Home cotton }}$ | (therention | Stocks (end of period) | Produc tion ${ }^{2}$ | Home consumption | $\begin{aligned} & \text { Stocks } \\ & \text { (end of } \\ & \text { period) } \end{aligned}$ | Home consumption ${ }^{2}$ | $\begin{aligned} & \text { Stocks } \\ & \text { (end of } \\ & \text { period) } \end{aligned}$ |
| 1943 | January <br> February <br> March <br> April <br> May <br> June <br> July <br> August <br> September <br> October <br> December | $\begin{aligned} & 6.8^{*} \\ & 7.1^{*} \\ & 7.22^{*} \\ & 6.5 \\ & 7.4 \\ & 6.7{ }^{*} \\ & 7.3 \\ & 6.6 \\ & 7.0^{*} \\ & 7.6 \\ & 7.1 \\ & 6.1^{*} \end{aligned}$ | 0.84 * <br> 0.83 <br> 0.61* <br> 0.64 <br> 0.63 <br> 0.42* <br> 0.43 <br> 0.42 $0.33 *$ <br> 0.44 <br> 0.38 <br> $0.34^{*}$ | 277 247 218 202 191 220 261 292 317 317 328 349 | 0.98 1.11 1.12 1.00 1.06 1.09 1.04 1.00 1.09 1.99 1.06 1.01 | $\begin{aligned} & 1.47^{*} \\ & 1.70 \\ & 1.83^{*} \\ & 1.71 \\ & 1.64 \\ & 1.38^{*} \\ & 1.37 \\ & 1.23 \\ & 1.35^{*} \\ & 1.21 \\ & 1.31 \\ & 1.13^{*} \end{aligned}$ | $\begin{aligned} & 43.53 \\ & 41.80 \\ & 41.96 \\ & 39.58 \\ & 36.93 \\ & 37.00 \\ & 35.85 \\ & 43.04 \\ & 46.89 \\ & 47.40 \\ & 47.91 \\ & 47.36 \end{aligned}$ | 0.54 0.56 0.60 0.53 0.50 0.59 0.50 0.57 0.58 0.64 0.60 0.54 | $\begin{array}{r} 14.75 \\ 14.05 \\ 12.16 \\ 10.05 \\ 7.54 \\ 6.01 \\ 5.44 \\ 13.10 \\ 12.80 \\ 17.02 \\ 19.04 \\ 19.73 \end{array}$ |
| 1944 | January <br> February <br> March <br> April <br> May <br> June <br> July <br> August <br> October <br> November <br> December | $\begin{aligned} & 6.8 \\ & 7.0 \\ & 7.4^{*} \\ & 6.6 \\ & 6.9{ }^{*} \\ & 6.8 \\ & 6.7 \\ & 5.9^{*} \\ & 6.6 \\ & 7.0 \\ & 6.5 * \\ & 5.7 \end{aligned}$ | 0.30 0.28 $0.32 *$ 0.26 $0.25^{*}$ 0.25 0.24 $0.20^{*}$ 0.24 0.26 $0.21^{*}$ 0.20 | $\begin{aligned} & 344 \\ & 367 \\ & 360 \\ & 372 \\ & 365 \\ & 350 \\ & 331 \\ & 327 \\ & 313 \\ & 303 \\ & 336 \\ & 350 \end{aligned}$ | $\begin{aligned} & 0.96 \\ & 1.95 \\ & 1.15 \\ & 0.96 \\ & 1.09 \\ & 1.06 \\ & 0.90 \\ & 0.94 \\ & 0.98 \\ & 1.90 \\ & 1.01 \\ & 0.87 \end{aligned}$ | $\begin{aligned} & 1.21 \\ & 1.27 \\ & 1.25^{*} \\ & 1.21 \\ & 1.20^{*} \\ & 1.40 \\ & 1.29 \\ & 1.21^{*} \\ & 1.36 \\ & 1.47 \\ & 1.44^{*} \\ & 1.19 \end{aligned}$ | $\begin{aligned} & 49.82 \\ & 49.70 \\ & 52.04 \\ & 51.02 \\ & 50.36 \\ & 49.49 \\ & 49.54 \\ & 48.09 \\ & 48.38 \\ & 47.77 \\ & 47.81 \\ & 48.04 \end{aligned}$ | $\begin{aligned} & 0.63 \\ & 0.66 \\ & 0.67 \\ & 0.62 \\ & 0.62 \\ & 0.68 \\ & 0.53 \\ & 0.59 \\ & 0.73 \\ & 0.58 \\ & 0.70 \\ & 0.65 \end{aligned}$ | 19.59 17.76 15.78 15.49 15.76 12.84 12.75 15.64 15.92 16.84 16.91 19.41 |
| $1945$ | January <br> February <br> March <br> May <br> June <br> July <br> August | $\begin{aligned} & 5.9^{*} \\ & 6.3 \\ & 6.0 \\ & 6.1 \\ & 5.5 * \\ & 6.3^{*} \\ & 5.8 \\ & 4.8^{*} \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.44^{*} \\ & 1.88 \\ & 0.59 \\ & 0.69 \\ & 0.56 * \\ & 0.64 \\ & 0.39 \\ & 0.49^{*} \\ & \hline \end{aligned}$ | $\begin{aligned} & 346 \\ & 331 \\ & 332 \\ & 339 \\ & 354 \\ & 376 \\ & 375 \\ & 411 \end{aligned}$ | 0.89 1.02 0.95 0.92 0.90 0.96 0.82 0.78 | $\begin{aligned} & 1.23^{*} \\ & 1.36 \\ & 1.37 \\ & 1.36 \\ & 1.16^{*} \\ & 1.46 \\ & 1.27 \\ & 1.05^{*} \end{aligned}$ | $\begin{aligned} & 47.71 \\ & 48.19 \\ & 48.57 \\ & 49.73 \\ & 49.76 \\ & 49.54 \\ & 47.21 \\ & 48.09 \end{aligned}$ | 0.68 0.71 0.66 0.67 0.65 0.70 0.59 0.48 | $\begin{aligned} & 19.32 \\ & 23.56 \\ & 24.22 \\ & 24.05 \\ & 22.32 \\ & 21.50 \\ & 22.64 \\ & 22.76 \end{aligned}$ |
| 1. From January 1941 including cleaning waste. <br> 2. Computed from figures relating to calendar months. <br> 3. Estimated. <br> * Average of five weeks. |  |  |  |  |  |  |  | Source: Bo | d of Trade |

### 6.19 Cotton yarn

|  |  | Cotton yarn |  |  |  |  |  |  |  | $\begin{aligned} & \text { Produc-Consump- } \\ & \text { tion of tion by } \\ & \text { coton weavers wate wate } \\ & \text { warne } \\ & \text { yarns } \end{aligned}$ |  | Spindles running |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Production 1 |  |  | Deliveries |  |  |  |  |  |  |  |
|  |  | Total | merican <br> type | gyptian |  | $\begin{gathered} \text { Govern- } \\ \text { Menart } \\ \text { Depant } \\ \text { ments } \end{gathered}$ | $\underset{\substack{\text { Indus- } \\ \text { trial } \\ \text { uses }}}{\text { In }}$ | $\begin{aligned} & \text { Civilian } \\ & \text { home } \\ & \text { trade } \end{aligned}$ | Export trade |  |  |  |
|  |  | Million Ib |  |  |  |  |  |  |  |  |  | Millions |
| Annu | 1 totals | 1,234 |  |  |  |  |  |  |  | 124.0 | 934 |  |
|  | $\begin{aligned} & 923 \\ & 943 \\ & 944 \\ & 945 \end{aligned}$ | 1,032 1,091 1,191 821 733 712 665 597 | $\begin{aligned} & 622 \\ & 546 \\ & 508 \\ & 408 \\ & 448 \end{aligned}$ | $\begin{aligned} & 199 \\ & 187 \\ & 204 \\ & 197 \\ & 181 \end{aligned}$ | $\begin{aligned} & 800.9 \\ & 792.1 \\ & 780.2 \\ & 682.2 \end{aligned}$ | $\begin{aligned} & 244, \\ & 2174 \\ & 217 \\ & 159.4 \end{aligned}$ | $\begin{aligned} & 303.9 \\ & 288.2 \\ & 278.1 \\ & 243.8 \end{aligned}$ | $\begin{aligned} & 116.9 \\ & 14.2 .29 \\ & 126.9 \\ & 36.5 \end{aligned}$ | $\begin{aligned} & 135 i \\ & 1393 \\ & 1590 \\ & 14929 \end{aligned}$ | $\begin{aligned} & 77.6 \\ & \text { o6.1. } \\ & 63.8 \\ & 64.9 \\ & 60.8 \end{aligned}$ | $\begin{aligned} & 724 \\ & 585 \\ & 6813 \\ & 556 \\ & 504 \end{aligned}$ |  |
|  | ly averges | $\begin{aligned} & 22.90 \\ & 1599 \\ & 14.10 \\ & 13.49 \\ & 1279 \\ & 11.46 \end{aligned}$ | $\begin{aligned} & 11.97 \\ & 10.50 \\ & 9.58 \\ & 9.00 \\ & 7.98 \end{aligned}$ | $\begin{aligned} & \text { a.82 } \\ & \text { 3.80 } \\ & 3.86 \\ & 3.79 \\ & 3.48 \end{aligned}$ | $\begin{aligned} & 15.40 \\ & 15.23 \\ & 14.72 \\ & 13.12 \end{aligned}$ | $\begin{aligned} & 4.70 \\ & 4.18 \\ & 4.10 \\ & 2.94 \end{aligned}$ | $\begin{aligned} & 5.84 \\ & 5.54 \\ & 5.25 \\ & 4.69 \end{aligned}$ | $\begin{aligned} & 2.25 \\ & 2.83 \\ & 2.39 \\ & 2.62 \end{aligned}$ | $\begin{aligned} & 2.6 i 68 \\ & 2.688 \\ & 2.88 \\ & 2.87 \end{aligned}$ | $\begin{aligned} & 1.46 \\ & 1.48 \\ & 1.12 \\ & 1.25 \\ & 1.17 \end{aligned}$ | $\begin{aligned} & 13.93 \\ & 11.24 .27 \\ & 111.58 \\ & 10.68 \\ & 9.69 \end{aligned}$ | $\begin{aligned} & 21.033 \\ & 19.16 \\ & 18.20 \\ & 17.28 \\ & 17.08 \end{aligned}$ |
| 1940 |  |  | $\begin{aligned} & 17 \ddot{9} * * \\ & 15.4 \\ & 15.3 \\ & 17.2 \\ & 17.2 * \\ & 15.6 \end{aligned}$ | $\begin{aligned} & .6 .7^{*} \\ & 5.7 \\ & 5.7 \\ & 5.2 \\ & 5.5 * \\ & 5.7^{*} \end{aligned}$ | $\because$ |  |  | $\because$ |  | 1.89 | $\begin{aligned} & 17.6 \\ & 19.4 \\ & 19.3^{*} \\ & 17.1 \end{aligned}$ |  |
| 1941 |  |  | $\begin{aligned} & 15.5 * \\ & 15.9 \\ & 14.4 \\ & 12.8 \\ & 12.6 * \\ & 10.2 \\ & 10.3^{*} \\ & 90.4 \\ & 10.0 \\ & 10.7^{*} \\ & 10.86 \\ & 10.91 \end{aligned}$ | $\begin{aligned} & 5.2^{*} \\ & 5.4^{*} \\ & 4.6 \\ & 3.6^{*} \\ & 3.2^{*} \\ & 3.2^{*} \\ & .3 .7^{*} \\ & 3.48 \\ & 3.03 \end{aligned}$ | $\begin{aligned} & \begin{array}{l} 3.61 \\ 1.19 \\ 1.47^{*} \end{array} \end{aligned}$ | $\begin{aligned} & 3.85 \\ & \begin{array}{l} 4.01 \\ 3.61 * \end{array} \end{aligned}$ | $\begin{aligned} & 5.45 \\ & 5.92 \\ & 5.92^{*} \end{aligned}$ | $\begin{gathered} 0.79 \\ 1.099^{*} \\ 1.31^{*} \end{gathered}$ | $\begin{aligned} & 3.32^{2} \\ & 4.17 \\ & 4.03^{*} \end{aligned}$ | $\begin{aligned} & 1.18 \\ & 2.24^{*} \\ & 1.72 \\ & 1.56 * \\ & 1.70^{*} \\ & 1.40^{*} \\ & 1.06 \\ & 1.24^{*} \\ & 1.43 \\ & 1.23 * \end{aligned}$ |  |  |
| 1942 |  |  |  | $2.83^{*}$ $3.21^{3}$ $3.477^{*}$ 3.96 3.65 $3.59 *$ 3.97 3.57 $4.07^{*}$ 4.02 3.90 |  | 3.83 $4.34 *$ $4.84^{*}$ 4.92 $4.94 *$ $4.51 *$ 4.63 4.50 $4.58 *$ $5.50^{*}$ $5.3)^{2}$ $4.94^{*}$ |  | 1.58 1.83 $1.97^{*}$ 1.95 2.20 $2.13^{*}$ 2.25 2.24 $2.43^{2}$ $2.63^{*}$ 2.74 2.67 $2.54^{*}$ | 3.48 3.54 $2.92^{*}$ 2.17 2.30 $2.57 *$ 2.32 2.22 $2.28^{*}$ $2.48^{*}$ 2.45 2.38 $2.48^{*}$ |  |  |  |

## 6. 19 Cotton yarn

6.20 Rayon, rayon yarn and woven fabrics

|  |  | Cotron yarn |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Production |  |  | Deliveres |  |  |  |  |  |  |  |
|  |  |  |  | sppar |  | $\begin{aligned} \text { sovent } \\ \text { ement } \\ \text { menart } \\ \text { mens } \end{aligned}$ | Indus <br> triad <br> tue | $\begin{gathered} \substack{\text { vilime } \\ \text { tran }} \end{gathered}$ | Export |  |  |  |
|  |  |  |  |  |  |  | on 1 |  |  |  |  | Mllions |
| 1943 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1944 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1945 |  |  |  |  |  |  |  |  |  |  |  |  |


|  | Production |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rayon |  | $\substack{\text { Spun rayen } \\ \text { and mexure }}$$\qquad$ | Woven fabric ca |  | Consumption | $\underset{\text { Leoms }}{\text { runing }}$ |
|  |  | Staple |  | Cotton | Rayon mixtures | yarm |  |
|  | Milion Ib |  |  | Milion liear yerds |  | Milion Ib | Thusands |
| Annual toals | 1149 | 33.5 |  | 3.640 | $483.6{ }^{2}$ | ${ }^{38 .}$ |  |
|  |  |  |  |  |  | $\begin{aligned} & 70.1 \\ & 70.3 \\ & 78.8 \\ & 83.1 \end{aligned}$ |  |
|  |  |  |  |  | Weeky ave |  |  |
| 1940 1.94 1.94 194 1945 1945 |  | $\begin{aligned} & 488 \\ & \begin{array}{l} 480 \\ 4.01 \\ 4.6 \\ 4.59 \\ 4.49 \end{array} \end{aligned}$ | $\begin{aligned} & 0.72 \\ & 0.75 \\ & 0.56 \\ & 0.66 \end{aligned}$ | $\begin{aligned} & 41,14 \\ & \text { and } \\ & 3,7 \\ & 29.7 \end{aligned}$ | $\begin{aligned} & 5.8 \\ & 5.5 \\ & 5.4 \\ & 5.5 \\ & 5.9 \\ & 5 \end{aligned}$ | $\begin{aligned} & 1.356 \\ & \substack{1.36 \\ 1.460} \end{aligned}$ |  |
|  |  |  |  |  | $\begin{aligned} & 5.5 \\ & 5.5 \\ & 5.4 * \\ & 49 \end{aligned}$ |  |  |
|  |  |  | ${ }_{0}^{0.728}$ |  |  | ${ }_{1}^{142}$ |  |
|  |  |  |  |  |  |  |  |

### 6.20 Rayon, rayon yarn and woven fabrics

|  |  | Production |  |  |  |  | $\begin{gathered} \text { Consumption } \\ \text { of pryon } \\ \text { oran } \end{gathered}$ | ${ }_{\text {Leoms }}^{\substack{\text { Luming' }}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Rayon |  |  | Woven fabrics |  |  |  |
|  |  | Continuous filament yarn | Staple |  | Coton | $\begin{gathered} \text { Rapon } \\ \text { mixatures } \end{gathered}$ |  |  |
|  |  |  | Milion b |  | Milion Ine | ar yarcs | Milion ${ }^{\text {b }}$ | Thousans |
| 1943 |  |  |  |  |  |  |  |  |
| 1944 |  |  |  |  |  |  |  |  |
| 1945 |  |  |  | $\begin{aligned} & 0.61 * \\ & 0.01 * \\ & 0.59 \\ & 0.52^{*} \\ & 0.6)^{*} \\ & 0.5)^{*} \\ & 0.51 \end{aligned}$ |  |  |  |  |

[^13]of period. Annual figures for 1944 and 1945 are monthly averages.
2. Million square yards.

### 6.2 Wool and silk

| Production and consumption: calendar years 1 Stocks: end of period |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Unit | 1937 | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| Wool |  |  |  |  |  |  |  |  |  |  |
| Raw wool: |  |  |  |  |  |  |  |  |  |  |
| Production: | Million |  |  |  |  |  |  |  |  |  |
| Actual weight, mainly greasy Estimated clean weight | 1 b | $\begin{array}{r} 107 \\ 66 \end{array}$ | $\begin{array}{r} 110 \\ 68 \end{array}$ | $\begin{gathered} 111 \\ 69 \end{gathered}$ | $\begin{gathered} 127 \\ 91 \end{gathered}$ | $\begin{gathered} 112 \\ 80 \end{gathered}$ | $\begin{array}{r} 101 \\ 72 \end{array}$ | $\begin{aligned} & 89 \\ & 62 \end{aligned}$ | $\begin{aligned} & 84 \\ & 59 \end{aligned}$ | 81 58 |
| Consumption2: Total |  |  | $\because$ |  | 536 | 381 | 333 | 269 | 258 | 331 |
| Home |  |  |  |  | 481 | 365 | 329 | 269 | 257 | 272 |
| Export |  |  |  |  | 11 | 16 | 4 | - | 1 | 11 |
| Re-export |  |  |  |  | 44 |  |  |  |  | 48 |
| Stocks2.3 |  |  |  | 342 | 378 | 406 | 367 | 284 | 436 | 453 |
| Wool tops: |  |  |  |  |  |  |  |  |  |  |
| Production4: | Million |  |  |  |  |  |  |  |  |  |
| Total | ${ }^{16}$ | 278.5 |  |  | 334.95 | $236.3^{5}$ | $206.4{ }^{5}$ | 152.3 | 133.6 | 135.3 |
| Merino |  | 141.5 |  |  | 171.15 | $118.7^{5}$ | $116.2^{5}$ | 80.8 | 83.5 | 85.3 |
| Crossbred |  | 124.0 | . |  | $151.9^{5}$ | $108.6{ }_{5}^{5}$ | $85.8{ }^{5}$ | 66.8 | 46.9 | 46.4 |
| Hair |  | 13.0 | $\cdots$ |  | $11.9^{5}$ | $9.0^{5}$ | $4.4{ }^{5}$ | 4.7 | 3.2 | 3.6 |
| Worsted yarn (wool content): |  |  |  |  |  |  |  |  |  |  |
| Production |  | $224.2^{6}$ | .. |  | .. |  | 152.3 | 130.5 | 123.1 | 126.9 |
| Woven wool fabrics |  |  |  |  |  |  |  |  |  |  |
| (excluding blankets): | Mn linear |  |  |  |  |  |  |  |  |  |
| Production | yds | 316.7 | . |  | .. |  |  | $236.4{ }^{5}$ | 194.5 | 193.1 |
| Blankets: Production | * |  | .. |  | .. | . |  | $34.4{ }^{5}$ | 29.7 | 28.4 |
| Silk |  |  |  |  |  |  |  |  |  |  |
| Raw silk: | Thousand |  |  |  |  |  |  |  |  |  |
| Consumption | 1 l | 5,832 | 5,493 |  |  | 1,982 | 1,625 | 393 | 345 | 332 |
| Stocks |  |  |  |  | 2,062 | 1,754 | 506 | 452 | 578 | 804 |
| Silk noils: |  |  |  |  |  |  |  |  |  |  |
| Production | " |  |  |  |  | 300 | 345 |  |  |  |
| Consumption | " |  |  |  |  | 1,551 | 625 | 194 | 63 | 397 |
| Stocks | " |  |  |  | 445 | 406 | 488 | 630 | 797 | 609 |

[^14]3. Figures relate to begining of September in 1939 and to 31 July in other years
4. Clean scoured weight.
. Production of yarm wholly or mainly of wool, including admixtures amounting to about 5 per cent.
6.22


Raw jute figures for 1942 and 1944 are for periods of 53 weeks and those for

- ther years for periods of 52 weeks.
. Including home produced goods from Control stocks.
Incuduing exports of Indian hemp amounting to 5.33 thousand tons.


### 6.23 Losses of raw materials at sea

|  |  | Monthly averages or calendar months |  |  |  |  |  | Thousand tons |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Iron ore, iron and steel and allied materials | $\begin{aligned} & \text { Non- } \\ & \text { ferrous } \\ & \text { metals } \\ & \text { and ores } \end{aligned}$ | Textiles | Timber | Hides, skins, etc. | Paper and paper- making materials | Materials for sulphuric acid and fertilizers | Miscellaneous |
| $\begin{aligned} & 1941 \\ & 1942 \\ & 1943 \\ & 1944 \end{aligned}$ |  | $\begin{array}{r} 75.1 \\ 48.8 \\ 35.8 \\ 4.5 \end{array}$ | $\begin{array}{r} \begin{array}{r} 9.1 \\ 16.2 \\ 18.1 \\ 0.8 \end{array} \end{array}$ | $\begin{aligned} & 5.4 \\ & 6.7 \\ & 6.2 \\ & 1.0 \end{aligned}$ | $\begin{aligned} & 3.4 \\ & 7.5 \\ & 2.6 \\ & 0.6 \end{aligned}$ | $\begin{aligned} & 4.3 \\ & 6.4 \\ & 2.5 \\ & 0.8 \end{aligned}$ | $\begin{aligned} & 1.0 \\ & 1.5 \\ & 0.9 \\ & 0.2 \end{aligned}$ | 3.4 2.4 0.7 | $\begin{aligned} & 5.8 \\ & 4.1 \\ & 2.6 \\ & 0.7 \end{aligned}$ | $\begin{aligned} & 2.7 \\ & 4.0 \\ & 2.2 \\ & 0.4 \end{aligned}$ |
| 1941 | January <br> February <br> March <br> April <br> May <br> June <br> August <br> September <br> October <br> November <br> December | $\begin{array}{r} 88.4 \\ 126.5 \\ 141.2 \\ 89.1 \\ 56.8 \\ 69.5 \\ 57.2 \\ 21.1 \\ 93.5 \\ 89.3 \\ 34.0 \\ 34.8 \end{array}$ | $\begin{aligned} & 54.4 \\ & 96.3 \\ & 96.4 \\ & 50.1 \\ & 30.5 \\ & 57.4 \\ & 43.8 \\ & 18.4 \\ & 48.7 \\ & 52.5 \\ & 23.8 \\ & 17.0 \end{aligned}$ | $\begin{array}{r} 15.5 \\ 1.0 \\ 10.8 \\ 2.0 \\ 6.2 \\ 7.0 \\ 5.8 \\ 10.3 \\ 3.2 \\ 1.8 \\ 0.7 \end{array}$ | $\begin{array}{r} 3.0 \\ 6.2 \\ 5.1 \\ 6.9 \\ 2.1 \\ 3.1 \\ 3.3 \\ \hline- \\ 7.2 \\ 2.7 \\ \hline 1.9 \end{array}$ | $\begin{array}{r} 7.2 \\ 8.3 \\ 1.5 \\ 10.6 \\ 0.8 \\ 0.7 \\ 0.3 \\ 15.7 \\ 2.8 \\ 2.8 \\ 1.0 \end{array}$ | $\begin{aligned} & 0.9 \\ & 2.8 \\ & 4.4 \\ & 1.0 \\ & 0.2 \\ & 0.9 \\ & 1.0 \\ & 0.0 \\ & 0.3 \end{aligned}$ | $\begin{array}{r} 0.4 \\ 1.7 \\ 13.0 \\ 3.5 \\ 11.2 \\ 0.4 \\ 2.2 \\ 0.9 \\ 1.2 \\ 1.1 \\ 4.6 \end{array}$ | $\begin{array}{r} 0.6 \\ 6.9 \\ 3.9 \\ 12.7 \\ \hline \\ \hline \\ \hline \\ 17.9 \\ 19.6 \\ 8.9^{-} \end{array}$ | $\begin{aligned} & 6.4 \\ & 3.3 \\ & 6.1 \\ & 2.3 \\ & 5.8 \\ & 2.1 \\ & 1.4 \\ & 2.5 \\ & 1.5 \\ & 1.4 \end{aligned}$ |
| 1942 | January <br> February <br> March <br> April <br> May <br> June <br> July <br> August <br> September <br> October <br> November December | $\begin{array}{r} 18.9 \\ 250.2 \\ 40.4 \\ 49.0 \\ 30.7 \\ 29.5 \\ 104 \\ 94.5 \\ 63.7 \\ 79.7 \\ 117.8 \\ 26.6 \end{array}$ | 17.0 6.4 8.5 13.0 15.9 12.0 3.1 1.7 26.5 26.2 28.5 44.4 8.5 | $\begin{array}{r} 1.0 \\ 5.2 \\ 5.3 \\ 6.8 \\ 4.8 \\ 6.2 \\ 8.0 \\ 0.8 \\ 16.6 \\ 6.9 \\ 5.9 \\ 13.4 \\ 5.2 \end{array}$ | $\begin{array}{r} 0.2 \\ 2.6 \\ 5.6 \\ 5.2 \\ 6.0 \\ 1.0 \\ 3.1 \\ 14.6 \\ 11.6 \\ 15.5 \\ 20.6 \\ 6.0 \end{array}$ | $\begin{array}{r} 1.8 \\ 2.6 \\ 5.6 \\ 1.4 \\ 5.4 \\ 5.4 \\ 1.0 \\ 10.2 \\ 10.4 \\ 8.2 \\ 19.1 \\ 2.4 \end{array}$ | $\begin{aligned} & 0.1 \\ & 0.5 \\ & 1.3 \\ & 0.2 \\ & 0.1 \\ & 0.7 \\ & 3.8 \\ & 2.2 \\ & 5.1 \\ & 3.8 \\ & 0.6 \end{aligned}$ | $\begin{aligned} & 0.5 \\ & 1.0 \\ & 1.3 \\ & 3.0 \\ & 4.7 \\ & 0.1 \\ & 4.8 \\ & 0.7 \\ & 7.1 \\ & 5.1 \end{aligned}$ | $\begin{array}{r} 5.4 \\ 3.6 \\ 0.5 \\ 15.3 \\ 2.0 \\ 0.5 \\ 11.2 \\ 0.5 \\ 4.4 \\ 5.9 \\ 0.2 \end{array}$ | $\begin{aligned} & 3.5 \\ & 1.2 \\ & 7.2 \\ & 2.2 \\ & 1.3 \\ & 4.4 \\ & 2.0 \\ & 7.1 \\ & 5.2 \\ & 5.0 \\ & 5.5 \\ & \hline 3.7 \end{aligned}$ |
| 1943 | January <br> February <br> March <br> April <br> May <br> June <br> July <br> August <br> September <br> October <br> November December | $\begin{array}{r} 29.8 \\ 34.3 \\ 144.1 \\ 76.7 \\ 56.7 \\ 11.0 \\ 3.2 \\ 25.0 \\ 7.5 \\ 16.0 \\ 14.2 \\ 13.1 \end{array}$ | 8.5 17.2 16.9 90.8 26.8 28.0 2.1 0.6 13.9 1.2 14.2 5.2 | $\begin{array}{r} 4.0 \\ 28.6 \\ 14.9 \\ 8.2 \\ 3.6 \\ 4.6 \\ 7.2 \\ 7.2 \\ 3.3 \end{array}$ | 0.2 4.0 6.0 10.3 1.0 1.6 4.5 0.5 3.0 0.6 | $\begin{aligned} & 0.6 \\ & 7.9 \\ & 9.5 \\ & 7.7 \\ & 3.0 \\ & 0.3 \\ & 0.1 \\ & 0.4 \\ & 0.5 \\ & 0.1 \\ & 0.5 \end{aligned}$ | 0.4 <br> 3.4 <br> 4.1 <br> - <br> 0.9 <br> 0.4 <br> 0.1 | 3.5 1.0 1.4 1.1 0.1 0.1 0.7 0.1 0.1 0.9 | $\begin{array}{r}8.0 \\ 1.3 \\ 12.9 \\ 0.6 \\ 3.1 \\ \hline\end{array}$ | 0.5 <br> 4.3 <br> 8.1 <br> 3.9 <br> 2.5 <br> 0.8 <br> 0.7 <br> 0.9 <br> 3.5 <br> - <br> 0.8 |
| 1944 | January <br> February <br> March <br> April <br> May <br> June <br> July <br> August <br> September <br> November <br> December | $\begin{aligned} & 1.2 \\ & 6.4 \\ & 1.8 \\ & 9.3 \\ & 1.2 \\ & 8.7 \\ & 6.0 \\ & 6.0 \\ & 3.4 \\ & 0.7 \\ & 5.4 \\ & 4.1 \end{aligned}$ | $\begin{aligned} & 0.2 \\ & 1.2^{2} \\ & 8.7 \end{aligned}$ | 1.0 $\begin{aligned} & 2.5 \\ & 5.5 \end{aligned}$ $2.5$ | 0.9 <br> - <br> $\square$ <br> 0.5 <br>  <br>  <br> 5.3 | $\begin{aligned} & 0.2 \\ & 1.2 \\ & 3.5 \end{aligned}$ <br> 3.4 $1.1$ | 2.6 <br>  <br> 0.2 | 0.2 | $\begin{array}{r}3.2 \\ 0.5 \\ 4.6 \\ \hline \\ \hline \\ \hline \\ \hline\end{array}$ | 2.1 0.1 1.0 0.5 0.5 0.5 0.3 0.1 0.5 |
| 1945 | January <br> February <br> March <br> April | $\begin{aligned} & 5.7 \\ & 9.0 \\ & 0.5 \end{aligned}$ | 5.7 | 0.6 0.4 |  | 8.4 | 0.1 |  | - |  |
|  | re October the figures giv | was no | mplete |  |  |  |  | Ministry of | pply and | offrade |



T
he dramatic transformation of the British economy in the Second World War, both in terms of the displacement of a market economy by a centrally administered economy and in terms of the temporary change in the industrial structure, was the result of one objective - to fight the war successfully. To do this the strategic priorities of the conflict on land, sea and air had to be turned into production programmes and fighter aircraft, battleships and tanks had to be produced by the factories and shipyards of the nation. The government departments responsible for those production programmes (the Ministry
of Supply, the Ministry of Aircraft Production, the production arm of the Admiralty, and the coordinating Ministry of Production which was created in February 942) came to dominate the economy and firms working on their contracts had priority with regard to scarce esources (Howlett 1993)
here was a massive increase in the output of munitions, as tables 7.3 to 7.26 testify: for example, the tonnage of major combat naval vessels increased more than threefold between 1938 and 1942, the production of light bombers and fighter aircraft increased by more than tenfold, tank production by twentyfold, mortar production rose from 58 in 1938 to more than 29,000 in 1942, and from producing a mere $12,000.303$ rifles in 1938 the economy was producing more than 900,000 by 1943 .

These crude measures of output almost certainly underestimate the scale of the achievement of the munitions industries because much of what they produced increased in complexity and often also in weight (for example, in 1939 the heaviest bomber produced was the Wellington which weighed 30,000 pounds and had a wing span of 86 feet but by 1944 the Lancaster bomber weighed in at 68,000 pounds and had a wing span of 102 feet); another important feature that should not be

## 7. Wartime aircraft production


underestimated was the output from repairs in both the shipbuilding and aircraft industries (Kohan 1952: 283; tables 7.23, 7.7-7.8 and 7.25). Furthermore this expansion occurred despite the constant modifications in weapons design and the disruption caused by air raids and the relocation of factories (Postan 1952: 164-6; 339-45). A related success story was that of machine tool production this industry had a poor interwar record but its output increased from less than 20,000 machines prior to the start of rearmament in 1935 to 37,000 in 1939 to a wartime peak of nearly 100,000 in 1942; and small tool production increased from 17,000 in 1940 to more than 42,000 in 1943. However, imports from the USA still remained crucial for several groups of machine tools, such as automatic lathes and vertical drillers (Hornby 1958: 330-I ).

The corollary of the expansion of munition sector was the contraction of the consumer orientated sector of the economy. This was engineered by the state by squeezing both demand (through such measures as rationing) and supply (through limiting access to raw materials; import and export restrictions; setting quantity ceilings on the amount wholesalers could sell and then progressively reducing those ceilings; and, more directly, by promoting a concentration of production drive in many consumer industries to release resources to the munitions and related industries, at least for the duration of the war) (Allen 195 Hargreaves and Gowing: 202-33; tables 7.32, 6.16-6.22). Munitions output peaked in the first quarter of 1944 but its expansion during the war was not a smooth process but one of continual 'ebb and flow' whereby production expanded until it met a resource limit or a production or administrative bottleneck and was temporarily checked, then overcame this constraint and expanded again until the
next constraint was encountered (Harrison 1990: 665; Postan 1952). The 'ebb and flow' of munitions production also reflected the changing strategic priorities of the war. Although the military and political leaders were committed o a policy of 'armament in depth' (that is building up the ong term strength of the army, navy and air force in order eventualy launch succesfful counter campaigns against Gernary and meant that in the short term strategic prionies could change abruptly and in such cases the munitions industries had to respond rapidly to the new demands these made. An example of this was the Battle of Britain. One of the consequences of the collapse of France and the Dunkirk evacuation in May 1940 was that a German invasion was highly likely; a precondition for this was air supremacy and thus the overriding priority of the British economy in the Summer of 1940, as the Battle of Britain raged, was to produce fighter aircraft (Churchill 1949:61). Thus, between the first and third quarters of 1940 the quarterly rate of aircraft produced increased by 93 per cent (and the official index of production increased from 569 in May 1940 to a level in excess of 700 between June and August, a level that was not reached again until February 194I) whilst the rate for the light bomber and fighter aircraft category increased by 170 per cent, with their share of the total output rising from 30 per cent to 41 per cent (tables 7.22 and 7.24).

The impressive increase in the domestic production of munitions should not mask the importance of munitions supplied by the USA (nor indeed those supplied by Canada) (Duncan Hall 1955; Duncan Hall and Wrigley 1956). The Lend-Lease Act of March 1941 released Britain and her allies, from the financial burden of immediate payment for goods received (payment being postponed

### 7.2 Index of Ministry of Supply munitions production



until after the war). Total Lend-Lease aid provided 17 per cent of all British empire munitions during war, and included the equivalent of 150 per cent of the domestic production of transport aircraft, 24 per cent of combat aircraft, 104 per cent of tanks, 67 per cent of small arms ammunition and 60 per cent of landing crafts and ships (Allen 1946: 268; Postan 1952: 247; tables 7.27-7.28). The only blip in this supply of munitions came, paradoxically. when the USA finally entered the war in December 194 and needed to divert some of its capacity from supplying

### 7.3 Shipbuilding

Naval vessels : Major combat ${ }^{1}$
$\qquad$

| Battleships | Aircraft carriers | Monitors | Cruisers | Destroyers | Submarines |
| :---: | :---: | :---: | :---: | :---: | :---: |


| 1936/32 |  | - |  |  |  |  | 4 | 30.3 | 10 | 13.7 | 3 | 3.7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1937 | April-December | - | - |  | - | - | 4 | 32.5 | 8 | 11.1 | 1 | 0.7 |
| 1938 |  | - | । | 22.0 | - |  | 2 | 18.8 | 12 | 21.9 | 6 | 5.0 |
| 1939 |  |  |  |  | - |  | 3 | 29.6 | 22 | 38.6 | 7 | 8.1 |
| 1940 |  | 35.0 | 2 | 46.0 |  |  | 7 | 45.9 | 27 | 31.3 | 15 | 12.0 |
| 1941 |  | 70.0 | 2 | 46.0 | . | 7.6 | 6 | 37.9 | 39 | 50.6 | 20 | 14.1 |
| 1942 |  | 70.0 |  |  | - |  | 6 | 40.4 | 73 | 99.5 | 33 | 24.0 |
| 1943 |  |  | 2 | 30.0 | I | 7.9 | 7 | 47.0 | 37 | 61.6 | 39 | 27.7 |
| 1944 |  | - | 4 | 74.5 | - |  | 2 | 13.8 | 31 | 53.7 | 39 | 29.0 |
| 1938 | Ist Quarter | - | - |  | - | - | - | - | । | 1.4 |  |  |
|  | 2nd Quarter | - |  |  |  |  | - |  | 2 | 3.7 | । | 0.7 |
|  | 3rd Quarter | - | । | 22.0 |  |  | । | 9.4 | 2 | 3.7 | 2 | 2.1 |
|  | 4th Quarter | - | - |  | - | - | 1 | 9.4 | 7 | 13.09 | 3 | 2.2 |
| 1939 | Ist Quarter |  | - | - | - | - | 1 | 9.6 | 5 | 9.4 |  |  |
|  | 2nd Quarter |  | - |  |  |  |  |  | 5 | 8.6 | 2 |  |
|  | July-August |  | - |  | - | - | 2 | 20.0 | 3 | 5.2 | 1 | 1.1 |
|  | September-December | - | - | - | - | - | - |  | 9 | 15.4 | 4 | 4.4 |
| 1940 | Ist Quarter |  |  |  |  |  |  |  | 4 | 5.1 |  |  |
|  | 2nd Quarter |  | I | 23.0 |  |  | 2 | 13.5 | 5 | 5.8 | 2 | 2.2 |
|  | 3rd Quarter |  |  |  |  | - | 5 | 32.4 | 6 | 6.0 | 4 | 2.7 |
|  | 4th Quarter | 35.0 | I | 23.0 | - | - |  |  | 12 | 14.4 | 6 |  |
| 1941 | Ist Quarter | 35.0 |  |  |  |  | 2 | 13.5 | 8 | 10.5 | 3 | 2.2 |
|  | 2nd Quarter |  | I | 23.0 |  | - | 1 | 5.5 | 9 | 11.1 | 4 | 2.7 |
|  | 3rd Quarter |  |  |  |  |  |  |  | 9 | 12.9 | 7 | 4.9 |
|  | 4th Quarter | 35.0 | I | 23.0 | 1 | 7.6 | 3 | 18.9 | 13 | 16.1 | 6 |  |
| 1942 | Ist Quarter |  |  |  |  | - | I | 8.0 | 14 | 18.6 | 3 |  |
|  | 2nd Quarter | 35.0 |  |  |  | - | 3 | 18.9 | 19 | 24.3 | 10 | 6.7 |
|  | 3rd Quarter | 35.0 |  |  |  | - | 2 | 13.5 | 18 | 25.4 | 8 |  |
|  | 4th Quarter |  | - | - | - | - |  |  | 22 | 31.2 | 12 | 8.8 |
| 1943 | Ist Quarter |  | - |  |  |  | 2 | 16.0 | 8 | 11.9 | 7 | 4.9 |
|  | 2nd Quarter | - | - | - | I | 7.9 |  |  | 9 | 15.0 | 11 | 7.7 |
|  | 3rd Quarter |  |  |  |  |  | 3 | 19.5 | 11 | 19.3 | 8 | 5.4 |
|  | 4th Quarter | - | 2 | 30.0 | - | - | 2 | 11.5 | 9 | 15.4 | 13 | 9.7 |
| 1944 | Ist Quarter |  | I | 14.5 |  |  | I | 5.8 | 9 | 15.4 | 9 |  |
|  | 2nd Quarter |  | I | 23.0 |  |  | । | 8.0 | 6 | 10.3 | 11 | 7.9 |
|  | 3rd Quarter | - | । | 23.0 | - |  | - |  | 8 | 14.3 | 7 | 4.9 |
|  | 4th Quarter | - | 1 | 14.0 |  |  |  | - | 8 | 13.7 | 12 | 89 |
| 1945 | Ist Quarter | - | 2 | 28.0 |  |  | - |  | । | 1.7 | 5 |  |
|  | 2nd Quarter |  | । | 14.0 |  |  | I | 8.0 | 3 | 5.7 | 6 | 5.4 |
|  | 3rd Quarter |  | 1 | 14.0 | - |  | - | - | 9 | 9.2 | 3 | 2.5 |

Vessels completed in the United Kingdom, including ships built for Dominion
Yevernments but excluding ships buit for other Governments.

### 7.4 Shipbuilding



### 7.5 Shipbuilding

Merchant vessels built in the United Kingdom'


Including merchant-type vessels built for the Nayy as follows. I I 19414,000 gross tons non-tanker
(all of 100-1.599 gross tons: 20.000 gross tons tanker (all of over 1,600 gross tons): in 19428,000 (al of 100-1,599 gross tons): 20,000 gross tons tanker (all of over 1,600 gross tons) in 19428,000 gross tons non-takker
gross tons non-tanker.
Including two suction dredgers of 3,944 and 1,747 gross tons.
7.6 Shipbuilding

Merchant vessels built in the United Kingdom

|  |  | Non-tankers of 1,600 gross tons and over! |  |  |  |  |  |  |  |  | Thousand gross tons |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Cargo liners |  |  |  |  |  | Tramps of 3,500 gross tons and over ${ }^{2}$ |  |  | Colliers and tramps of $1,600-3,499$ gross tons ${ }^{3}$ |  |  |
|  |  | Fully refrigerated |  |  | Others |  |  |  |  |  |  |  |  |
|  |  | Under <br> Laid constructdown tion end |  | Completed | $\begin{aligned} & \text { Laid } \\ & \text { down } \end{aligned}$ | Under construction end of period | Completed | $\begin{aligned} & \text { Laid } \\ & \text { down } \end{aligned}$ | Under construction end of period | Com- <br> pleted | $\begin{aligned} & \text { Laid } \\ & \text { down } \end{aligned}$ |  | Completed |
| 1940 |  | 37 | 95 |  | 124 | 152 | 193 | 601 | 539 | 406 | 49 | 50 | 44 |
| 1941 |  | 63 | 130 | 28 | 91 | 145 | 98 | 686 | 562 | 663 | 58 | 50 | 58 |
| 1942 |  | 99 | 134 | 95 | 200 | 273 | 72 | 696 | 549 | 709 | 81 | 51 | 80 |
| 1943 |  | 36 | 105 | 65 | 223 | 279 | $217^{4}$ | 436 | 373 | 612 | 48 | 34 | 65 |
| 1944 |  | 48 | 74 | 79 | $180^{5}$ | 261 | 198 | 400 | 312 | 461 | 37 | 30 | 41 |
| 1941 | 3rd Quarter | 9 | 117 | 7 | 35 | 151 | 16 | 208 | 588 | 206 | 6 | 37 | 10 |
|  | 4th Quarter | 34 | 130 | 21 | 33 | 145 | 39 | 162 | 562 | 188 | 22 | 50 | 9 |
| 1942 | Ist Quarter | 10 | 114 | 26 | 38 | 178 |  | 142 | 530 | 174 | 18 | 51 | 17 |
|  | 2nd Quarter | 33 | 133 | 14 | 41 | 201 | 18 | 190 | 534 | 186 | 22 | 53 | 20 |
|  | 3rd Quarter | 38 | 163 | 9 | 51 | 218 | 34 | 209 | 598 | 145 | 20 | 58 | 15 |
|  | 4th Quarter | 18 | 134 | 46 | 70 | 273 | 15 | 155 | 549 | 204 | 21 | 51 | 28 |
| 1943 | Ist Quarter |  | 127 | 7 | 61 | 309 | 25 | 113 | 515 | 147 | 15 | 56 | vo |
|  | 2nd Quarter | 10 | 109 | 28 | 54 | 333 | 30 | 136 | 503 | 148 | 17 | 53 | 20 |
|  | 3rd Quarter | 8 | 107 | 10 | 73 | 372 | 34 | 92 | 448 | 147 | 16 | 53 | 16 |
|  | 4th Quarter | 18 | 105 | 20 | 35 | 279 | 128 | 95 | 373 | 170 | - | 34 | 19 |
| 1944 | Ist Quarter | 8 | 104 | - | 53 | 316 | 16 | 107 | 367 | 113 | 6 | 31 | 9 |
|  | 2nd Quarter | 10 | 84 | 30 | 34 | 323 | 27 | 111 | 347 | 131 | 9 | 30 | 10 |
|  | 3rd Quarter | 9 | 75 | 18 | 36 | 296 | 63 | 99 | 366 | 80 | 9 | 32 | 7 |
|  | 4th Quarter | 21 | 74 | 22 | $57^{5}$ | 261 | 92 | 83 | 312 | 137 | 13 | 30 | 15 |
| 1945 | Ist Quarter | 44 | 110 | 8 | 53 | 287 | 27 | 33 | 280 | 65 | 15 | 40 | 5 |
|  | 2nd Quarter | 70 | 171 |  | 101 | 357 | 31 | 37 | 241 | 76 | 27 | 55 | 12 |
|  | 3rd Quarter | 14 | 177 | 8 | 143 | 483 | 17 | 5 | 180 | 66 | 6 | 52 |  |

In addition to the classes of vessel shown below, passenger liners of 98,000 gross tons were
completed in 1940 .
completed in 1940 .
Inse vessels are mostly of about 7,000 gross tons and 10,000 deadweight tons.
Including dredgers from Maly 1943
Including four vessels totaling 56,800 gross tons handed over to the Royal Nan

### 7.7 Merchant vessels undergoing or awaiting repair in United Kingdom ports

|  | Vessels of 100 |  |  |  |  | Britis | Bitish and for | oreign |  |  | Thousand | gross tons |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Vessels of 1,600 gross tons and over |  |  |  |  |  |  |
|  |  |  |  | Cause of | damage |  | Non-tankers |  |  | Tankers |  | op- |
|  | Total | Undergoing repairs while working cargo | Immobilised by reasonof | Enemy action | Other causes | Total | Undergoing repairs while working cargo | Immobilised by reason of | Total | Undergoing repairs while working cargo | Immobilised by reason of repair | $\begin{array}{r} \text { and } \\ \text { hospital } \\ \text { ships } \end{array}$ |
| 91 February 27 | 2,593 | 1,008 | 1,585 | 453 | 2.140 | 2,031 | 971 | 1,060 | 421 | 23 | 397 |  |
| March 27 | 2,306 | 860 | 1,447 | 567 | 1,740 | 1,819 | 821 | 999 | 364 | 30 | 334 |  |
| April 24 | 2,025 | 681 | 1,345 | 612 | 1,413 | 1,573 | 641 | 932 | 322 | 24 | 298 |  |
| May 29 | 2,070 | 935 | 1,135 | 592 | 1,478 | 1,615 | 874 | 741 | 338 | 44 | 294 |  |
| June 26 | 1,922 | 1,100 | 822 | 461 | 1,460 | 1,525 | 1,003 | 522 | 282 | 57 | 225 |  |
| July 31 | 1,618 | 735 | 883 | 428 | 1.189 | 1,264 | 691 | 573 | 246 | 12 | 234 |  |
| August 28 | 1,691 | 907 |  | 392 | 1,299 | 1,279 | 807 | 473 | 319 | 67 | 252 |  |
| September 25 | 1,694 | 1,051 | 643 | 306 | 1,388 | 1,309 | 910 | 399 | 282 | 111 | 172 |  |
| October 30 | 1.857 | 1,116 | 742 | 236 | 1,621 | 1,392 | 970 | 422 | 349 | 95 | 254 |  |
| November 27 | 1,668 | 972 | 696 | 254 | 1,414 | 1,181 | 814 | 367 | 378 | 114 | 264 |  |
| December 25 | 1,891 | 1,155 | 736 | 210 | 1,682 | 1,394 | 1,006 | 388 | 401 | 118 | 283 |  |
| 1942 January 29 | 1.768 | 926 | 841 | 176 | 1,592 | 1,245 | 776 | 468 | 415 | 104 | 311 |  |
| February 26 | 1.846 | 1,002 | 844 | 182 | 1,664 | 1,396 | 880 | 516 | 345 | 82 | 263 |  |
| March 26 | 1.567 | 919 | 648 | 139 | 1,428 | 1,200 | 816 | 384 | 277 | 76 | 201 |  |
| April 30 | 1,570 | 871 | 699 | 116 | 1,455 | 1,190 | 769 | 421 | 272 | 64 | 209 | 390 |
| May 28 | 1.508 | 851 | 658 | 146 | 1,362 | 1,190 | 809 | 381 | 223 | 10 | 213 | 320 |
| June 25 | 1,460 | 857 | 602 | 80 | 1,379 | 1,164 | 779 | 385 | 189 | 47 | 142 |  |
| July 30 | 1,402 | 731 | 671 | 48 | 1,354 | 968 | 626 | 342 | 317 | 75 | 241 | 246 |
| August 27 | 1,438 | 768 | 671 | 47 | 1,392 | 1,078 | 674 | 404 | 254 | 61 | 193 | 206 |
| September 24 | 1,701 1,628 1 | 905 939 | 796 689 | $\begin{aligned} & 71 \\ & 74 \end{aligned}$ | 1,630 1,555 | $\begin{aligned} & 1,279 \\ & 1,255 \end{aligned}$ | 828 | $\begin{aligned} & 452 \\ & 392 \end{aligned}$ | $\begin{aligned} & 314 \\ & 277 \end{aligned}$ | 52 49 | 262 | 307 |
| October 29 | 1,628 | 836 | 689 | 84 | 1,555 | 1,200 | 777 | 423 | 300 | 63 | 237 | 215 |
| December 31 | 1,606 | 846 | 759 | 97 | 1,509 | 1,265 | 809 | 456 | 251 | 18 | 233 | 526 |
| 1943 January 28 | 1,781 | 938 | 843 | 89 | 1,692 | 1,371 | 861 | 510 | 299 | 50 | 249 |  |
| February 25 | 1,698 | 869 | 829 | 85 | 1.613 | 1,331 | 801 | 529 | 267 | 39 | 228 | 389 |
| March 25 | 1,759 | 837 | 922 | 92 | 1,667 | 1,386 | 787 | 600 | 267 | 22 | 245 | 350 |
| April 29 | 2,004 | 1,031 | 973 | 117 | 1,888 | 1,658 | 971 | 687 | 242 | 28 | 214 | 287 |
| May 27 | 1,846 | 1,027 | 820 | 87 | 1,759 | 1,536 | 962 | 574 | 209 | 38 | 151 | 464 |
| June 24 | 1,531 | ${ }_{9} 85$ | 576 | 83 | 1449 | 1,329 | 843 | 393 | 198 | 84 | 114 | 534 |
| August 26 | 1,477 | 870 | 607 | 98 | 1,379 | 1,124 | 736 | 388 | 240 | 110 | 130 | 404 |
| September 30 | 1,609 | 985 | 624 | 89 | 1,520 | 1,263 | 876 | 387 | 236 | 70 | 166 | 426 |
| October 28 | 1,798 | 1.025 | 774 | 92 | 1,706 | 1,454 | 972 | 482 | 232 | 29 | 203 | 254 |
| November 25 | 1,536 | 806 | 729 |  | 1,448 | 1,211 | 770 | 442 | 220 | 14 | 205 | 363 |
| December 30 | 1,736 | 1,006 | 731 | 96 | 1,640 | 1,470 | 968 | 502 | 181 | 14 | 167 | 448 |
| 1944 January 27 | 1,753 | 1,005 | 748 | 98 | 1,656 | 1,479 | 968 | 512 | 182 | 17 | 165 | 446 |
| February 24 | 1,768 | 989 | 779 | 60 | 1,708 | 1,436 | 917 | 520 | 209 | 44 | 165 | 469 |
| March 30 | 1,506 | 747 | 759 | 72 | 1,434 | 1,167 | 681 | 486 | 237 | 39 | 199 | 19 |
| April 27 | 1,807 | 1.010 | 797 | 53 | 1,753 | 1,468 | 929 | 539 | 220 | 47 | 173 | 540 |
| May 25 | 1,723 | 991 | 731 | 47 | 1,676 | 1,446 | 940 | 506 | 185 | 33 | 152 | 246 |
| June 29 | 1,515 | 904 | 611 | 66 | 1,449 | 1,258 | 830 | 428 | 173 | 49 | 124 | 305 |
| July 27 | 1,510 | 863 | 647 | 74 | 1,436 | 1,184 | 811 | 373 | 236 | 36 | 200 | 309 |
| August 31 | 1,619 | 805 | 814 | 91 | 1,527 | 1,318 | 759 | 558 | 198 | 29 | 169 | 466 |
| September 28 | 1,618 | 806 | 812 | 111 | 1,507 | 1,325 | 749 | 576 | 183 | 35 | 148 | 522 |
| October 26 | 1,995 | 1,123 | 872 | 93 | 1,902 | 1,681 | 1,057 | 623 | 202 | 41 | 160 | 551 |
| November 30 | 2,053 | 1,100 | 952 | 84 | 1,969 | 1,684 | 1,054 | 630 | 241 | 21 | 220 | 515 |
| December 28 | 1,989 | 1,142 | 847 | 67 | 1,922 | 1,660 | 1,074 | 586 | 183 | 34 | 149 | 515 |
| 1945 January 25 | 2,127 | 1,121 | 1,006 | 67 | 2,060 | 1,705 | 1,009 | 696 | 254 | 71 | 183 | 42 |
| March 1 | 2,179 | 1,242 | 937 | 78 | 2.101 | 1,824 | 1,154 | 670 | 225 | 62 | 163 | 560 |
| March 29 | 1,860 | 947 | 913 | 65 | 1,795 | 1,536 | 902 | 634 | 197 | 23 | 174 | 27 |
| April 26 | 1,983 | 1,087 | 897 | 71 | 1,913 | 1,683 | 1,042 | 641 | 163 | 18 | 146 | 556 |
| May 31 | 2,047 | 1,049 | 998 | 125 | 1,922 | 1,695 | 970 | 725 | 208 | 54 | 154 | 480 |
| June 28 | 2,184 | 1,130 | 1,055 | 120 | 2.065 | 1,774 | 1,087 | 687 | 271 | 18 | 253 | 525 |
| july 26 | 2,076 | 902 | 1,174 | 125 | 1,951 | 1,502 | 791 | 711 | 413 | 87 | 327 | 455 |
| August 30 | 2,410 | 1,247 | 1,163 | 94 | 2,317 | 1,834 | 1,193 | 641 | 419 | 24 | 395 | 410 |

### 7.8 Merchant vessels repaired in United Kingdom ports

|  | Vessels of 100 gross tons and over, British and foreign weekly averages |  |  | Thousand gross tons |
| :---: | :---: | :---: | :---: | :---: |
|  | Total | $\begin{aligned} & \text { Vessels of } \\ & 100 \text { to } 1,599 \text { gross } \\ & \text { tons } \end{aligned}$ | Vessels of 1,600 gross tons and over |  |
|  |  |  | Non-tankers | Tankers |
| $\begin{aligned} & 1942 \\ & 1943 \\ & 1944 \end{aligned}$ | $\begin{aligned} & 728 \\ & 728 \\ & 847 \end{aligned}$ | $\begin{aligned} & 62 \\ & 50 \\ & 60 \end{aligned}$ | $\begin{aligned} & 544 \\ & 562 \\ & 701 \end{aligned}$ | 122 116 85 |
| 1941 February <br> * March <br> April <br> * June <br> June <br> August <br> * September October <br> November <br> * December | 768 934 760 788 881 743 749 797 752 815 789 | $\begin{aligned} & 40 \\ & 61 \\ & 53 \\ & 52 \\ & 59 \\ & 54 \\ & 57 \\ & 54 \\ & 70 \\ & 73 \\ & 62 \end{aligned}$ | 639 755 759 654 706 584 592 613 566 635 575 | $\begin{array}{r} 89 \\ 117 \\ 98 \\ 83 \\ 116 \\ 105 \\ 99 \\ 130 \\ 17 \\ 177 \\ 153 \end{array}$ |
| 1942 <br> January <br> February <br> *March <br> April <br> * May <br> July <br> * August September October <br> * November <br> December | 800 825 756 730 737 675 742 640 786 782 674 679 |  | 607 572 566 555 546 521 570 471 532 585 519 505 | 128 179 123 108 122 93 107 108 149 142 101 122 |
| 1943 <br> January <br> February <br> * March <br> * April <br> *May <br> June <br> * July <br> September <br> October <br> * November <br> December | 674 771 753 756 744 811 692 681 775 667 710 707 | $\begin{aligned} & 55 \\ & 58 \\ & 51 \\ & 54 \\ & 55 \\ & 50 \\ & 46 \\ & 48 \\ & 46 \\ & 48 \\ & 46 \\ & 42 \end{aligned}$ | 518 592 583 583 568 633 514 493 594 529 565 577 | $\begin{aligned} & 101 \\ & 121 \\ & 119 \\ & 119 \\ & 121 \\ & 132 \\ & 139 \\ & 135 \\ & 90 \\ & 99 \\ & 89 \end{aligned}$ |
|  | 750 <br> 796 <br> 804 <br> 713 <br> 988 <br> 854 <br> 798 <br> 888 <br> 811 <br> 926 <br> 987 <br> 955 <br> 924 <br> 984 <br> 1,088 <br> 923 <br> 843 <br> 858 <br> 918 <br> 720 | 43 49 51 51 59 62 63 64 57 71 80 70 74 74 67 64 62 56 51 44 | 620 <br> 678 <br> 568 <br> 758 <br> 695 <br> 669 <br> 697 676 <br> 779 <br> 836 785 <br> 748 <br> 842 <br> 913 781 <br> 709 <br> 699 <br> 602 | 88 70 85 110 100 97 66 87 77 76 70 100 102 68 107 78 73 103 93 74 |
| 1. Figures for two weeks have been omitted as unreliable on account of disorganisation following air raids. <br> * Average of five weeks. |  |  |  |  |

## 7. 10 Munitions

Artillery equipments and instruments and tank and anti-tank guns


## 7.II Munitions <br> Naval guns!



### 7.12 Munitions

Aircraft and light guns


## 7. I 3 Munitions <br> Other weapons


7.14 Munitions

Small arms 1

|  | Rifles - 303 -in. | Anti-tank rifles | Machine carbines 9 mm . | $\begin{aligned} & \text { Machine } \\ & \text { guns - } 303 \text {-in. } \end{aligned}$ | $\begin{array}{r} \text { A.F.V. } \\ \text { machine guns }{ }^{2} \end{array}$ | $\begin{aligned} & \text { Pistols } \\ & \text {-38-in. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1936/373 <br> 1937 April-December <br> 1938 <br> 1939 <br> 1940 <br> 1941 <br> 1942 <br> 1943 <br> 1944 |  | $\begin{array}{r} 296 \\ 5,364 \\ 9,663 \\ 14,027 \\ 7,13 \\ 22,643 \\ 9,608 \end{array}$ | $\begin{array}{r} 6,404 \\ 1,438,336 \\ 1,572,445 \\ 671,490 \end{array}$ | $\begin{array}{r} 12 \\ 5.48 \\ 5,48 \\ 16,405 \\ 30,179 \\ 39,39 \\ 68,167 \\ 81,030 \\ 53,368 \end{array}$ | $\begin{array}{r} 438 \\ 886 \\ 1,838 \\ 3,548 \\ 7,405 \\ 24,446 \\ 19,293 \\ 7,095 \end{array}$ | $\begin{array}{r} 1,978 \\ 3,919 \\ 13,437 \\ 38,777 \\ 55,377 \\ 83,557 \\ 107,333 \\ 87,719 \end{array}$ |
| 1938 1st Quarter 2nd Quarter 3rd Quarter 4th Quarter | $\begin{aligned} & 1,510 \\ & 1,693 \\ & 3,974 \\ & 4,851 \end{aligned}$ | $\begin{array}{r} 718 \\ 953 \\ 1,768 \\ 1,925 \end{array}$ | - | $\begin{array}{r} 308 \\ 442 \\ 1,868 \\ 2,860 \end{array}$ | $\begin{aligned} & 237 \\ & 209 \\ & 92 \\ & 348 \end{aligned}$ | $\begin{array}{r} 627 \\ 769 \\ 1,087 \\ 1,436 \end{array}$ |
| 1939 Ist Quarter 2nd Quarter July-August September-December | $\begin{aligned} & 3,766 \\ & 8,529 \\ & 3,866 \\ & 18,255 \end{aligned}$ | $\begin{aligned} & 2,078 \\ & 2,133 \\ & 1,290 \\ & 4,102 \end{aligned}$ |  | $\begin{aligned} & 3,313 \\ & 3,378 \\ & 2,727 \\ & 6,987 \end{aligned}$ | $\begin{aligned} & 392 \\ & 489 \\ & 228 \\ & 729 \end{aligned}$ | $\begin{aligned} & 1,779 \\ & 1,922 \\ & 2,251 \\ & 7,485 \end{aligned}$ |
| 1940 Ist Quarter 2nd Quarter 3rd Quarter 4th Quarter | $\begin{aligned} & 17,349 \\ & 21,348 \\ & 26,317 \\ & 15,749 \end{aligned}$ | $\begin{array}{r} 3,539 \\ 5,426 \\ 4.214 \\ \hline 848 \end{array}$ | - | $\begin{aligned} & 5,513 \\ & 8,546 \\ & 9,059 \\ & 7,061 \end{aligned}$ | $\begin{array}{r} 400 \\ 1,077 \\ 1,060 \\ 1,011 \end{array}$ | $\begin{array}{r} 4,630 \\ 1,2915 \\ 11,269 \\ 9,963 \end{array}$ |
| 1941 1st Quarter 2nd Quarter 3rd Quarter 4th Quarter | $\begin{array}{r} 8,454 \\ 11,914 \\ 12,586 \\ 45,579 \end{array}$ | $\begin{aligned} & 1,037 \\ & 2,537 \\ & 3,739 \end{aligned}$ | 6,404 | $\begin{array}{r} 8,998 \\ 9,967 \\ 10,080 \\ 10,795 \end{array}$ | $\begin{aligned} & 1,237 \\ & 1,395 \\ & 2,064 \\ & 2,709 \end{aligned}$ | $\begin{aligned} & 12,599 \\ & 13,217 \\ & 14,148 \\ & 15,413 \end{aligned}$ |
| 1942 Ist Quarter 2nd Quarter 3rd Quarter 4th Quarter | $\begin{array}{r} 86,485 \\ 126,202 \\ 168,086 \\ 214,116 \end{array}$ | $\begin{aligned} & 5,291 \\ & 6,519 \\ & 5,251 \\ & 5,582 \end{aligned}$ | $\begin{aligned} & 130,364 \\ & 323,776 \\ & 503,447 \\ & 480,749 \end{aligned}$ | $\begin{aligned} & 14,558 \\ & 16,791 \\ & 18,813 \\ & 18,005 \end{aligned}$ | $\begin{aligned} & 4,666 \\ & 5,946 \\ & 6,718 \\ & 7,116 \end{aligned}$ | $\begin{aligned} & 14,453 \\ & 20,904 \\ & 22,030 \\ & 26,170 \end{aligned}$ |
| 1943 Ist Quarter 2nd Quarter 3rd Quarter 4th Quarter | $\begin{aligned} & 233,018 \\ & 245,275 \\ & 217,498 \\ & 213,994 \end{aligned}$ | $\begin{array}{r} 3,458 \\ 3,940 \\ 2,210 \end{array}$ | 561.676 508,515 232,684 269,570 | $\begin{aligned} & 21,086 \\ & 19,779 \\ & 19,792 \\ & 20,373 \end{aligned}$ | $\begin{aligned} & 6,039 \\ & 5,826 \\ & 4,194 \\ & 3,234 \end{aligned}$ | $\begin{aligned} & 288,425 \\ & 27,781 \\ & 265,10 \\ & 25,017 \end{aligned}$ |
| 1944 Ist Quarter 2nd Quarter 3rd Quarter 4th Quarter | $\begin{aligned} & 180,443 \\ & 139,281 \\ & 120,721 \\ & 106,937 \end{aligned}$ | $:$ | $\begin{aligned} & 211,703 \\ & 184,224 \\ & 140,481 \\ & 135,082 \end{aligned}$ | $\begin{aligned} & 18,191 \\ & 15,596 \\ & 14,756 \\ & 4,825 \end{aligned}$ | $\begin{aligned} & 1,853 \\ & 1,510 \\ & 1,669 \\ & 2,063 \end{aligned}$ | $\begin{aligned} & 23,305 \\ & 2,453 \\ & 22,210 \\ & 20,751 \end{aligned}$ |
| 1945 1st Quarter 2nd Quarter 3rd Quarter | $\begin{aligned} & 92,720 \\ & 74,389 \\ & 60,344 \end{aligned}$ |  | $\begin{array}{r} 110,963 \\ 68,487 \\ 51,866 \end{array}$ | $\begin{array}{r} 4,680 \\ 4.067 \\ 100 \end{array}$ | 2,097 1 | $\begin{aligned} & 18,842 \\ & 17,635 \\ & 7,741 \end{aligned}$ |

2. Al services. 7.92 mm . Besa, 15 mm . Besa and $\cdot 303$-in. and 5 -in Vickers.

Year ended 31 March.

### 7.15 Munitions

Filled ammunition: Army

|  |  |  |  | tillery |  | Anti-a | ircraft | Tank and |  | Grendes | Mortar | PIAT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Field | Medium | Heavy | Coast | Light | Heavy |  |  |  |  |  |
| $\begin{aligned} & 1936 / 3 \\ & 1937 / \\ & 1938 \\ & 1939 \text { ] } \end{aligned}$ | /372 <br> April-December <br> January-August | $\begin{gathered} 474 \\ 1,034 \\ 777 \end{gathered}$ |  |  |  | $\begin{aligned} & 180 \\ & 550 \end{aligned}$ | $\begin{array}{r} 143 \\ 514 \\ 1,108 \\ 1,333 \end{array}$ | $\begin{array}{r} 41 \\ 169 \\ 296 \\ 165 \end{array}$ | 14 |  | $\begin{array}{r} 39 \\ 117 \\ 191 \\ 111 \end{array}$ |  |
| $\begin{aligned} & 1940 \\ & 1941 \\ & 1942 \\ & 1943 \\ & 1944 \end{aligned}$ | September-December | $\begin{array}{r} 758 \\ 6,175 \\ 61,763 \\ 20,146 \\ 9,152 \\ 8,180 \end{array}$ | $\begin{array}{r} 28 \\ 626 \\ 1,744 \\ 2,117 \\ 1,784 \\ 1,918 \end{array}$ | $\begin{array}{r} 7.70 \\ 84.00 \\ 35.70 \\ 259.02 \\ 1.25 \end{array}$ | $\begin{aligned} & 39 \\ & 76 \\ & 70 \\ & 120 \\ & 205 \\ & 243 \end{aligned}$ | $\begin{gathered} 160 \\ 2,338 \\ 4,648 \\ 10,582^{3} \\ 13,574^{3} \\ 8,982 \end{gathered}$ | $\begin{array}{r} 677 \\ 2,138 \\ 4,413 \\ 4,452 \\ 2,030 \\ 837 \end{array}$ | $\begin{gathered} 135 \\ 836 \\ 5,534^{4} \\ 17,143^{4} \\ 15,886^{4} \\ 5,177 \end{gathered}$ | $\begin{array}{r} 151 \\ 1,043 \\ 2,361 \\ 6,480 \\ 9,611 \\ 3,099 \end{array}$ | $\begin{array}{r} 180 \\ 15,812 \\ 15,502 \\ 22,098 \\ 21,510 \\ 16,872 \end{array}$ | $\begin{array}{r} 223 \\ 2,127 \\ 13784 \\ 35,07 \\ 23,772 \\ 12,192 \end{array}$ | 357 4,113 4,806 |
| 1938 | Ist Quarter 2nd Quarter 3rd Quarter 4th Quarter | $\begin{aligned} & 190 \\ & 338 \\ & 291 \\ & 215 \end{aligned}$ | $\ldots$ |  |  | $\begin{aligned} & 15 \\ & 82 \\ & 83 \end{aligned}$ | $\begin{aligned} & 214 \\ & 235 \\ & 245 \\ & 414 \end{aligned}$ | $\begin{aligned} & 47 \\ & 95 \\ & 82 \\ & 72 \end{aligned}$ |  |  | $\begin{aligned} & 81 \\ & 56 \\ & 32 \\ & 22 \end{aligned}$ |  |
| 1939 | Ist Quarter 2nd Quarter July-August | $\begin{aligned} & 316 \\ & 265 \\ & 190 \end{aligned}$ |  |  |  | $\begin{aligned} & 110 \\ & 196 \\ & 244 \end{aligned}$ | $\begin{aligned} & 503 \\ & 477 \\ & 353 \end{aligned}$ | $\begin{aligned} & 48 \\ & 20 \\ & 97 \end{aligned}$ | 7 |  | 52 59 |  |
|  | September-December | 758 | 28 | 7.70 | 39 | 160 | 677 | 135 | 151 | 180 | 223 |  |
| 1940 | Ist Quarter 2nd Quarter 3rd Quarter 4th Quarter | $\begin{aligned} & 1,068 \\ & 1,516 \\ & 1,901 \\ & 1,690 \end{aligned}$ | $\begin{array}{r} 90 \\ 189 \\ 108 \\ 239 \end{array}$ |  | $\begin{aligned} & 35 \\ & 19 \\ & 10 \\ & 12 \end{aligned}$ | $\begin{array}{r} 80 \\ 542 \\ 713 \\ 1,003 \end{array}$ | $\begin{aligned} & 574 \\ & 530 \\ & 404 \\ & 630 \end{aligned}$ | $\begin{array}{r} 90 \\ 156 \\ 278 \\ 312 \end{array}$ |  | $\begin{array}{r} 299 \\ 1,478 \\ 6,498 \\ 7,537 \end{array}$ | $\begin{aligned} & 155 \\ & 278 \\ & 895 \\ & 799 \end{aligned}$ |  |
| 1941 | Ist Quarter 2nd Quarter 3rd Quarter 4th Quarter | $\begin{aligned} & 2.580 \\ & 2,302 \\ & 3,091 \\ & 3,790 \end{aligned}$ | $\begin{aligned} & 349 \\ & 466 \\ & 470 \\ & 459 \end{aligned}$ |  | $\begin{array}{r} 3 \\ 24 \\ 15 \\ 28 \end{array}$ | $\begin{array}{r} 585 \\ 542 \\ 1,545 \\ 1,976 \end{array}$ | $\begin{array}{r} 773 \\ 1,079 \\ 1,115 \\ 1,446 \end{array}$ | $\begin{array}{r} 279 \\ 772 \\ 1,522 \\ 2,961 \end{array}$ | $\begin{aligned} & 306 \\ & 648 \\ & 437 \\ & 970 \end{aligned}$ | $\begin{aligned} & 5,195 \\ & 3,683 \\ & 3,023 \\ & 3,601 \end{aligned}$ | $\begin{aligned} & 1,291 \\ & 2,446 \\ & 4,335 \\ & 5,712 \end{aligned}$ |  |
| 1942 | Ist Quarter 2nd Quarter 3rd Quarter 4th Quarter | $\begin{aligned} & 4,560 \\ & 5,388 \\ & 5,114 \\ & 5,084 \end{aligned}$ | $\begin{aligned} & 469 \\ & 517 \\ & 536 \\ & 595 \end{aligned}$ | $\begin{aligned} & 50.00 \\ & 93.00 \\ & 106.44 \\ & 108.15 \end{aligned}$ | $\begin{aligned} & 45 \\ & 29 \\ & 19 \\ & 27 \end{aligned}$ | $\begin{aligned} & 2,323 \\ & 2,682 \\ & 2,321 \\ & 3,256 \end{aligned}$ | $\begin{aligned} & 1,332 \\ & 1,029 \\ & 1,995 \\ & 1,096 \end{aligned}$ | $\begin{aligned} & 3.560 \\ & 4,068 \\ & 4,727 \\ & 4,788 \end{aligned}$ | $\begin{aligned} & 1,158 \\ & 1,717 \\ & 1,489 \\ & 2,116 \end{aligned}$ | $\begin{aligned} & 3,359 \\ & 5,357 \\ & 6,144 \\ & 7,238 \end{aligned}$ | $\begin{aligned} & 7,915 \\ & 9,701 \\ & 9,901 \\ & 7,500 \end{aligned}$ | 357 |
| 1943 | \|st Quarter 2nd Quarter 3rd Quarter 4th Quarter | $\begin{array}{r} 5,351 \\ 2,399 \\ 783 \\ 619 \end{array}$ | $\begin{aligned} & 579 \\ & 595 \\ & 336 \\ & 284 \end{aligned}$ | $\begin{array}{r} 136.80 \\ 95.90 \\ 25.50 \\ 0.82 \end{array}$ | $\begin{aligned} & 42 \\ & 39 \\ & 35 \\ & 89 \end{aligned}$ | $\begin{aligned} & 3,126 \\ & 3,491 \\ & 3,230 \\ & 3,727 \end{aligned}$ | $\begin{array}{r} 1,034 \\ 598 \\ 209 \\ 189 \end{array}$ | $\begin{aligned} & 4,755 \\ & 4,834 \\ & 3,338 \\ & 2,959 \end{aligned}$ | $\begin{aligned} & 1,854 \\ & 2382 \\ & 2990 \\ & 2,385 \end{aligned}$ | $\begin{aligned} & 6,438 \\ & 4441 \\ & 4575 \\ & 6,057 \end{aligned}$ | $\begin{aligned} & 7,537 \\ & 6,472 \\ & 5,254 \\ & 4,509 \end{aligned}$ | $\begin{array}{r} 939 \\ 1,112 \\ 1,023 \\ 1,039 \end{array}$ |
| 1944 | \|st Quarter 2nd Quarter 3rd Quarter 4th Quarter | $\begin{array}{r} 1,038 \\ 920 \\ 9,486 \\ 3,736 \end{array}$ | $\begin{aligned} & 285 \\ & 362 \\ & 392 \\ & 879 \end{aligned}$ | $\begin{aligned} & 1.15 \\ & 0.15 \end{aligned}$ | $\begin{aligned} & 71 \\ & 45 \\ & 43 \\ & 84 \end{aligned}$ | $\begin{aligned} & 2,724 \\ & 2,084 \\ & 2,294 \\ & 1,880 \end{aligned}$ | $\begin{aligned} & 110 \\ & 152 \\ & 345 \\ & 230 \end{aligned}$ | $\begin{aligned} & 2840 \\ & 1,037 \\ & 1,300 \end{aligned}$ | $\left[\begin{array}{l} 1,854 \\ 1,200 \\ 45 \end{array}\right.$ | $\begin{aligned} & 5,444 \\ & 3,705 \\ & 3,724 \\ & 3,999 \end{aligned}$ | $\begin{aligned} & 3,994 \\ & 2,445 \\ & 2,147 \\ & 3,606 \end{aligned}$ | $\begin{aligned} & 1,292 \\ & 1,374 \\ & 1,176 \\ & 1764 \end{aligned}$ |
| 1945 | \|st Quarter 2nd Quarter 3rd Quarter | $\begin{aligned} & 4,222 \\ & 3,420 \\ & 678 \end{aligned}$ | $\begin{array}{r} 776 \\ 759 \\ 77 \end{array}$ |  | $\begin{array}{r} 5 \\ 26 \\ 6 \end{array}$ | $\begin{array}{r} 1,718 \\ 1,296 \\ 629 \end{array}$ | $\begin{aligned} & 138 \\ & 206 \\ & 168 \end{aligned}$ | $\begin{aligned} & 949 \\ & 721 \\ & 212 \end{aligned}$ | 16 | $\begin{aligned} & 3,593 \\ & 3,026 \\ & 1,155 \end{aligned}$ | $\begin{array}{r} 3,096 \\ 1,815 \\ 648 \end{array}$ | $\begin{array}{r}820 \\ 231 \\ 78 \\ \hline\end{array}$ |

1. Despatches ex factory. Before September 1939 figures are for unfilled arnmunition.
2. Year ended 31 March.
3. Year ended 31 March.
no quarterly figures are available.
no quarterly figures are avalab
5 were produced during the years 1941 to 1943 which cannot
7.16 Munitions

Filled ammunition: Naval and aircraft


## 7. 17 Munitions

Rocket ammunition, small arms and 20 mm . ammunition, propellants and high explosives ${ }^{\prime}$

7.18

Munitions
Armoured fighting vehicles

|  | Tanks 1 |  |  | Armoured carriers, armoured cars, scout cars and armoured command vehicles |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | United Kingdom production | Supplies from overseas | United Kingdom production | Supplies from overseas |
|  | Number | Thousand tons ${ }^{2}$ |  | Number |  |
| 1936/373 | 42 | 0.23 | - | 26 |  |
| 1937 April-December | 32 | 0.18 |  | 83 |  |
| 1938 | 419 | 2.55 |  | 681 |  |
| 1939 | 969 | 7.44 |  | 1,920 |  |
| 1940 | 1,399 | 23.73 |  | 6,070 |  |
| 1941 | 4,841 | 109.24 | 1,390 | 10,681 | 4,550 |
| 1942 | 8,611 | 203.99 | 9,253 | 19,317 | 13,399 |
| 1943 | 7,476 | 186.19 | 15,933 | 24,375 | 23,534 |
| 1938 1st Quarter |  | - | - | 14 |  |
| 2nd Quarter | 75 | 0.41 | - | 46 |  |
| 3rd Quarter | 146 | 0.89 | - | 258 |  |
| 4th Quarter | 198 | 1.25 | - | 363 |  |
| 1939 1st Quarter | 145 | 0.95 | - | 406 |  |
| 2nd Quarter | 394 | 2.42 | - | 514 |  |
| July-August | 116 | 1.03 | - | 367 |  |
| September-December | 314 | 3.05 | - | 633 |  |
| 1940 1st Quarter | 218 | 2.65 | - | 618 |  |
| 2nd Quarter | 340 | 5.50 |  | 1,617 |  |
| 3rd Quarter | 392 | 7.17 | - | 1,985 |  |
| 4th Quarter | 449 | 8.40 | - | 1,850 | - |
| 1941 1st Quarter | 653 | 12.98 | 300 | 2,338 |  |
| 2nd Quarter | 943 | 18.47 |  | 2,281 |  |
| 3rd Quarter | 1,368 | 31.59 | 349 | 2,764 |  |
| 4th Quarter | 1,877 | 46.20 | 741 | 3,298 |  |
| 1942 1st Quarter | 2,118 | 51.70 | 1,384 | 3,704 | 2.440 |
| 2nd Quarter | 2,220 | 52.84 | 2,118 | 4,701 | 3,014 |
| 3rd Quarter | 2,200 | 50.78 | 3,020 | 5,304 | 3,650 |
| 4th Quarter | 2,073 | 48.68 | 2,731 | 5,608 | 4,295 |
| 1943 lst Quarter | 2,041 | 49.46 | 2,934 | 5,965 | 5,402 |
| 2nd Quarter | 2,147 | 53.33 | 6,285 | 5,629 | 5,357 |
| 3rd Quarter | 1,878 | 45.91 | 3,633 | 5,441 | 5,881 |
| 4th Quarter | 1,410 | 37.48 | 3,081 | 7,340 | 6,894 |
| 1944 Ist Quarter | 1,400 | 40.59 | 2,575 | 7,741 | 6,097 |
| 2nd Quarter | 1,074 | 33.11 | 4,095 | 6,216 | 4,614 |

1. Incuding special purpose tanks and self-propelled artillery on tank chassis.
2. Weight in action.
3. Yeare ended 31 March

## 7. 19 Munitions <br> Wheeled vehicles ${ }^{1}$

| Number |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Tank } \\ \text { trans- } \\ \text { porters } \end{gathered}$ | Lorries |  |  | Trucks 15 cwt. | Ambulances | $\begin{aligned} & \text { Heavy } \\ & \text { cars } \end{aligned}$ | Tractors |  | Light <br> cars <br> and <br> vans | Motor cycles | Trailers |
|  | $\begin{gathered} \text { tra } \\ \text { port } \end{gathered}$ |  | $\begin{aligned} & 10 \text { ton } \\ & \text { and over } \end{aligned}$ | 6 ton | $1-3$ ton |  |  |  | Heary | Light |  |  |  |
| 1940 |  | 5 | 447 | 569 | 60,445 | 28,121 | 3,938 | 13,173 | 1,539 | 4,108 | 21,232 | 68,532 | 14,098 |
| 1941 |  | 41 | 266 | 962 | 53,181 | 33,752 | 4,540 | 8,914 | 1,956 | 5,910 | 17,324 | 70,804 | 20,275 |
| 1942 |  | 440 | 88 | 1,834 | 57,449 | 28,128 | 1,269 | 11,955 | 1,768 | 5,997 | 15,963 | 75,081 | 17,303 |
| 1943 |  | 553 | 348 | 1,305 | 58,943 | 27,207 | 2,201 | 5,312 | 1,956 | 6.493 | 17,306 | 78,633 | 29,039 |
| 1944 |  | 193 | 617 | 2,807 | 53,316 | 23,984 | 1,450 | 3,093 | 2,605 | 2,268 | 12,511 | 74,576 | 33,061 |
| 1939 | September-December | ber 2 | 22 | 6 | 3,705 | 4,635 | 378 | 1,838 | 89 | 387 | 2,000 | 11,679 | 1,088 |
| 1940 | Ist Quarter | - |  | . | .. |  |  |  | 279 | 704 |  |  |  |
|  | 2nd Quarter | - | . | . | . |  | .. |  | 497 | 1,134 |  |  |  |
|  | 3rd Quarter | । | . | . | - |  |  |  | 455 | 1,167 |  |  |  |
|  | 4th Quarter | 4 | . | . | .. |  |  |  | 308 | 1,103 |  |  |  |
| 1941 | Ist Quarter | 8 | 142 | 166 | 13,686 | 8,383 | 1,268 | 1,867 | 334 | 1,432 | 6,907 | 17,122 | 5,152 |
|  | 2nd Quarter | 10 | 39 | 262 | 14,393 | 8,737 | 1,714 | 2,367 | 430 | 1,547 | 4,937 | 18,335 | 6,010 |
|  | 3rd Quarter | 11 | 35 | 280 | 12,256 | 8,538 | 1,150 | 2,186 | 634 | 1,402 | 2,594 | 16,527 | 4,502 |
|  | 4th Quarter | 12 | 50 | 254 | 12,846 | 8,094 | 408 | 2,494 | 558 | 1.529 | 2,886 | 18,820 | 4,611 |
|  | Ist Quarter | 13 | 20 | 259 | 12,688 | 7,397 | 362 | 2,475 | 465 | 1.519 | 3,599 | 16,420 | 3,605 |
|  | 2nd Quarter | 53 | 1 | 325 | 15,843 | 7.303 | 361 | 3,511 | 401 | 1,657 | 3,954 | 17,778 | 4,510 |
|  | 3rd Quarter | 129 | 30 | 655 |  | 6,619 | 239 | 2,921 | 380 | 1,450 | 3,795 | 19,501 | 4,063 |
|  | 4th Quarter | 245 | 37 | 595 | 14,105 | 6,809 | 307 | 3,048 | 522 | 1,371 | 4,615 | 21,382 | 5,125 |
|  | 1st Quarter | 214 | 43 | 359 | 14,411 | 6,283 | 364 | 1,946 | 476 | 1,728 | 4,604 | 20,508 | 5,244 |
|  | 2nd Quarter | 190 | 60 | 241 | 15,101 | 6,686 | 386 | 1,553 | 589 | 1,804 | 4,138 | 17,843 | 7,437 |
|  | 3rd Quarter | 99 | 67 |  | 14,527 | 6,893 | 583 | 1,034 | 485 | 1,470 | 3,896 | 18,931 | 7,907 |
|  | 4th Quarter | 50 | 178 | 381 | 14,904 | 7,345 | 868 | 779 | 406 | 1,491 | 4,668 | 21,35 | 8,451 |
|  | Ist Quarter | 49 | 150 | 508 | 13,550 | 6,848 | 630 | 1,143 | 451 | 765 | 4,639 | 20,322 | 9,487 |
|  | 2nd Quarter | 48 | 114 | 642 | 13,445 | 6,446 | 212 | 817 | 681 | 665 | 3,583 | 18,336 | 9,127 |
|  | 3rd Quarter | $42$ | 119 | 690 | 12,990 | 4,605 | 281 | 359 | 693 | 481 | 2,984 | 17,267 | 6,191 |
|  | 4th Quarter | 54 | 234 | 967 | 13,331 | 6,085 | 327 | 774 | 780 | 357 | 1,305 | 18,651 | 8,256 |
|  | Ist Quarter | 37 | 513 | 886 | 13,385 | 4,877 | 407 | 765 | 662 | 142 | 1,727 | 15,597 | 9,387 |
|  | 2nd Quarter | 31 | 532 | 690 | 11,051 | 3,357 | 236 | 945 | 482 | 76 | 2,549 | 14,703 | 13,313 |
|  | 3rd Quarter | 15 | 527 | 390 | 8,990 | 1,975 | 124 | 694 | 309 | 73 | 2,807 | 11,434 | 13,506 |
|  | or 1939, War Office only; fo Services. eliveries of wheeled vehicle nounted to 34,918 during | ; for 1940 <br> icles to th g the per | 10 War Office <br> he War Office <br> iod April 193 | and Air <br> e under th <br> 36 to Aug | Ministry; fro <br> he Rearman gust 1939. | J January <br> ent Progra |  |  |  |  | Source | : Ministry | of Supply |



1. Assaut, reconnaissance and storm boats and motor tuggs.
April 1936 to August 1939 .
7.22 Aircraft

7.23

Aircraft
Production by structure weight

| Million Ib. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | $\begin{array}{r} \text { Heary } \\ \text { bombers } \end{array}$ | Medium bombers | $\begin{array}{r} \text { Light } \\ \text { bombers } \\ \text { and fighters } \end{array}$ | General reconnaissance transport and A.S.R. | Naval | Trainers and miscellaneous |
| 1935 |  | 1.91 |  |  | 0.52 | 0.64 | 0.20 | 0.55 |
| 1936 |  | 3.75 |  |  | 0.87 | 0.77 | 0.50 | 1.61 |
| 1937 |  | 6.54 | - | 0.36 | 2.81 | 0.57 | 0.85 | 1.95 |
| 1938 |  | 9.82 | - | 1.56 | 3.38 | 0.54 | 0.84 | 3.50 |
| 1939 |  | 28.89 |  | 6.83 | 8.33 | 0.79 | 1.63 | 11.29 |
| 1940 |  | 58.83 | 0.75 | 18.54 | 18.39 | 2.65 | 1.90 | 16.63 |
| 1941 |  | 87.25 | 9.29 | 27.96 | 26.69 | 1.69 | 4.41 | 17.19 |
| 1942 |  | 133.38 | 37.96 | 37.21 | 34.75 | 4.62 | 3.61 | 15.24 |
| 1943 |  | 185.25 | 88.96 | 29.30 | 38.16 | 9.95 | 6.29 | 12.60 |
| 1944 |  | 208.52 | 100.95 | 25.30 | 39.63 | 23.64 | 11.46 | 7.54 |
| 1938 | Ist Quarter | 1.77 |  | 0.32 | 0.75 | 0.03 | 0.24 | 0.43 |
|  | 2nd Quarter | 1.90 |  | 0.17 | 0.66 | 0.16 | 0.22 | 0.69 |
|  | 3rd Quarter | 2.47 |  | 0.19 | 0.86 | 0.20 | 0.20 | 1.02 |
|  | 4 th Quarter | 3.68 | - | 0.88 | 1.11 | 0.15 | 0.18 | 1.36 |
| 1939 | Ist Quarter | 6.13 |  | 1.46 | 1.86 | 0.16 | 0.35 | 2.30 |
|  | 2nd Quarter | 6.93 | - | 1.48 | 2.09 | 0.16 | 0.45 | 2.75 |
|  | 3rd Quarter | 7.50 |  | 1.52 | 2.14 | 0.19 | 0.46 | 3.19 |
|  | 4 th Quarter | 8.33 |  | 2.37 | 2.24 | 0.28 | 0.37 | 3.05 |
| 1940 | Ist Quarter | 8.86 |  | 2.32 | 2.29 | 0.57 | 0.23 | 3.46 |
|  | 2nd Quarter | 15.67 | 0.04 | 5.20 | 4.42 | 0.98 | 0.42 | 4.60 |
|  | 3rd Quarter | 18.23 | 0.16 | 6.10 | 5.94 | 0.67 | 0.60 | 4.77 |
|  | 4th Quarter | 16.07 | 0.55 | 4.92 | 5.74 | 0.43 | 0.65 | 3.80 |
| 1941 | Ist Quarter | 18.70 | 1.38 | 5.91 | 6.18 | 0.40 | 0.85 | 3.97 |
|  | 2nd Quarter | 20.90 | 1.88 | 6.70 | 6.81 | 0.43 | 1.10 | 3.96 |
|  | 3rd Quarter | 23.51 | 2.76 | 7.34 | 7.23 | 0.33 | 1.25 | 4.60 |
|  | 4th Quarter | 24.14 | 3.27 | 8.01 | 6.47 | 0.53 | 1.21 | 4.66 |
| 1942 | Ist Quarter | 27.51 | 5.12 | 8.68 | 7.69 | 0.80 | 1.05 | 4.17 |
|  | 2nd Quarter | 32.41 | 8.28 | 9.48 | 8.82 | 1.22 | 0.75 | 3.87 |
|  | 3rd Quarter | 35.46 | 11.23 | 9.73 | 8.90 | 1.22 | 0.70 | 3.68 |
|  | 4th Quarter | 38.00 | 13.33 | 9.32 | 9.34 | 1.38 | 1.11 | 3.52 |
| 1943 | Ist Quarter | 42.64 | 18.71 | 8.26 | 9.59 | 1.63 | 1.13 | 3.31 |
|  | 2nd Quarter | 46.61 | 23.09 | 7.54 | 9.61 | 1.89 | 1.36 | 3.13 |
|  | 3rd Quarter | 46.11 | 22.39 | 6.91 | 9.49 | 2.58 | 1.68 | 3.06 |
|  | 4th Quarter | 49.89 | 24.77 | 6.59 | 9.47 | 3.85 | 2.12 | 3.10 |
| 1944 | Ist Quarter | 56.47 | 27.09 | 6.90 | 10.58 | 6.13 | 2.76 | 3.01 |
|  | 2nd Quarter | 55.31 | 26.52 | 6.72 | 10.18 | 6.34 | 3.19 | 2.36 |
|  | 3rd Quarter | 50.40 | 25.14 | 6.18 | 9.61 | 5.58 | 2.83 | 1.06 |
|  | 4th Quarter | 46.34 | 22.20 | 5.50 | 9.26 | 5.59 | 2.68 | 1.11 |
| 1945 | Ist Quarter | 42.87 | 19.39 | 4.06 | 9.30 | 6.49 | 2.59 | 1.05 |
|  | 2nd Quarter | 31.95 | 10.83 | 2.78 | 7.51 | 7.53 | 2.61 | 0.68 |
|  | 3rd Quarter | 19.80 | 7.41 | 1.00 | 5.31 | 3.67 | 1.78 | 0.63 |

7.24 Aircraft

Index of aircraft production
January $1942=1,000$

|  | January | February | March | April | May | June | July | August | September | October | November | December |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1939 | 181 | 238 | 278 | 234 | 285 | 279 | 282 | 248 | 335 | 323 | 341 | 277 |
| 1940 | 333 | 300 | 373 | 463 | 569 | 736 | 735 | 731 | 581 | 609 | 635 | 563 |
| 1941 | 527 | 748 | 807 | 721 | 810 | 792 | 808 | 857 | 930 | 915 | 897 | 829 |
| 1942 | 1,000 | 958 | 1,046 | 1,129 | 1,190 | 1,175 | 1,236 | 1,139 | 1,348 | 1,425 | 1,277 | 1,282 |
| 1943 | 1,369 | 1,452 | 1,597 | 1,510 | 1,701 | 1,562 | 1,504 | 1,507 | 1,744 | 1,732 | 1,726 | 1,636 |
| 1944 | 1,852 | 1,823 | 2,081 | 1,808 | 1,922 | 1,926 | 1,630 | 1,725 | 1,800 | 1,762 | 1,673 | 1,285 |
| 1945 | 1,199 | 1,600 | 1,598 | 1,158 | 1,036 | 1,083 | 995 | 704 |  |  |  |  |

7.25 Aircraft

Aircraft undergoing and awaiting repair and repaired

|  |  |  |  |  |  |  |  |  |  | Nurnber |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Undergoing and awaiting repair (end of period) | Repaired |  |  |  |  |  |  |  |
|  |  |  | Total | Heavy bombers | Medium bombers | Light bombers fighters | $\begin{aligned} & \text { General } \\ & \text { recon- } \\ & \text { naissance } \end{aligned}$ | Transport A. and . A.S.R | Naval | Trainers and miscel- laneous |
| Annual totals |  |  |  |  |  |  |  |  |  |  |
| 1941 |  | 2,354 | 13,560 |  |  |  |  |  |  |  |
| 1942 |  | 2,385 | 16,636 | 711 | 3,097 | 6,659 | 784 |  | 433 | 4,952 |
| 1943 |  | 2,625 | 17.932 | 1,971 | 3,336 | 5,976 | 779 | 10 | 1,164 | 4,696 |
| 1944 |  | 2,368 | 18,400 | 3,285 | 2,135 | 6,678 | 705 | 453 | 1,477 | 3,667 |
|  |  |  |  |  |  |  |  |  |  |  |
| Monthly averages1940 2nd Quarter .. 177 |  |  |  |  |  |  |  |  |  |  |
|  | 3rd Quarter |  | 660 |  |  |  |  |  |  |  |
|  | 4th Quarter | 1,785 | 738 |  |  |  |  |  |  |  |
|  | 1st Quarter | 1,773 | 809 |  |  |  |  |  |  |  |
|  | 2nd Quarter | 2.149 | 1,063 |  |  |  |  |  |  |  |
|  | 3rd Quarter | 2,646 | 1,336 |  |  |  |  |  |  |  |
|  | 4 th Quarter | 2,354 | 1,312 | 17 | 227 | 583 | 53 | - | 31 | 401 |
| 1942 | Ist Quarter | 2.263 | 1,197 | 22 | 226 | 486 | 65 | - |  |  |
|  | 2nd Quarter | 2.537 | 1,395 | 48 | 272 | 555 | 77 | - | 25 | 418 |
|  | 3rd Quarter | 2,610 | 1,508 | 74 | 272 | 599 | 62 |  | 34 | 466 |
|  | 4th Quarter | 2,385 | 1,445 | 93 | 262 | 580 | 57 | - | 53 | 400 |
| 1943 | Ist Quarter | 2,602 | 1,360 | 111 | 259 | 491 | 59 | - | 56 | 385 |
|  | 2nd Quarter | 2,744 | 1,586 | 166 | 306 | 563 | 67 | - | 91 | 393 |
|  | 3rd Quarter | 2,774 | 1,567 | 194 | 304 | 507 | 64 | - | 103 | 395 |
|  | 4th Quarter | 2,625 | 1,464 | 187 | 243 | 430 | 70 | 3 | 139 | 392 |
| 1944 | Ist Quarter | 2,678 | 1,426 | 203 | 195 | 465 | 66 | 17 | 114 |  |
|  | 2nd Quarter | 2.733 | 1,642 | 279 | 193 | 593 | 57 | 38 | 149 | 333 |
|  | 3 3rd Quarter | 2,672 | $1,676$ | 330 | 176 | 661 | 65 | 41 | 111 | 292 |
|  | 4 th Quarter | 2,368 | 1,390 | 283 | 147 | 507 | 47 | 55 | 118 | 233 |
| 1945 | Ist Quarter |  |  | 233 | 109 | 476 | 56 | 44 | 117 |  |
|  | 2nd Quarter | 1,945 | 1,106 | 156 | 93 | 399 | 55 | 33 | 168 | 202 |
|  | 3rd Quarter | 1,880 | 644 | 62 | 52 | 198 | 22 | 29 | 107 | 173 |

### 7.26 Aircraft

Aircraft engines: Production, imports and repairs

7.27 Aircraft Aircraft
Arrivals in United Kingdom from North America'

7.28 Aircraft Arrivals overseas direct from the United States'


### 7.29 Machine tools, welding sets and electric motors: Deliveries

|  | Unit | 1935 | 1942 | 1943 | 1944 | 1945 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Machine tools' | Thousand |  | 95.8 | 76.2 | 59.1 | 47.5 |
| Meta-working | Value $£$ million | 6.1 | 33.5 | 31.3 | 25.8 | 20.7 |
|  | Thousands |  | 9.0 | 11.3 | 10.7 | 9.4 |
| Wood-working | Value $£$ million | 0.6 | 1.3 | 1.5 | 1.7 | 1.5 |
| Engineers' small tools ${ }^{2}$ | " | . | 35.8 | 42.4 | 40.2 | 23.3 |
| Welding sets: |  |  |  |  |  |  |
| Arc | Thousands |  |  |  | 8.6 |  |
|  | Value $£$ million | $0.22^{3}$ | . |  | 1.47 | 1.20 |
|  |  |  |  |  | $2.4$ | 2.5 |
| Electric motors 1-300 horse-power: |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| A.C. | " |  |  |  |  | 12.5 |
| D.C. | " |  |  | 6.5 | 7.7 | 12.5 |
| Excluding, except in 1935, machine tools of low value. Source: Ministry of Suptly |  |  |  |  |  |  |
| 2. From January 1943 the figures include roller box tools, and from January 1944 they includebalancin and testing machines |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

7.30 Agricultural machinery: Production

| Number |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| Tractors: |  |  |  |  |  |  |  |  |
| $\begin{array}{llllllllll}\text { Total } \\ \text { Tracklayers: } & 10,679 & 15,733 & 19,316 & 24,401 & 27,056 & 25,059 & 23,022 & 23,296\end{array}$ |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Full and half track | 48 | 30 | 19 |  | 48 | 87 | 133 | 45 |
| Market-garden type | 198 | 211 | 327 | 339 | 411 | 440 | 557 | 630 |
| Three-and four-wheeled | 9,981 | 14,632 | 17,906 | 22,168 | 24,099 | 21,595 | 18.716 | 17,455 |
| Two-wheeled market-garden type' | 452 | 860 | 1,064 | 1,894 | 2,498 | 2,937 | 3,616 | 5,166 |
| Mouldboard ploughs: |  |  |  |  |  |  |  |  |
|  | 12,580 | 16,665 | 23,172 | 24,657 | 21,414 | 19,246 | 23,701 | 30,227 |
| Horse-drawn | 7,424 | 9,541 | 14,492 | 14,162 | 12,485 | 10,939 | 13,963 | 17,345 |
| Tractor-drawn | 5,156 | 7,124 | 8.680 | 10,495 | 8,929 | 8,307 | 9,738 | 12,882 |
| Disc harrows | 1,260 | 2,108 | 3,905 | 5,696 | 8,343 | 9,791 | 10,521 | 12,940 |
| Cultivators or grubbers | 6,405 | 7,668 | 11,087 | 16,763 | 9,878 | 11,485 | 11,710 | 9,642 |
| Toolbars | 1,342 | 1,734 | 2,296 | 3,417 | 4,358 | 5,144 | 7,244 | 7,773 |
| Corn drills ${ }^{2}$ | 352 | 664 | 1,567 | 1,452 | 1,262 | 1,176 | 1,353 | 1,743 |
| Mowing machines | 4,641 | 5,587 | 7,087 | 5,896 | 5,910 | 5,611 | 5,802 | 6,297 |
| Binders | 687 | 708 | 954 | 1.010 | 798 | 1,567 | 2,957 | 2,722 |
| Threshing machines | 486 | 489 | 842 | 998 | 1,149 | 1,149 | 1,160 | 1,083 |
| Potato spinners | 1.496 | 1,253 | 2,108 | 5,226 | 7,534 | 9,831 | 5,586 | 6,021 |
| Milking machines |  |  |  |  | 4,582 | 5,623 | 4,888 | 4,807 |

Including motor hoes and self-propelled grass cutters (not lawn mowers)
Including combined seed and fertilizer drills.
Including combined seed and fertilizer drills.
Source: Ministry of Agriculture and Fisheries

### 7.3 Locomotives and motor vehicles: Production

|  | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number |  |  |  |  |  |
| Steam locomotives': |  |  |  |  |  |  |
| Main line types | 272 | 234 | 350 | 797 | 1,050 | 754 |
| Industrial types ${ }^{2}$ | 84 | 110 | 110 | 58 | 45 | 43 |
| Motor vehicles: |  |  |  |  |  |  |
| Public service vehicles: |  |  |  |  |  |  |
| Total |  | 164 | 1,260 | 2,217 | 2,017 | 2,914 |
| Single deck buses | - | 1 | 624 | 1,172 | 606 | 791 |
| Double deck buses. | - | 163 | 636 | 1,045 | 1,411 | 2,123 |
| Other heavy type vehicles ${ }^{3}$ 212531 124.574 |  |  |  |  |  |  |
| Total | 112,531 | 124,574 | 136,079 | 125,496 | 111,234 | 99,709 |
| For the Services | 112,345 | 109,522 | 108,928 | 104,308 | 90,333 | 60,385 |
| For other users ${ }^{4}$ | 186 | 15,052 | 27,151 | 21,188 | 20,901 | 39,324 |
| Light cars and vans ${ }^{5}$ |  |  |  |  |  |  |
| Total | 21,338 | 20,692 | 23,183 | 21,605 | 19,704 |  |
| For the Services | 21,232 | 17,324 | 15,963 | 17,306 | 12,511 | 9,197 |
| For other users ${ }^{4}$ | 106 | 3,368 | 7,220 | 4,299 | 7,193 | 27,585 |
|  | Thousands |  |  |  |  |  |
| Motor cycles: |  |  |  |  |  |  |
| Total ${ }^{6}$ | 70.0 | 73.0 | 77.0 | 81.7 | 77.4 | 50.0 |
| For the services | 68.5 | 70.8 | 75.1 | 78.6 | 74.6 | 42.6 |
| For other users ${ }^{46}$ | 1.5 | 2.2 | 1.9 | 3.1 | 2.8 | 7.4 |

[^15]7.32 Woven cloth, household textiles, hosiery and footwear Supplies for home civilian use

|  | Unit | 1935 | 1942 | 1943 | 1944 | 1945 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Woven cloth for clothing |  |  |  |  |  |  |
| Total | Mn.sq.yds. |  | 173 | 162 | 159 | 166 |
| Utility |  |  | 128 | 119 | 104 | 133 |
| Non-utility |  |  | 45 | 43 | 55 | 33 |
| Woven non-wool cloth: 30 |  |  |  |  |  |  |
| Utility |  |  |  |  | 404 | 403 |
| Non-utility | " | $\cdots$ | $\begin{aligned} & 299 \\ & 72^{2} \end{aligned}$ | $\begin{array}{r} 358 \\ 96 \end{array}$ | $\begin{array}{r} 336 \\ 68 \end{array}$ | 330 73 |
| Wool hand-knitting yarn | Million Ib. |  |  | 8.7 | 9.4 | 11.1 |
| Household textiles Blankets ${ }^{3}$ : |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Wool | Millions | 6.49 |  | 2.26 | 2.70 | 3.80 |
| Cotton |  |  |  | 4.40 | 4.76 | 5.02 |
| Sheets |  |  |  | 3.00 | 3.87 | 7.06 |
| Pillowcases |  | Towels: |  |  | 7.56 | 10.78 |
| Towels: Hand and bath |  |  |  |  |  |  |
| Other | " |  |  | 18.5 | 15.1 | 2.5 |
|  |  |  |  |  |  |  |
| HosieryMen's and youths': |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Socks and stockings | Mn.pars | $90^{4}$ | 35.4 | 33.4 | 20.1 | 23.9 |
| Pullovers and cardigans | Millions |  | 1.8 | 1.9 | 2.3 | 2.8 |
| Vests |  |  | 8.4 | 10.9 | 8.4 | 8.8 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Stockings and socks | Mn.pairs | 2804, | 160.4 | 140.6 | 131.3 |  |
| Jumpers and cardigans | Millions |  | 6.6 | 5.3 | 6.0 | 6.2 |
| $\begin{array}{lllllll}\text { Vests } & \ldots & 19.6 & 17.8 & 15.8 & 17.1\end{array}$ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Underwear | Mn. pieces |  | 23.2 | 31.4 | 26.9 | 26.7 |
| Footwear ${ }^{\text {² }}$ |  |  |  |  |  |  |
| Total production for all uses | Mn. pairs | 132.5 | 108.2 | 102.7 | 99.7 | 99.8 |
| Production for home civilian use: |  |  |  |  |  |  |
| Total |  | 129.0 | 90.3 | 89.4 | 87.4 | 87.7 |
| Leather uppers: .. $1050.0{ }^{\text {a }}$ |  |  |  |  |  |  |
| Total |  | 105.0 | 74.7 | 75.5 | 74.1 | 73.7 |
| Men's |  | 29.3 | 16.7 | 14.7 | 12.6 | 12.9 |
| Women's |  | 46.4 | 31.2 | 29.6 | 28.1 | 28.2 |
| Children's | " | 29.3 | 26.9 | 31.2 | 33.3 | 32.6 |
| Fabric uppers |  | 5.5 | 5.9 | 5.0 | 4.1 | 4.4 |
| Slippers |  | 8.4 | 9.7 | 9.0 | 9.2 | 9.6 |

[^16]7.33 Pottery, hollow-ware and brushes Production and supplies for home civilian use

|  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |



In the 1930's foreign shipping had carried between 40 and 50 per cent of British imports but with the onset of war Britain had problems chartering neutral shipping and by the Britain had problems chartering neutral shipping and by 1940 a mere 55 non-tanker foreign ships,
end end of March 1940 a mere 55 non-tanker foreign sh
amounting to 361,000 deadweight tons, had been amounting to 361,000 deadweight tons, had been
chartered (Behrens 1955: 58-64; tables 8.3 and 8.5 ). T situation changed radically with the German conquests of the second quarter of that year which forced the major shipping nations of Holland, Norway and Greece out of neutrality and into the Allied arms of the British: by the end of September Britain had at its disposal more than 3.5 million deadweight tons of non-tanker foreign shipping and indeed the importance of foreign vessels to British shipping indeed the importance of foreign vessels to British shipping
capacity increased during the war, rising to over 6.5 million deadweight tons by mid- 1944 (Behrens 1955:9 | - | 18 ; table 8.5). This increase in the available foreign shipping helped to compensate for the marked decline in the UK and Colonies non-tanker shipping (from 17.7 million deadweight tons in September 1939 to a low of 11.5 million tons in mid- 1943) although the total dry cargo merchant shipping under British control fell by more than 3 merchant shipping under British control fell by more than
million tons (or approximately 15 per cent) between 1940 and 1943 (table 8.5). The deadweight tonnage of tankers under British control actually increased from 5 million deadweight tons to almost 7 million tons by the end of 194| before declining to a level of about 5.5 million tons

The transport sector of the economy came under great strain in the war as it bore the brunt of enemy action, from shipping sunk by German submarines to the railway and road system having to cope with the relocatio of factories and the vast troop and equipment movement that was prompted by the D-Day build up. The loss of shipping capacity was one of the key constraints facing the wartime economy and problems with the inland transport system, and particularly the railways, posed major problems in 1940-41 (Robinson 1951: 37; Savage 1957: 191-256).

## 8. Merchant shipping under British control (at September of each year)


from 1943 onwards, although here again it was a story of British losses being made good by foreign additions, with American shipping being particularly important (Hancock and Gowing 1949: 257; table 8.5). The shipping problems were compounded by two other features: first, as the war progressed the proportion of non-tanker shipping under British control that was unavailable at any one time because of repairs or other reasons increased from 8.5 per cent of the total in September 1939 to a peak of 15.6 per cent in December 1942; second, the entry of the Italians into the war closed the Mediterranean to merchant shipping and greatly increased the length of the journey to Suez and to India (Behrens 1955: 109; table 8.6).

The greatest threat to British shipping, however, came from enemy action (especially in the Battle of the Atlantic) with total losses of 2.4 million gross tons in 1940 and 2.9 million gross tons in 1941; it reached its peak in the fifteen months from January 1942 to March 1943 when 4.1 million gross tons was sunk, 81 per cent of it by submarine (table 9.10). The impact on government import programmes was as dramatic: monthly non-tanker imports fell from 2.68 milio tons in December 1941 (which was itself far below the April 1940 peak of 4.2 million tons) to a low of 1.18 million tons in January 1943; between 1941 and 1942 imports of food and raw materials declined, respectively, by 4 million tons ( 28 per cent) and 3.5 million tons ( 24 per cent) (tables 8.13-8.15). Although the increased effectiveness of the convoy escort ships (many provided by the USA) helped to dent the German campaign the decisive factor in the Battle of the Atlantic was a technological one: the invention and success of radar greatly reduced the threat from the U-boats and after July 1943 total losses due to enemy action fell dramatically so that by 1944 the total
losses had been reduced to 490,000 tons and imports recovered (Duncan Hall and Wrigley 1956:36; Hancock and Gowing 1949:417-35; tables 8.10 and 8.13-8.15).

The importance of the inland transport sector is illustrated by the fact that the state felt it was necessary for it to administer all four of its branches (rail, road, canal and coastal shipping), road haulage being the last to be brought into the fold in 1943 (Savage 1957: | 19-29, 155-9, 446-8, 538-5). At the apex of the state administrative organisation was the Ministry of War Transport which was formed by the amalgamation of the Ministries of Shipping and Transport in May 194I (Savage 1957: 279-83). The volume of traffic carried on the inland transport system increased during the war years but all of this increased burden fell on the railways: compared to their pre-war loads road, canal and coastal shipping all experienced a decline but railway freight traffic rose from 16.3 million ton miles in 1938 to a wartime peak of 24.4 million ton-miles in 1944 whilst passenger traffic in the same period increased from 19 to 32 million passenger miles (Savage 1957: 634; tables 8.17 and 8.22-8.23).

The railway system was placed under great strain by various wartime pressures, including: the diversion of shipping form east to west coast ports; the transfer onto rail of freight normally carried by coastal shipping (which faced the threat of German attack) and road (to conserve petrol, rubber and manpower); the switch of AngloScottish freight to the east coast route to release the west coast route for the movement of American troops (who disembarked in the Clyde) and later the transfer of troops and their supplies to Southampton and the South-West for the D-Day build-up (Kohan 1952: 345; Savage 1957).

### 8.2 Losses of merchant shipping due to enemy action




Indeed, the story of the railways in the war was marked by a series of crises: the coal distribution crisis of the first winter of the war arose because although coal was diverted onto the railways due to the reduced coastal shipping capacity the existing railway capacity was overestimated (a problem exacerbated by the severity of the winter); in the following year, the shipping crisis centring on port congestion was again blamed on the railways and this time the chief culprit was a shortage of wagons, particularl specialist wagons, in the build-up to D-Day, and the increased demands it made on both freight and passenger traffic, problems again emerged because of shortage of wagons, this time of general wagons. (Savage 1957: $136-9$,

19|-256,410-8, 569-634; Behrens 1955: |26-42). There were wartime improvements and expansions in the rail, and road, links between ports and inland sorting depots, to new airfields and to new and relocated factories, and to service the D-Day build-up (although the low priority attached to canals meant they experienced only basic repair and maintenance) (Kohan 1952:347-51). However, despite their increased load even the railways only received E 11.5 million from the state during the war, mainly to increase the capacity on existing lines rather than to create new ones and their wartime inheritance was a deteriorating stock of labour and capital (Kohan 1952: 3456; Savage 1955: 634; Hancock and Gowing 1949: 480).

### 8.3 Merchant shipping under British control <br> (i) Vessels of 1,600 gross tons and over: Number



Vessels under the British flag and those under foreign flags on time-charter to the United Kingdom.
For the earier months of the war the information about foreign flag vessels
For the earlier months of the war the information about foreign flag vessels

### 8.4 Merchant shipping under British control I

| Total | British flag |  |  |  |  | Foreign flag vessels ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | United |  | Foreig |  | Time- |
|  | Total |  | Dominions | Bareboat charter |  | hartered to United |


| Non-tankers |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1939 September 3 | 14,352 | 14,352 | 13,452 | 900 |  |  |  |
| December 31 | 14,264 | 14,143 | 13,181 | 957 | 5 |  | 121 |
| 1940 March 31 | 14,484 | 14,242 | 13,263 | 954 | 25 |  | 242 |
| June 30 | 15,926 | 14,559 | 13,235 | 1,075 | 51 | 198 | 1,367 |
| September 30 | 16,910 | 14.512 | 12.779 | 1,124 | 34 | 575 | 2,398 |
| December 31 | 16,507 | 14,136 | 12.425 | 1,103 | 35 | 573 | 2,371 |
| 1941 March 31 | 16,337 | 13,900 | 12,093 | 1,100 | 66 | 641 | 2,437 |
| June 30 | 15,780 | 13,223 | 11,414 | 1,076 | 99 | 634 | 2.557 |
| September 30 | 15,925 | 13,221 | 11,355 | 1,090 | 112 | 664 | 2,704 |
| December 31 | 16,083 | 13,329 | 11,400 | 1,094 | 148 | 687 | 2,754 |
| 1942 March 31 | 15,829 | 13,017 | 11,114 | 1,046 | 175 | 682 | 2.812 |
| June 30 | 15,560 | 12,709 | 10,766 | 1,030 | 245 | 668 | 2,851 |
| September 30 | 15,047 | 12,392 | 10,387 | 1,006 | 351 | 648 | 2,655 |
| December 31 | 14,299 | 11,822 | 9,686 | 999 | 581 | 556 | 2,477 |
| 1943 March 31 | 14,12 | 11,685 | 9,450 | 958 | 742 | 535 | 2,427 |
| June 30 | 14,207 | 11,804 | 9,103 | 1,170 | 1,002 | 529 | 2,403 |
| September 30 | 14.631 | 12,249 | 9,299 | 1,349 | 1,067 | 534 | 2,382 |
| December 31 | 15,272 | 12,962 | 9,323 | 1,678 | 1.436 | 525 | 2,310 |
| 1944 March 31 | 15,777 | 13,478 | 9,395 | 1,766 | 1,779 | 538 | 2,299 |
| June 30 | 16,682 | 14,051 | 9,487 | 1,962 | 2.073 | 529 | 2,631 |
| September 30 | 16,704 | 14,097 | 9,402 | 2,134 | 2057 | 504 | 2,607 |
| December 31 | 16,905 | 14,330 | 9,542 | 2.267 | 2.035 | 486 | 2,575 |
| 1945 March 31 | 16.939 | 14,387 | 9,565 | 2.337 | 2.011 | 474 | 2,552 |
| June 30 | 16,907 | 14,532 | 9,746 | 2,365 | 2.017 | 404 | 2,375 |
| September 30 | 16,274 | 14,675 | 9,907 | 2.428 | 2.075 | 265 | 1,599 |
| Tankers |  |  |  |  |  |  |  |
| 1939 September 3 | 3,432 | 3,172 | 3,007 | 165 |  |  | 260 |
| December 31 | 3,508 | 3,248 | 3,079 | 169 |  | - | 260 |
| 1940 March 31 | 3,716 | 3,192 | 3,021 | 171 |  |  | 524 |
| June 30 | 4,551 | 3,177 | 2,937 | 198 |  | 42 | 1,374 |
| September 30 | 4.463 | 3,078 | 2778 | 202 |  | 98 | 1,385 |
| December 31 | 4,347 | 3,018 | 2727 | 203 | - | 88 | 1,329 |
| 1941 March 31 | 4,546 | 2,928 | 2,615 | 201 |  | 112 | 1,618 |
| June 30 | 4,351 | 2.802 | 2,530 | 179 |  | 93 | 1,549 |
| September 30 | 4,627 | 2.944 | 2.671 | 180 |  | 93 | 1,683 |
| December 31 | 4,610 | 2,955 | 2,688 | 180 |  | 87 | 1,655 |
| 1942 March 31 | 4,291 | 2755 | 2.528 | 147 | - | 80 | 1,536 |
| June 30 | 4,063 | 2,585 | 2,383 | 122 |  | 80 | 1,478 |
| September 30 | 3,909 | 2.532 | 2.329 | 123 | - | 80 | 1,377 |
| December 31 | 3,823 | 2,486 | 2296 | 123 | - | 67 | 1,337 |
| 1943 March 31 | 3,680 | 2,436 | 2,251 | 117 | - | 68 | 1,244 |
| June 30 | 3.651 | 2.429 | 2244 | 117 | - | 68 | 1,222 |
| September 30 | 3,594 | 2,453 | 2,268 | 117 | - | 68 | 1,141 |
| December 31 | 3,667 | 2,544 | 2,336 | 140 | - | 68 | 1,123 |
| 1944 March 31 | 3,751 | 2,632 | 2,369 | 195 | - | 68 | 1,119 |
| June 30 | 3,788 | 2,669 | 2,386 | 204 | - | 79 | 1,119 |
| September 30 | 3.798 | 2,678 | 2.415 | 197 |  | 66 | 1,120 |
| December 31 | 3,821 | 2720 | 2.463 | 197 | - | 60 | 1,101 |
| 1945 March 31 | 3,795 | 2710 | 2.445 | 197 | - | 68 | 1,085 |
| June 30 | 3,703 | 2762 | 2,507 | 197 | - | 58 | 941 |
| September 30 | 3,176 | 2836 | 2,594 | 196 | 7 | 39 | 340 |

### 8.5 Merchant shipping under British control।

(iii) Vessels of 1,600 gross tons and over: Deadweight tonnage


### 8.6 Non-tankers 1,600 gross tons and over under British control (i) Analysis by employment: September 1939 to September 19421

|  |  |  |  |  |  | Carrying overseas civil <br> or military cargoes |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

(ii) Analysis by employment: December 1942 to September 19454


[^17]
### 8.7 Merchant shipping under the British flag

Summary of gains and losses of tonnage: Vessels of 1,600 gross tons and overl

|  |  |  |  |  | Thousand gross tons |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Gains |  |  | Losses |  |  | Net gain $(+)$ less $(-)$ |
|  |  | Total | Non-tankers | Tankers | Total | Non-tankers | Tankers |  |
| 1939 to 1945219393 |  | 13,526 | 11,799 | 1,727 | 13,539 | 11,476 | 2,063 | $-13$ |
|  |  | 397 | 280 | 117 | 461 | 380 | 81 | -64 |
| 1940 |  | 2,380 | 2,202 | 178 | 2.656 | 2,261 | 395 | -276 |
| 1941 |  | 2.096 | 1,694 | 402 | 3,079 | 2.591 | 488 | -983 |
| 1942 |  | 2,111 | 1,834 | 27 | 4,034 | 3,341 | 693 | -1,923 |
| 1943 |  | 3,057 | 2,784 | 273 | 1,826 | 1,609 | 217 | +1,231 |
| 1944 |  | 2,448 | 2,175 | 273 | 907 | 809 | 98 | +1,54\| |
| 1939 | September ${ }^{\text {3 }}$ | 50 | 37 | 13 | 149 | 106 | 43 | -99 |
|  | 4th Quarter | 347 | 243. | 104 | 312 | 274 | 38 | +35 |
| 1940 | 1st Quarter | 295 | 27 | 18 | 335 | 262 | 73 | 40 |
|  | 2nd Quarter | 901 | 835 | 66 | 473 | 405 | 68 | +428 |
|  | 3rd Quarter | 717 | 652 | 65 | 892 | 726 | 166 | -175 |
|  | 4th Quarter | 467 | 438 | 29 | 956 | 868 | 88 | -489 |
| 1941 | 1 st Quarter | 558 | 490 | 68 | 992 | 822 | 170 | -434 |
|  | 2nd Quarter | 429 | 351 | 78 | 1.227 | 1,028 | 199 | -798 |
|  | 3rd Quarter | 606 | 452 | 154 | 505 | 465 | 40 | +101 |
|  | 4th Quarter | 503 | 401 | 102 | 355 | 276 | 79 | +148 |
| 1942 | 1st Quarter | 347 | 313 | 34 | 855 | 642 | 213 | -508 |
|  | 2nd Quarter | 563 | 474 | 89 | 1,017 | 767 | 250 | -454 |
|  | 3rd Quarter | 536 | 469 | 67 | 909 | 778 | 131 | -373 |
|  | 4th Quarter | 665 | 578 | 87 | 1,253 | 1,154 | 99 | -588 |
| 1943 | \|st Quarter | 489 | 413 | 76 | 681 | 557 | 124 |  |
|  | 2nd Quarter | 653 | 598 | 55 | 542 | 476 | 66 | +111 |
|  | 3rd Quarter | 850 | 811 | 39 | 376 | 361 | 15 | +474 |
|  | 4th Quarter | 1,065 | 962 | 103 | 227 | 215 | 12 | +838 |
| 1944 | \|st Quarter | 803 | 685 | 118 | 199 | 169 | 30 | +604 |
|  | 2nd Quarter | 795 | 749 | 46 | 188 | 178 | 10 | +607 |
|  | 3rd Quarter | 405 | 356 | 49 | 350 | 310 | 40 | +55 |
|  | 4th Quarter | 445 | 385 | 60 | 170 | 152 | 18 | +275 |
| 1945 | 1st Quarter | 214 | 191 | 23 | 167 | 134 |  | +47 |
|  | 2nd Quarter | 358 | 273 | 85 | 161 | 128 | 33 | +197 +197 |
|  | 3rd Quarter | 465 | 366 | 99 | 248 | 223 | 25 | +217 |
| 1. Recorded by date of notification. <br> 2. 3 September 1939 to 30 September 1945. <br> 3. From 3 September. |  |  |  |  |  |  | : Ministry | ofTransport |

ans
8.8

Merchant shipping under the British flag
Analysis of gains and losses: Non-tankers of 1,600 gross tons and over 1

| Thousand gross tons |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Gains |  |  |  |  | Losses |  |  |  | $\begin{gathered} \text { Net } \\ \text { gain } \\ (+) \\ \text { or } \\ \text { loss } \\ (-) \end{gathered}$ |
|  |  | $\begin{gathered} \text { Foreign } \\ \text { tonnage } \end{gathered}$ |  |  |  | Other ${ }^{2}$ | Total | War3 | Marine | Other4 |  |
|  |  | Total | vessels | Bareboat charter | Requisi- tioned |  |  |  |  |  |  |
| 1939 to 19455 |  | 11,799 | 6.831 | 2.402 | 931 | 1,635 | 11,476 | 9,449 | 833 | 1,194 | +323 |
| 19396 |  | 280 | 162 |  |  | 118 | 380 | 346 | 28 | 6 | -100 |
| 1940 |  | 2,202 | 757 | 65 | 604 | 76 | 2,261 | 1,968 | 216 | 7 | -59 |
|  |  | 1,694 | 905 | 114 | 264 | 411 | 2.591 | 2,332 | 119 | 140 | -897 |
| 1942 |  | 1,834 | 1,313 | 473 | 9 | 39 | 3,341 | 2,906 | 181 | 254 | -1,507 |
| 1943 |  | 2,784 | 1,757 | 994 | 30 | 3 | 1,609 | 1,332 | 123 | 154 | +1,175 |
| 1944 |  | 2.175 | 1,422 | 712 | 24 | 17 | 809 | 427 | 96 | 286 | +1,366 |
| 1939 | September6 | 37 | 35 | - |  | 2 | 106 | 106 |  | - | -69 |
|  | 4th Quarter | 243 | 127 | - |  | 116 | 274 | 240 | 28 | 6 | -31 |
| 1940 | Ist Quarter | 277 | 189 | 25 | - | 63 | 262 | 145 | 87 | 30 | +15 |
|  | 2nd Quarter | 835 | 216 | 30 | 198 | 391 | 405 | 346 | 29 | 30 | +430 |
|  | 3rd Quarter | 652 | 159 | 4 | 382 | 107 | 726 | 693 | 19 | 14 | -74 |
|  | 4th Quarter | 438 | 193 | 6 | 24 | 215 | 868 | 784 | 81 | 3 | -430 |
| 1941 | $1 s t$ Quarter | 490 | 148 | 27 | 105 | 210 | 822 | 763 | 54 | 5 | -332 |
|  | 2nd Quarter | 351 | 201 | 33 | 48 | 69 | 1,028 | 916 | 16 | 96 | -677 |
|  | 3rd Quarter | 452 | 256 | 18 | 65 | 113 | 465 | 420 | 6 | 39 | -13 |
|  | 4th Quarter | 401 | 300 | 36 | 46 | 19 | 276 | 233 | 43 |  | +125 |
| 1942 | $1 s t$ Quarter | 313 | 259 | 32 | 7 | 15 | 642 | 459 | 68 | 115 | -329 |
|  | 2nd Quarter | 474 | 367 | 87 | - | 20 | 767 | 642 | 46 | 79 | -293 |
|  | 3rd Quarter | 469 | 346 | 119 |  | 4 | 778 | 717 | 28 | 33 | -309 |
|  | 4th Quarter | 578 | 341 | 235 | 2 |  | 1,154 | 1.088 | 39 | 27 | -576 |
| 1943 | 1 st Quarter | 413 | 224 | 187 |  | 2 | 557 | 495 | 41 | 21 | -144 |
|  | 2nd Quarter | 598 | 508 | 68 | 22 |  | 476 | 373 | 41 | 62 | +122 |
|  | 3rd Quarter | 811 | 478 | 327 | 5 | 1 | 361 | 294 | 26 | 41 | +450 |
|  | 4 th Quarter | 962 | 547 | 412 | 3 | - | 215 | 170 | 15 | 30 | +747 |
| 1944 | Ist Quarter | 685 | 282 | 380 | 14 | 9 | 169 | 137 | 26 | 6 | +516 |
|  | 2nd Quarter | 749 | 422 | 309 | 10 | 8 | 178 | 104 | 27 | 47 | +571 |
|  | 3rd Quarter | 356 | 339 | 17 | - | - | 310 | 128 | 21 | 161 | +46 |
|  | 4th Quarter | 385 | 379 | 6 | - | - | 152 | 58 | 22 | 72 | +233 |
| 1945 | 1 It Quarter | 191 | 191 | - | - | - | 134 | 101 | 25 | 8 | +57 |
|  | 2nd Quarter | 273 | 182 | 13 |  | 78 | 128 | 37 | 38 | 53 | +145 |
|  | 3rd Quarter | 366 | 142 | 31 | - | 193 | 223 | - | 7 | 216 | +143 |

1. Recorded by date of notification. For this reason the figures for war losses differ from those
given in Table 8 I. o which her anay ysed by date of occurrence.
2. Including prizes. transfers of flag, etc.
3. Including overdue and presumed lost.
4. Including overdue and presume
5. Including transfers of flagetc.
6. 3 September 1939 to 30 September 1945 .

From 3 September:

### 8.9 Merchant shipping under the British flag

 Analysis of gains and losses: Tankers of 1,600 gross tons and over

|  |  | Vessels lost |  |  |  |  |  | Cause of loss |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Under 1,600 gross tons | $\begin{aligned} & \text { 1,600 } \\ & \text { gross } \\ & \text { tons } \\ & \text { and } \\ & \text { over } \end{aligned}$ | Under <br> 1,600 <br> gross tons | 1,600 <br> gross tons and over | Total | Submarine | Mine | Surface | Aircratt |  |
|  |  | Number |  |  | Thousand gross tons |  |  |  |  |  |  |  |
| 1939 | to 19452 | 2,627 | 731 | 1,896 | 440.6 | $10,956.4$ | 11,396.9 | 7,6224 | 823.0 | 965.4 | 1,589.3 | 396.1 |
| 1939 |  | 122 | 49 | 73 | 30.2 | 400.1 | 430.3 | 266.3 | 99.4 | 55.1 | 2.2 | 7.3 |
| 1940 |  | 587 | 192 | 395 | 123.4 | 2,323.4 | $2,446.8$ | 1,359.7 | 3428 | 343.0 | 310.8 | 90.6 |
| 1941 |  | 833 | 320 | 513 | 1827 | 2,681.2 | 2863.8 | 1,5626 | 191.4 | 3124 | 574.6 | 2227 |
| 1942 |  | 656 | 105 | 551 | 60.4 | 3,394.0 | 3,454.4 | 2.761 .7 | 45.1 | 1925 | 398.7 | 56.4 |
| 1943 |  | 278 | 28 | 250 | 15.9 | 1,505.7 | 1,521.6 | 1,175.3 | 44.0 | 27.1 | 273.3 | 21 |
| 1944 |  | 106 | 22 | 84 | 13.7 | 475.9 | 489.6 | 365.5 | 53.2 | 25.1 | 29.7 | 16.1 |
| 19453 |  | 45 | 15 | 30 | 14.3 | 176.1 | 190.4 | 131.2 | 48.0 | 10.2 |  | 0.9 |
| 1939 | September | 37 | 10 | 27 | 5.4 | 154.6 | 160.0 | 137.1 | 11.4 | 5.1 |  | 6.4 |
|  | October | 23 | 4 | 19 | 3.2 | 1024 | 105.5 | 74.9 | 3.2 | 27.4 |  |  |
|  | November | 29 | 19 | 10 | 14.7 | 44.5 | 59.2 | 22.9 | 35.6 | 0.7 |  |  |
|  | December | 33 | 16 | 17 | 7.0 | 98.6 | 105.6 | 31.4 | 49.2 | 220 | 2.2 | 0.9 |
| 1940 | January | 28 | 11 | 17 | 7.9 | 90.6 | 98.4 | 11.3 | 63.4 |  | 23.7 |  |
|  | February | 25 | 7 | 18 | 3.4 | 1120 | \| 15.4 | 73.0 | 42.1 |  | 0.2 |  |
|  | March | 15 | 8 | 7 | 7.2 | 32.5 | 39.7 | 19.1 | 15.2 |  | 5.4 |  |
|  | April | 19 | 4 | 15 | 4.2 | 70.7 | 74.8 | 14.6 | 13.1 | 5.2 |  | 41.9 |
|  | May | 33 | 18 | 15 | 13.8 | 68.8 | 826 | 25.0 | 23.2 | 6.9 | 23.3 | 4.2 |
|  | June | 67 | 25 | 42 | 6.6 | 276.8 | 283.4 | 134.9 | 39.4 | 39.3 | 54.7 | 15.1 |
|  | July | 68 | 26 | 42 | 20.0 | 255.7 | 275.7 | 139.2 | 33.3 | 56.6 | 42.2 | 4.3 |
|  | August | 59 | 11 | 48 | 9.3 | 269.8 | 279.1 | 188.2 | 11.3 | 28.5 | 49.6 | 1.5 |
|  | September | 66 | 12 | 54 | 9.3 | 315.5 | 324.8 | 223.0 | 3.7 | 45.7 | 45.1 | 7.3 |
|  | October | 68 | 23 | 45 | 14.4 | 288.0 | 3024 | 257.4 | 23.2 | 10.3 | 4.6 | 6.9 |
|  | November | 76 | 23 | 53 | 11.6 | 301.5 | 313.1 | 110.7 | 39.7 | 106.5 | 54.0 | 2.2 |
|  | December | 63 | 24 | 39 | 15.9 | 241.5 | 257.4 | 163.3 | 35.1 | 44.0 | 7.9 | 7.1 |
| 1941 | January | 45 | 12 | 33 | 7.4 | 2022 | 209.6 | 105.1 | 16.8 | 40.0 | 47.2 |  |
|  | February | 80 | 25 | 55 | 18.8 | 297.5 | 316.3 | 171.7 | 13.2 | 67.9 | 51.9 | 11.7 |
|  | March | 98 | 38 | 60 | 18.9 | 348.0 | 366.8 | 174.3 | 16.1 | 104.0 | 70.3 | 2.1 |
|  | April | 79 | 20 | 59 | 13.4 | 349.1 | 3625 | 188.6 | 23.3 | 25.1 | 122.5 | 3.0 |
|  | May | 100 | 34 | 66 | 7.9 | 380.0 | 387.8 | 234.0 | 23.2 | 15.0 | 115.6 |  |
|  | June | 63 | 11 | 52 | 8.1 | 260.5 | 268.6 | 203.8 | 9.6 | 13.6 | 39.3 | 24 |
|  | July | 36 | 17 | 19 | 8.5 | 87.0 | 95.5 | 71.9 | 8.6 | 5.8 | 6.1 | 3.1 |
|  | Augut | 31 | 12 | 19 | 7.8 | 89.2 | 97.0 | 60.7 | 1.4 | 15.6 | 19.0 | 0.2 |
|  | September | 61 | 21 | 40 | 18.6 | 196.6 | 215.2 | 156.6 | 14.9 | 7.7 | 34.2 | 1.8 |
|  | October | 32 | 6 | 26 | 7.0 | 144.8 | 151.8 | 106.4 | 15.8 | 1.5 | 27.4 | 0.6 |
|  | November | 29 | 10 | 19 | 5.5 | 85.8 | 91.4 | 55.2 | 1.1 | 15.7 | 19.4 |  |
|  | December | 179 | 114 | 65 | 60.8 | 240.5 | 301.3 | 34.4 | 47.4 | 0.5 | 21.7 | 197.3 |
| 1942 | January | 38 | 9 | 29 | 4.0 | 143.9 | 147.9 | 124.4 | . 10.1 | - | 11.0 | 25 |
|  | February | 60 | 11 | 49 | 8.0 | 306.2 | 314.2 | 2075 |  |  | 85.8 | 20.8 |
|  | March | 67 | 30 | 37 | 11.5 | 239.2 | 250.7 | 195.5 | 123 | 5.6 | 21.4 | 15.8 |
|  | April | 52 | 4 | 48 | 3.15 | 2898 | 2929 | 151.5 | 11.1 | 70.3 | 59.9 | 0.1 |
|  | May | 58 | 11 | 47 | 4.5 | 253.8 | 258.3 | 203.1 | 7.0 | 7.1 | 40.7 | 0.3 |
|  | June | 50 | 11 | 39 | 7.7 | 226.0 | 233.7 | 1824 | 20 | 16.9 | 322 | 0.2 |
|  | July | 43 |  | 36 | 4.0 | 228.8 | 2327 | 1927 |  | 27.1 | 129 |  |
|  | August | 58 | 6 | 52 | 22 | 342.6 | 344.8 | 245.2 | - | 38.8 | 60.5 | 0.2 |
|  | September | 50 | 3 | 47 | 25 | 2724 | 275.0 | 249.4 | 13 | 10.4 | 15.1 |  |
|  | October | 59 |  | 57 | 2.1 | 4023 | 404.4 | 389.8 | 1.3 | 7.6 | 5.7 |  |
|  | November | 76 | 4 | 72 | 4.2 | 470.4 | 474.6 | 403.7 | 1.0 | 7.5 | 50.4 | 120 |
|  | December | 46 | 8 | 38 | 5.2 | 227.1 | 2323 | 216.5 | 0.3 | 12.6 | 2.9 |  |
| See footnotes on page 191. |  |  |  |  |  |  |  |  |  |  | Source | iraty |

,
8. | Shipping movement at United Kingdom ports: Entrances and clearances in the foreign trade

ncluding, from the end of 1943 , the tomnage of certain foreign vessels
transferred temporarily to the British flag.

## 8. 12 Arrivals of shipping at United Kingdom ports



8. 3 Imports into the United Kingdom


The monthly and quarterly figures of imports siven in this and in the next two tables represent
the estimated weights of the commodities included in the Trade and Navigation Accounts for
ech month, and are unadjusted for small revisions subsequently made in the cumulative totals
ven in the Accounts for Iater months. From September 1939 to August 1940, imports from Eire
are included under Departmental programmes
Petroleum products, molasses, unrefined whale Govmment account from lanuary 1943.
cetone is included. From lanuary to May 1945 , and industrial alcohol. From January 1943
shipped direct to the Continent under this programme.
Adjusted for revisions. The figures for 1944 exclude approximately 36,000 tons of food and 23,000 ton
f munitions destined for Eurose and 104,000 tons of timber as a a peplacement of suplies deliweod
the United States Army, since these amounts were not provided for in the United Kingdom import progran
The figures of actual imports in 1945 exclude about 179,000 tons of cereals and oisseds which have been
shipped direct to the Continent, a corresponding amount having been transferred to United Kingdom stocks
form S.H.A.E.F. emergency reserves held in this country. On the other hand, about 58,000 tons of foodstuffs
intended for relief stockpile and 22,000 tons of softwood imported in repayment of a loan to the
8. I4 Imports of food under the Ministry of Food programme'

|  |  | Total | $\begin{gathered} \text { Grain } \\ \text { and } \\ \text { pulses } \end{gathered}$ | Animal feedingstuffs | Meat | Oilseeds, oils and fats ${ }^{2}$ | Sugar | $\begin{array}{r} \text { Dairy } \\ \text { produce } \\ \text { vegetables } \end{array}$ | Thousand tons |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | Fruit | Beverages and other foods |
| 1941 |  | 14,654 | 7,315 | 325 | 1,433 | 1,948 | 1,658 | 665 | 462 | 847 |
| 1942 |  | 10,606 | 4,162 | 74 | 1,583 | 1,905 | 773 | 789 | 458 | 862 |
| 1943 |  | 11,525 | 4,299 | 12 | 1,658 | 2.154 | 1,458 | 655 | 327 | 963 |
| 1944 |  | 10,996 | 3,843 | 98 | 1,768 | 1,975 | 1,156 | 664 | 646 | 846 |
| 1940 | 4th Quarter | 3,241 | 1,684 | 133 | 305 | 336 | 339 | 107 | 125 | 215 |
| 1941 | 1 It Quarter | 3,132 | 1,560 | 163 | 253 | 403 | 302 | 159 | 69 | 226 |
|  | 2nd Quarter | 3.927 | 2,349 | 113 | 313 | 447 | 286 | 149 | 76 | 193 |
|  | 3rd Quarter | 4,183 | 2,089 | 35 | 430 | 577 | 559 | 157 | 135 | 203 |
|  | 4th Quarter | 3,513 | 1,342 | 15 | 448 | 531 | 560 | 207 | 185 | 227 |
| 1942 | \|st Quarter | 2,955 | 906 | 47 | 349 | 571 | 318 | 250 | 196 | 318 |
|  | 2nd Quarter | 3,308 | 1,528 | 11 | 466 | 598 | 223 | 160 | 86 | 237 |
|  | 3rd Quarter | 2,514 | 1.004 | 13 | 446 | 493 | 134 | 185 | 77 | 162 |
|  | 4th Quarter | 1,876 | 730 | 3 | 323 | 248 | 129 | 194 | 102. | 145 |
| 1943 | \|st Quarter | 2.038 | 730 | - | 302 | 371 | 210 | 161 | 69 | 195 |
|  | 2nd Quarter | 3,368 | 1,552 | - | 404 | 525 | 373 | 201 | 71 | 241 |
|  | 3rd Quarter | 3,182 | 1,373 | 3 | 440 | 511 | 397 | 146 | 69 | 242 |
|  | 4th Quarter | 2,998 | 643 | 8 | 519 | 750 | 523 | 153 | 115 | 286 |
| 1944 | 1st Quarter | 2.501 | 776 | 9 | 429. | 557 | 161 | 149 | 217 | 202 |
|  | 2nd Quarter | 2.912 | 1,055 | 3 | 534 | 444 | 338 | 141 | 157 | 238 |
|  | 3rd Quarter | 3,043 | 1,082 | 34 | 466 | 566 | 413 | 157 | 130 | 196 |
|  | 4th Quarter | 2.733 | 991 | 52 | 378 | 412 | 323 | 220 | 151 | 207 |
| 1945 | 15 Quarter ${ }^{3}$ | 2.544 | 840 | 44 | 355 | 437 | 189 | 149 | 322 | 208 |
|  | 2nd Quarter ${ }^{\text {3 }}$ | 3,229 | 1,500 | 64 | 291 | 360 | 491 | 129 | 177 | 217 |
|  | Juy and August ${ }^{\text {a }}$ | 2,103 | 1,156 | 30 | 162 | 175 | 251 | 118 | 67 | 145 |

1. See footnote 1 to Table 8.13 :
2. Excluding unrefined whale oi.
3. See footnote 5 to Table 8.13 .
4. 5 Imports of food under the Ministry of Supply programme I Non-tanker imports (excluding imports from Eire)
Theusand tons

## 8. I6 Repair and availability of railway rolling stock



## 8. I7 Passenger and goods traffic

|  | Unit | 1937 | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Passenger traffic |  |  |  |  |  |  |  |  |  |  |
| Number of passenger joumeys: |  |  |  |  |  |  |  |  |  |  |
| Total | Milions | 1,295.4 | 1,237.2 | 1,225.5 | 966.6 | 1,023.3 | 1,218.2 | 1,334.6 | 1,345.3 | 1,371.8 |
| Full fare |  |  | 77.8 | 77.2 | 64.9 | 62.6 | 81.4 | 103.8 | 110.7 | 116.0 |
| Monthly return, excursion, weekend, etc. | " |  |  |  |  |  |  |  |  |  |
| Serrice or Goverrment |  | 659.1 | 474.5 | 463.2 | 284.3 | 297.4 | 359.1 | 3728 | 370.5 | 405.9 |
| joumeys, etc. |  |  | 53.6 | 53.4 | 77.7 | 116.1 | 163.7 | 227.4 | 250.5 | 256.9 |
| Workmen |  | 247.0 | 244.2 | 251.2 | 264.2 | 3022 | 340.1 | 3326 | 307.4 | 276.9 |
| Season tickets (on basis of 600 jourmeys per annum) |  | 389.3 | 387.1 | 380.5 | 275.5 | 245.0 | 273.9 | 298.0 | 306.2 | 316.1 |
| Average receipt: |  |  |  |  |  |  |  |  |  |  |
| Per passenger jourmey: |  |  |  |  |  |  |  |  |  |  |
| Total | Pence |  | 11.38 | 12.55 | 16.37 | 21.05 | 22.99 | 24.65 | 25.83 | 27.63 |
| Ordinary |  | 17.04 | 18.47 | 21.29 | 30.47 | 39,20 | 41.15 | 42.20 | 43.16 | 44.70 |
| Workmen |  | 3.55 | 3.68 | 3.80 | 4.54 | 5.08 | 5.13 | 5.02 | 4.99 | 4.99 |
| Season |  | 5.02 | 5.19 | 5.51 | 6.00 | 6.17 | 6.07 | 6.15 | 6.38 | 6.39 |
| Per train mile | Shillings | 5.25 | 5.17 | 5.75 | 7.83 | 10.25 | 12.83 | 14.75 | 15.83 | 16.00 |
| Estimated passenger miles: |  |  |  |  |  |  |  |  |  |  |
| Total | Milions | $\cdots$ | 18,9933 |  |  |  |  | 32,273 | 32,052 | 35,248 |
| Ordinary ${ }^{2}$ |  | .. | 12,5503 | .. |  |  |  | 25,613 | 25,531 | 28,827 |
| Workmen | " |  | 1,7373 | . |  |  |  | 3,015 | 2,791 | 2548 |
| Season tickets |  |  | 4,7063 | . | $\cdots$ | $\cdots$ |  | 3,645 | 3,730 | 3,873 |

Goods traffic

Goods, mineral and livestock | trafic $:$ |
| :--- |
| Total |

Total
Merchandise and livestock Minerals
Coal, coke and patent fue
Estimated net ton miles
Total
Merch
Merchandi
Minerals
Main line companies.
All passenger travel (including Service travel) except workmen's and season tickets.
3. September 1938 to August 1939 inclusive.

Excluding freehauled traffic

## 8. 8 Operating statistics of railways

|  | Unit | 1937 | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Train-miles |  |  |  |  |  |  |  |  |  |  |
| Loaded: |  |  |  |  |  |  |  |  |  |  |
| Coaching Freight | Millions | $\begin{aligned} & 272.621 \\ & 125.031 \end{aligned}$ | $\begin{aligned} & 277.012 \\ & 119.522 \end{aligned}$ | $\begin{aligned} & 245.96 \\ & 123.70 \end{aligned}$ | $\begin{aligned} & 190.45 \\ & 133.23 \end{aligned}$ | $\begin{aligned} & 191.78 \\ & 130.86 \end{aligned}$ | $\begin{aligned} & 193.16 \\ & 135.10 \end{aligned}$ | $\begin{aligned} & 194.05 \\ & 135.50 \end{aligned}$ | $\begin{aligned} & 191.08 \\ & 133.47 \end{aligned}$ | $\begin{aligned} & 204.79 \\ & 123.05 \end{aligned}$ |
| Empty |  | 24.681 | 23.992 |  | 28.42 | 27.97 | 28.29 | 28.45 | 30.51 | 27.80 |
| Wagon-miles |  |  |  |  |  |  |  |  |  |  |
| Loaded:Total |  | 3,252 | 3,003 |  |  | 3,838 | 3,983 | 4,052 | 4,064 | 3,683 |
| Merchandise and livestock |  |  |  |  |  |  | 2,402 | $\begin{array}{r}2.537 \\ \hline 534\end{array}$ | 2.604 | 2,331 |
| Minerals Coal, coke and patent fuel | " |  |  |  |  |  | 532 1,048 | $\begin{aligned} & 534 \\ & 981 \end{aligned}$ | 489 971 | 428 925 |
| Empty | " | 1,591 | 1,492 |  |  | 1,446 | 1,412 | 1,392 | 1,427 | 1,257 |
| Average length of haul per ton 3,4 |  |  |  |  |  |  |  |  |  |  |
| Total | Miles | 57.86 | 59.00 |  |  |  | 75.90 | 76.16 | 78.64 | 7.73 |
| Merchandise and livestock |  | 103.21 | 107.49 |  |  |  | 115.45 | 112.45 | 112.16 | 114.92 |
| Mineras | " | 62.37 | 63.49 |  |  |  | 79.95 | 79.93 | 83.44 | 80.13 |
| Coal, coke and patent fuel | " | 44.29 | 45.21 |  |  |  | 57.39 | 55.97 | 57.75 | 58.11 |

1. Fify two weeks ended 22 December.
2. Fifty-two weeks ended 24 December.
3. Including freehauled traft

## 8. 19 Traffic receipts

Main line railway companies and London Passenger Transport Board (including joint lines)'


### 8.20 Vehicles with licences current



TRANSPORT

### 8.2 New vehicle registrations ${ }^{1}$

| Great intion |  |  |  |  |  |  |  |  | ${ }_{1945}^{\text {Number }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1937 | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 |  |
| Total | 486,269 | 419,154 | 381,627 | 99,234 | 61.657 | 79,512 | 58.381 | 58,248 | 77,880 |
| Cars, etc. |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 4.664 | 1,108 | 1,063 | 9,238 |
| Priate cars, etc. | 320,239 | 272,192 | 231,042 | 31,396 | 3.083 | 3.164 | 267 | 416 | 7,708 |
| duty ${ }^{2}$ |  |  |  |  |  | 1.500 | 841 | 647 | 1,530 |
| Cycles and triccles3: |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Privatey owned | 57,060 | 45,041 | 47,210 | 22709 | 8.880 | 5.157 | ${ }_{1,641}$ | 1.676 | ${ }_{1}^{12,292}$ |
| Other (exempt from licence duty) ${ }^{2}$ |  |  |  |  |  | 2242 | 1.247 | 1,439 | 443 |
| Vehicles for public converance: |  |  |  |  |  |  |  |  |  |
|  | ${ }^{8,37}$ | 8.990 | 6.988 | 2492 | 596 | 1,332 | 2.075 | 2011 | 2.170 |
| Buses coaches taxis etc. | 7.827 | ${ }_{8} 8264$ |  |  |  | 1,216 | 2.007 | 1,919 |  |
| Trolerebuses Vehicle exempt from licence | 550 | 726 |  |  |  | 64 | 57 | 84 | 115 |
| Venices exempt from icence duty ${ }^{2}$ |  |  |  |  |  | 52 | 11 | 8 |  |
| Goods vehicles: |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 30,858 | 26,379 | 30,747 | 35.260 |
| General haulage: |  |  |  |  |  |  |  |  |  |
| Petro, heay oil etc. | 77.555 | 67,3033 | 60,258 | 16,200 | 11,595 | 22,153 | 16.251 | 18.502 | 27,586 |
| Other | 910 |  |  |  |  |  | 323 | 342 | 372 |
| Agncultura vans and ormes 1,115 1,022 1,060 287 15 704 775 852 1,330 <br> Showmés special vencices          |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| and cleansing) | 106 | 107 | 90 |  | 12 |  | 31 |  |  |
| Vehices exempt from I icence duty? |  |  |  |  |  |  |  | 10.842 |  |
| Tractors for genera haulage | $23 i$ | 243 | 201 | 191 | 257 | 257 | 171 | ${ }_{158}$ | 130 |
| Agriculural tractors and engines, etc: |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | 7,261 | 7,343 | 12,559 | 20,05 | 23,959 | 27,101 | 20,643 | 17.587 | $\underset{\substack{15.537 \\ 1.309}}{ }$ |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Miscellaneous vehicles exempt fromlicence dury. |  |  |  |  |  |  |  |  |  |
| Total |  | 15.962 |  |  |  | 4,991 | 2385 | 1.456 | 994 |
| Ouned by govermment authorites? | 12154 12158 1258 | 14.542 | 20.89 | 2929 | 9,476 |  |  |  |  |
| Other | 1.258 | 1,420 |  |  |  | 4.991 | 2385 | 1.456 | 994 |

1. Before 1939 fyures rae for years ended 30 September

rom 1942 Govermment owned vehices are incuded with other exempt vehicles
under the approporiate headings.
defence permits are excuded.
2. Incuding pedestrian controleded delvery vans

### 8.22 Canal traffic originating'

|  | 1937 | 1938 | 19392 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Coal, coke and patent fuel Liquids in bulk Other merchandise | $\begin{array}{r} 14,388 \\ 6,803 \\ 1,259 \\ 6,297 \end{array}$ | $\begin{array}{r} 12,952 \\ 6,58 \\ 1,329 \\ 5,465 \\ 5, \end{array}$ | $\begin{array}{r} 6,307 \\ 3,196 \\ 576 \\ 2,536 \end{array}$ | $\begin{array}{r} 11,005 \\ 5,234 \\ 1,254 \\ 4,517 \end{array}$ | $\begin{aligned} & 11,241 \\ & 5,272 \\ & 1,353 \\ & 4,6617 \end{aligned}$ | $\begin{aligned} & 11,043 \\ & 5,450 \\ & 1,563 \\ & 4,031 \end{aligned}$ | $\begin{aligned} & 11,315 \\ & 5,411 \\ & 1,16 \\ & 4,288 \end{aligned}$ | $\begin{aligned} & 11,047 \\ & 5,381 \\ & 1,814 \\ & 3,852 \end{aligned}$ | $\begin{aligned} & 10,060 \\ & 4,983 \\ & 1,491 \\ & 3,585 \end{aligned}$ |

T. Total for six months lanuary-|une

### 8.23 Coasting trade

(i) Cargoes of coal: Analysis by areas of discharge

(ii) Cargoes other than coal: Analysis by areas of discharge



### 9.3 Sources of imports to the United Kingdom


priorities. Likewise domestic economic constraints meant that Britain was forced to rely on imports and their strategic and financial importance meant that, following some initial but rather ad hoc moves, formal import controls were imposed in June 1940 (Pollard 1983: 218 ). Of all the major combatants of the Second World War Britain was the most reliant on net imports which at their peak, in 1941, were equal to 17 per cent of national income and which from 1942-45 accounted for about l0 per cent of national income (Harrison 1988: 189).

With whom Britain traded, and their level of trade with individual countries, was largely determined by enemy action and pressure and allied help (particularly help from the USA). Although exports had declined during the war, their geographical distribution in 1945 was not substantially different to what it had been in 1938, the most notable change being the increased importance of Africa (whose share of total British exports increased from 16 per cent to

21 per cent) (table 9.7).The distribution of imports had, however, changed: not surprisingly, imports from Europe collapsed from $£ 308$ million in 1938 to $£ 130$ million in 1945 (with their share of total imports declining from 34 per cent to 12 per cent) whilst imports from North America soared from $£ 199$ million to $£ 527$ million (from 22 per cent to 48 per cent of total imports) (tables 9.6 ) Although Canada played an important role in the latter (exporting $£ 200$ million worth of goods to Britain in 1945) they were dominated by the USA: the contribution of the USA to British imports peaked in 1943 at $£ 535$ million which represented 43.4 per cent of total imports (tables 9.6-9.7). The most important feature of the wartime trading relationship between Britain and the USA was the introduction of the Lend-lease programme by the American government, although until the end of 1942 imports from the USA paid for in cash exceeded Lendlease supplies (Milward 1984: 68).

### 9.4 Value and volume of the external trade of the United Kingdom'

|  | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Value ( $£$ million) |  |  |  |  |  |  |  |  |
| Imports: |  |  |  |  |  |  |  |  |
| Total imports | 920 | 886 | 1,152 | 1,145 | 997 | 1,234 | 1,309 | 1,104 |
| Retained imports | 858 | 840 | 1,126 | 1,132 | 992 | 1,228 | 1,294 | 1,053 |
| Exports: |  |  |  |  |  |  |  |  |
| Exports of United Kingdom produce and manufactures | 471 | 440 | 411 | 365 | 271 | 234 | 266 | 399 |
| Reexports | 62 | 46 | 26 | 13 | 5 | 6 | 15 | 51 |
| Volume index2: $(1938=100)$ |  |  |  |  |  |  |  |  |
| Retained imports: |  |  |  |  |  |  |  |  |
| Total | 100 | 97 | 94 | 82 | 70 | 71 | 80 | 62 |
| Food, drink and tobacco | 100 | 94 | 78 | 72 | 73 | 78 | 74 | 60 |
| Raw materias and articles mainly unmanufactured | 100 | 98 | 105 | 62 | 63 | 59 | 61 | 60 |
| Artides wholly or mainly manuractured | 100 | 100 | 112 | 121 | 72 | 94 | 102 | 62 |
| Exports: |  |  |  |  |  |  |  |  |
| Total | 100 | 94 | 72 | 56 | 36 | 29 | 31 | 46 |
| Articles wholly or mainly manufactured: |  |  |  |  |  |  |  |  |
| Texiles | 100 | 101 | 80 | 69 | 55 | 36 | 36 | 41 |
| Metals | 100 | 87 | 65 | 47 | 29 | 23 | 29 | 42 |
| Other | 100 | 100 | 91 | 83 | 46 | 41 | 42 | 55 |
| 1. The figures for 1942 to 1945 excluce imports, exports an <br> 2. Quantities revalued at 1938 prices and expressed as a pe imports or exports in 1938. | $\begin{aligned} & \text { re-expe } \\ & \text { entage } \end{aligned}$ | $\begin{aligned} & \text { ts of muni } \\ & \text { the value } \end{aligned}$ |  |  |  |  | Source: Bo | oftrade |

## Analysis by classes and groups



### 9.6 Value of exports of the produce and manufactures of the United Kingdom

 Analysis by classes and groups| 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Food, drink and tobacco
Total
A. Grain and flour
D. Meat
E. Dairy produce
G. Beverages and cocoa preparations
I. Tobacco
Other food

| 35.9 | 35.7 | 33.4 | 27.8 | 18.4 | 19.0 | 22.9 | 55.7 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1.7 | 1.2 | 0.6 | 0.3 | 0.1 | 0.2 | 1.3 | 20 |
| 1.2 | 1.2 | 0.7 | 0.3 | 0.1 | 0.2 | 0.2 | 0.4 |
| 1.1 | 1.1 | 0.9 | 0.2 | 0.1 | 0.3 | 0.6 | 2. |
| 13.8 | 15.9 | 19.6 | 17.0 | 11.5 | 11.0 | 10.7 | 15.2 |
| 1.9 | 5.0 | 4.8 | 5.6 | 4.3 | 5.2 | 5.1 | 12.1 |
| 13.2 | 11.3 | 6.8 | 4.4 | 2.3 | 2.1 | 5.0 | 23.1 |

II. Raw materials and articles mainly unmanufactured

```
A. Coal
A. Coal 
D. Non-ferrous metalliferous ores and scrap
G. Wool, raw and waste, and woollen rags
G. Woo, raw and waste, and,wollen rags 
K. Hides and skins, undresse
    Papermaking, materias
    OPher Class II
```

II. Articles wholly or mainly manuffactured

Total
A. Coke and manufactured fue
B. Pottery, glass, abrasives, etc
C. Iron and steel and manufactures thereof
D. Non-ferrous metals and manufactures thered

Electrical goods and apparatus
G. Machinery
H. Manutactures of wood and timber

Cotton yarms and manufactures
K. Silk and artificial silk yams and manufaratures
$L$ Manufactures of other textile materials
M. Apparel
N. Footwear
N. Footwear
O. Chemicals, druss, dyes and colours
Q. Leather fats and resins, manufactured
R. Paper, cardboard, etc
S. Vehicles (including locomotives, ships and aircraft)
T. Rubber manufactures
U. Miscelaneous articles wholly or mainly manufactured
IV. Animals not for food
V. Parcel post

EXTERNALTRADE

### 9.7 Value of imports

| £milion |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| Total | 919.5 | 885.5 | 1,152.1 | 1,145.1 | 996.7 | 1,233.9 | 1,309.3 | 1,103.7 |
| Britsh countries | 371.5 | 358.1 | 548.5 | 515.0 | 456.3 | 479.8 | 517.2 | 522.6 |
| Foreign countries | 548.0 | 527.4 | 603.6 | 630.1 | 540.4 | 754.1 | 792.1 | 581.1 |
| France and Northem Europe | 2622 | 240.6 | 109.0 | 46.0 | 497 | 427 | 52.2 | 98.7 |
| Rest of Europe | 46.0 | 427 | 40.8 | 18.4 | 17.1 | 17.3 | 29.8 | 31.1 |
| Africa | 63.4 | 68.7 | 95.7 | 86.6 | 1024 | 106.4 | 1225 | 101.4 |
| India and Western Asia | 79.4 | 76.5 | 101.6 | 75.2 | 73.2 | 88.1 | 91.6 | 90.4 |
| Rest of Asia | 44.2 | 38.8 | 63.4 | 50.3 | 14.5 | 0.3 | 0.6 | 3.2 |
| Oceania | 120.7 | 105.6 | 154.0 | 103.6 | 100.4 | 82.4 | 98.0 | 111.4 |
| North America | 199.3 | 199.4 | 428.3 | 6028 | 505.0 | 739.4 | 745.7 | 526.8 |
| Centra/ America and West Indies | 34.7 | 34.3 | 46.2 | 71.9 | 49.5 | 58.0 | 54.6 | 50.7 |
| South America | 69.6 | 78.9 | 113.1 | 90.3 | 84.9 | 99.3 | 114.3 | 90.0 |
| Argentine Republic | 38.5 | 46.8 | 61.4 | 522 | 49.4 | 58.3 | 80.7 | 47.6 |
| Australia | 71.8 | 62.0 | 96.8 | 46.4 | 40.0 | 32.7 | 45.9 | 50.5 |
| Belgium | 18.6 | 18.8 | 9.4 |  |  |  | 28 | 3.1 |
| Brazil | 7.7 | 8.8 | 16.8 | 14.2 | 16.2 | 17.9 | 18.0 | 21.4 |
| Canada | 78.7 | 80.0 | 147.1 | 190.8 | 150.2 | 200.2 | 208.0 | 199.9 |
| Ceylon and Dependencies | 12.4 | 10.7 | 124 | 120 | 9.6 | 25.1 | 16.2 | 15.2 |
| Denmark including Faroe Islands | 37.9 | 36.4 | 11.4 | 0.7 | 0.6 | 0.5 | 0.5 | 8.2 |
| Dutch East Indies | 6.4 | 5.9 | 15.2 | 10.5 | 3.8 |  |  |  |
| Dutch West Indies | 14.7 | 13.9 | 25.2 | 50.5 | 35.1 | 28.7 | 25.0 | 21.0 |
| Egypt | 11.6 | 12.1 | 13.4 | 9.0 | 15.6 | 11.0 | 13.1 | 13.9 |
| Eire | 23.0 | 25.3 | 31.7 | 32.1 | 34.0 | 28.4 | 30.8 | 35.0 |
| Finland | 19.3 | 14.6 | 1.3 | 0.1 |  |  |  | 4.4 |
| France | 23.6 | 26.9 | 14.7 | 0.1 | 0.1 |  | 0.1 | 2.1 |
| Germany ${ }^{2}$ | 30.1 | 19.4 |  |  |  |  |  | 21 |
| India | 49.9 | 48.5 | 72.9 | 57.3 | 60.1 | 59.8 | 69.3 | 66.8 |
| Burma | 6.0 | 5.1 | 7.2 | 9.2 | 27 | 0.1 | - |  |
| Malay (British) ${ }^{2}$ | 12.2 | 9.9 | 20.2 | 20.6 | 6.3 |  | - | 2.0 |
| Netherlands | 29.3 | 30.2 | 11.8 |  |  |  |  | 1.3 |
| New Zealand | 46.9 | 41.8 | 55.8 | 56.4 | 60.3 | 49.8 | 52.2 | 60.9 |
| Nigeria (including Cameroons under British mandate) | 6.3 | 7.2 | 13.6 | 140 | 182 |  |  |  |
| Northem Rhodesia | 4.1 | 6.0 | 13.6 | 10.2 | 10.5 | 18.7 | 21.1 13.6 | 17.5 6.3 |
| Soviet Union | 19.5 | 8.2 | 1.3 | 1.1 | 3.2 | 1.8 | 2.2 | 3.8 |
| Sweden | 24.5 | 25.6 | 10.2 | 1.3 | 0.4 | 0.7 | 0.9 | 22.4 |
| United States of America | 118.0 | 117.3 | 275.3 | 409.0 | 352.6 | 535.2 | 532.5 | 320.8 |
| Union of South Africa | 14.6 | 15.9 | 23.3 | 15.9 | 16.6 | 123 | 14.3 | 14.5 |

Including protectorates, mandated territories and territories under condominium
Including Austria in
1939
Straits Settlements and Dependencies (including Labuan) and

### 9.8 Value of exports of the produce and manufactures of the United Kingdom Analysis by destination

|  | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total British countries(1) Foreign countries | $\begin{aligned} & 470.8 \\ & 234.8 \\ & 236.0 \end{aligned}$ | $\begin{aligned} & 439.5 \\ & 216.6 \\ & 222.9 \end{aligned}$ | $\begin{aligned} & 411.2 \\ & 247.4 \\ & 163.8 \end{aligned}$ | $\begin{aligned} & 365.4 \\ & 232.2 \\ & 133.2 \end{aligned}$ | $\begin{array}{r} 271.3 \\ 175.0 \\ 96.3 \end{array}$ | $\begin{array}{r} 233.5 \\ 149.2 \\ 84.3 \end{array}$ | $\begin{array}{r} 266.3 \\ 169.8 \\ 96.5 \end{array}$ | $\begin{aligned} & 399.3 .3 \\ & 211.9 \\ & 185.4 \end{aligned}$ |
| France and Northem Europe Rest of Europe | 140.0 322 | 132.9 25.7 | 69.3 26.0 | 47.0 19.5 | 34.5 11.5 | 24.2 13.4 | $46.4$ | 120.2 22.6 |
| Africa | 73.6 | 68.5 | 69.0 | 70.4 | 60.9 | 56.7 | 65.9 | 83.4 |
| India and Westem Asia | 48.2 | 41.4 | 44.5 | 40.4 | 31.8 | 25.3 | 35.9 | 52.9 |
| Rest of Asia | 29.9 | 26.7 | 28.4 | 27.2 | 4.1 | 1.2 | 1.2 | 3.3 |
| Oceania <br> North America <br> Central America and West Indies <br> South America | $\begin{aligned} & 58.2 \\ & 44.0 \\ & 10.5 \\ & 34.2 \end{aligned}$ | $\begin{gathered} 48.8 \\ 51.9 \\ 9.1 \\ 34.5 \end{gathered}$ | $\begin{aligned} & 63.3 \\ & 66.3 \\ & 9.9 \\ & 34.9 \end{aligned}$ | $\begin{aligned} & 53.1 \\ & 70.9 \\ & 9.6 \\ & 97.3 \end{aligned}$ | $\begin{array}{r} 45.1 \\ 49.9 \\ 8.9 \\ 84.9 \end{array}$ | $\begin{array}{r} 40.1 \\ 43.1 \\ 8.2 \\ 21.1 \end{array}$ | $\begin{array}{r} 46.6 \\ 41.2 \\ 6.7 \\ 10.1 \end{array}$ | 49.6 42.7 8.7 15.9 |
| Argentine Republic | 19.3 | 20.4 | 17.8 | 15.5 | 13.3 | 9.6 | 4.1 | 6.4 |
| Australia | 38.2 | 32.3 | 46.3 | 38.0 | 323 | 26.9 | 32.1 | 35.2 |
| Belgium | 8.2 | 7.2 | 3.0 |  | 0.4 |  | 0.9 | 31.0 |
| Brazil | 5.2 | 4.6 | 5.0 | 3.5 | 3.6 | 4.1 | 2.3 | 3.4 |
| Canada | 22.5 | 22.4 | 322 | 38.4 | 25.5 | 23.2 | 21.8 | 23.7 |
| Ceylon and Dependencies | 3.5 | 3.2 | 3.3 | 2.5 | 20 | 2.0 | 3.3 | 5.8 |
| Denmark including Faroe Islands | 15.8 | 17.6 | 4.6 | 0.7 | 0.8 | 0.8 | 0.7 | 29 |
| Dutch East Indies | 3.6 | 3.9 | 4.3 | 7.6 | 1.7 |  |  |  |
| Dutch West Indies | 0.6 | 0.3 | 0.4 | 0.4 | 1.1 | 1.3 | 1.4 | 2.1 |
| Egypt | 8.7 | 9.7 | 9.0 | 9.0 | 8.8 | 4.5 | 5.9 | 11.3 |
| Eire | 20.3 | 22.9 | 23.2 | 19.0 | 17.9 | 11.5 | 11.9 | 18.6 |
| Finland | 5.5 | 4.1 | 4.0 | - |  |  |  | 0.3 |
| France | 15.1 | 13.6 | 16.4 | - |  | - | 6.8 | 25.7 |
| Germany2 | 20.5 | 123 |  | - |  |  |  | 28 |
| India | 33.8 | 29.7 | 33.3 | 31.6 | 22.3 | 17.6 | 23.5 | 33.1 |
| Burma | 26 | 2.9 | 3.2 | 3.5 | 0.6 | - |  | 1.2 |
| Malay ( (ritish ${ }^{2}$ | 11.1 | 10.3 | 11.7 | 10.2 | 1.0 |  |  | 0.9 |
| Netherlands | 13.1 | 13.5 | 5.8 |  |  | 0.3 | 0.5 | 5.9 |
| New Zealand | 19.2 | 16.0 | 16.5 | 14.8 | 12.6 | 12.9 | 14.2 | 14.0 |
| Nigeria (including Cameroons under British mandate) | 4.2 | 3.7 | 3.9 | 3.6 | 4.4 | 6.2 | 7.5 | 7.5 |
| Northem Rhodesia | 1.3 | 0.7 | 0.7 | 0.6 | 0.6 | 0.8 | 1.2 | 1.1 |
| Soviet Union | 6.5 | 4.6 | 0.5 | 23.4 | 9.9 | 9.8 | 23.9 | 16.3 |
| Sweden | 11.7 | 14.1 | 4.8 | 0.7 | 0.5 | 0.5 | 0.3 | 27 |
| United States of America | 20.5 | 28.4 | 33.0 | 31.8 | 23.8 | 19.5 | 18.9 | 18.6 |
| Union of South Africa | 39.5 | 36.2 | 38.2 | 39.2 | 31.5 | 21.7 | 24.8 | 35.7 |

Including protectorates, mandated territories and territories under condominium.
Austria in 1939 and 1945
3. Straits Settlements and Dependencies (including Labuan) and Federated and Unfederated Malay States.

### 9.9 Quantity of imports

Principal articles of food, drink and tobacco imported

|  | Unit | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wheat <br> Barley <br> Maize <br> Rice <br> Peas and beans, not fresh <br> Wheat meal and flour | Mn.tons Th. tons Mn. tons Th. tons " | $\begin{array}{rr} 15 & 5.1 \\ \hline \text { s } & 993.8 \\ \hline & 2.9 \\ \hline & 133.7 \\ & 145.1 \\ & 383.8 \end{array}$ | $\begin{array}{r} 5.3 \\ 687.0 \\ 2.3 \\ 143.2 \\ 135.1 \\ 366.7 \end{array}$ | $\begin{array}{r} 5.8 \\ 457.3 \\ 2.1 \\ 191.3 \\ 146.7 \\ 577.4 \end{array}$ | 5.4 63.8 0.7 178.6 157.9 707.9 | $\begin{array}{r} 3.5 \\ 0.1 \\ 5.1 \\ 48.1 \\ 374.4 \end{array}$ | $\begin{array}{r} 3.3 \\ 0.1 \\ 131.1 \\ 69.5 \\ 717.5 \end{array}$ | $\begin{array}{r} 2.8 \\ 0.1 \\ 4.9 \\ 71.5 \\ 79.15 \end{array}$ | $\begin{array}{r} 3.6 \\ 101.8 \\ 0.5 \\ 25.2 \\ 66.1 \\ 542.8 \end{array}$ |
| Feeding-stufff for animals | Mn.tons | 1.9 | 1.7 | 1.1 | 0.3 | 0.1 |  | 0.1 | 0.2 |
| Catte, living, for food | Thous. | 646.7 | 705.8 | 560.3 | 287.8 | 547.8 | 409.4 | 401.6 | 447.5 |
| Meat: <br> Other than tinned or canned: <br> Beef <br> Veal <br> Mutton <br> Lamb <br> Bacon and ham <br> Pork and other pig products <br> Tinned and canned meat of all descriptions <br> Poultry and game, dead (including tinned and canned) | Th. tons | $\begin{array}{r} 613.3 \\ 17.4 \\ 82.5 \\ 274.4 \\ 376.6 \\ 70.7 \\ 72.9 \\ 23.5 \end{array}$ | 610.4 17.9 69.0 270.1 394.8 60.3 1029 218 | 566.4 11.9 124.2 291.6 238.6 68.6 123.3 | $\begin{array}{r} 551.5 \\ 99.0 \\ 51.0 \\ 2829 \\ 274.2 \\ 93.3 \\ 230.9 \\ 10.3 \end{array}$ | $\begin{array}{r} 489.7 \\ 5.6 \\ 5.3 \\ 326.0 \\ 32.0 \\ 108.4 \\ 28.9 \end{array}$ | $\begin{array}{r} 321.4 \\ 1.4 \\ 58.3 \\ 371.0 \\ 331.5 \\ 225.2 \\ 298.0 \end{array}$ | 352.2 16.3 102.1 282.8 399.8 389.4 213.5 | $\begin{array}{r} 207.5 \\ 14.9 \\ 11.9 \\ 266.0 \\ 243.5 \\ 20.7 \\ 97.4 \end{array}$ |
| Dairy products: Butter Cheese Eggs in shell Eggs dried whole Condensed mik Milk powder |  | $\begin{array}{r} 475.9 \\ 146.4 \\ 19.0 \\ 0.3 \\ 8.7 \\ 17.7 \end{array}$ | $\begin{array}{r} 436.8 \\ 142.3 \\ 195.4 \\ 0.1 \\ 70.0 \\ 15.1 \end{array}$ | $\begin{array}{r} 264.4 \\ 156.2 \\ 102.7 \\ 004 \\ 70.4 \\ 15.8 \end{array}$ | $\begin{array}{r} 218.1 \\ 203.4 \\ 61.3 \\ 7.5 \\ 139.7 \\ 26.6 \end{array}$ | $\begin{array}{r} 134.3 \\ 315.2 \\ 23.3 . \\ 56.0 \\ 192.0 \\ 65.0 \end{array}$ | $\begin{array}{r} 151.6 \\ 207.0 \\ 15.8 \\ 73.4 \\ 137.3 \\ 81.1 \end{array}$ | $\begin{array}{r} 153.2 \\ 251.9 \\ 23.1 \\ 80.0 \\ 93.2 \\ 83.0 \end{array}$ | $\begin{array}{r} 190.1 \\ 191.2 \\ 47.6 \\ 24.4 \\ 65.4 \\ 30.0 \end{array}$ |
| Fruit, fresh or raw. <br> Apples <br> Bananas <br> Oranges <br> Other fresh fruit <br> Nuts used as fruit |  | $\begin{aligned} & 353.4 \\ & 3050 \\ & 538.3 \\ & 280.3 \\ & 70.6 \end{aligned}$ | $\begin{aligned} & 234.2 \\ & 287.6 \\ & 563.3 \\ & 23.2 \\ & 59.9 \\ & 59.9 \end{aligned}$ | $\begin{array}{r} 92.0 \\ 193.1 \\ 413.1 \\ 927 \\ 35.9 \end{array}$ | $\begin{array}{r} 16.2 \\ 0.1 \\ 84.2 \\ 10.1 \\ 4.0 \end{array}$ | $\begin{array}{r} 20.6 \\ 104.7 \\ 1.0 \\ 4.9 \end{array}$ | $\begin{array}{r} 8.0 \\ 45.3 \\ 45 .{ }^{3} \\ 21 \\ 29 \end{array}$ | $\begin{array}{r} 20.1 \\ 165.7 \\ 18.9 \\ 8.9 \end{array}$ | $\begin{array}{r} 30.3 \\ 1.1 \\ 305.9 \\ 54.0 \\ 5.4 \end{array}$ |
| Vegetables fresh: <br> Potatoes <br> Onions <br> Tomatoes <br> Other fresh vegetables |  | $\begin{aligned} & 146.2 \\ & 228.6 \\ & 143.3 \\ & 50.5 \end{aligned}$ | $\begin{array}{r} 146.2 \\ 249.3 \\ 1420 \\ 43.9 \end{array}$ | $\begin{gathered} 104.9 \\ 138.8 \\ 58.2 \\ 10.3 \end{gathered}$ | $\begin{array}{r} 28.5 \\ 9.9 \\ 1.8 \\ 0.8 \end{array}$ | $\begin{array}{r} 18.0 \\ 5.0 \\ 0.7 \end{array}$ | $\begin{aligned} & 6.7 \\ & 0.1 \\ & 0.5 \end{aligned}$ | $\begin{array}{r} 8.1 \\ 27.9 \\ 0.9 \end{array}$ | $\begin{array}{r} 7.9 \\ 46.2 \\ 7.4 \\ 0.4 \end{array}$ |
| Cocoa, raw <br> Coffee, not kiln dried, roasted or ground I Teal <br> Wine ${ }^{1}$ | Mn. galls | $\begin{array}{r} 131.5 \\ 13.9 \\ 205.6 \\ 15.4 \end{array}$ | $\begin{array}{r} 128.8 \\ 26.3 \\ 158.1 \\ 16.8 \end{array}$ | $\begin{array}{r} 120.2 \\ 5.4 .4 \\ 171.8 \\ 14.6 \end{array}$ | $\begin{array}{r} 148.8 \\ 6.1 \\ 209.9 \\ 1.8 \end{array}$ | $\begin{array}{r} 164.4 \\ 222 \\ 154.3 \\ 0.9 \end{array}$ | $\begin{array}{r} 172.2 \\ 39.9 \\ 206.1 \\ 1.1 \end{array}$ | $\begin{array}{r} 145.3 \\ 37.6 \\ 189.8 \\ 1.3 \end{array}$ | $\begin{array}{r} 95.3 \\ 42.3 \\ 170.9 \\ 3.8 \end{array}$ |
| Fish (not of British taking) Fresh or frozen Canned | Th. tons | $\begin{aligned} & 81.8 \\ & 77.1 \end{aligned}$ | $\begin{aligned} & 97.6 \\ & 84.8 \end{aligned}$ | $\begin{array}{r} 163.6 \\ 97.7 \end{array}$ | $\begin{aligned} & 144.6 \\ & 79.6 \end{aligned}$ | $\begin{aligned} & 162.1 \\ & 135.6 \end{aligned}$ | $\begin{aligned} & 175.9 \\ & 148.6 \end{aligned}$ | $\begin{array}{r} 209.3 \\ 62.7 \end{array}$ | $\begin{gathered} 229.1 \\ 38.7 \end{gathered}$ |
| Fruit dried: <br> Currants and raisins <br> Plums, prunes and prunellos Fruit tinned or bottled in syrup Dates |  | $\begin{array}{r} 136.0 \\ 23.9 \\ 199.9 \\ 21.9 \end{array}$ | $\begin{array}{r} 148.2 \\ 18.8 \\ 255.1 \\ 18.0 \end{array}$ | $\begin{array}{r} 87.4 \\ 16.7 \\ 126.3 \\ 15.1 \end{array}$ | $\begin{array}{r} 133.2 \\ 3.9 \\ 21.6 \\ 25.1 \end{array}$ | $\begin{array}{r} 89.2 \\ 54.0 \\ 6.6 \\ 38.0 \end{array}$ | $\begin{array}{r} 109.4 \\ 44.9 \\ 6.1 \\ 10.4 \end{array}$ | $\begin{array}{r} 164.8 \\ 389 \\ 22.2 \\ 26.7 \end{array}$ | $\begin{array}{r} 89.1 \\ 9.9 \\ 13.1 \\ 40.3 \end{array}$ |
| Edible oils and fats, refined: <br> Lard <br> Other <br> Sugar, unrefined | Mn.tons | $\begin{aligned} & 720 \\ & 65.6 \\ & 24 \end{aligned}$ | $\begin{array}{r} 79.6 \\ 51.6 \\ 2.1 \end{array}$ | $\begin{gathered} 34.7 \\ 43.6 \\ 1.4 \end{gathered}$ | $\begin{gathered} 96.6 \\ 39.8 \\ 1.6 \end{gathered}$ | $\begin{array}{r} 218.5 \\ 340 \\ 0.8 \\ 0.8 \end{array}$ | $\begin{array}{r} 218.4 \\ 42.3 \\ 1.4 \end{array}$ | $\begin{array}{r} 189.2 \\ 50.1 \\ 1.2 \end{array}$ | $\begin{gathered} 90.7 \\ 19.4 \\ 1.1 \end{gathered}$ |
| Tobacco, unmanufactured | Mn. b. | 344.9 | 211.5 | 141.4 | 213.7 | 264.9 | 354.1 | 229.9 | 368.8 |

## 9. $10 \begin{aligned} & \text { Quantity of imports } \\ & \text { Princian raw materals inported }\end{aligned}$ <br> Principal raw materials imported

|  | Unit | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Asbestos, raw and fibre | Th. tons | 50.9 | 54.8 | 87.8 | 50.4 | 66.6 | 53.3 | 69.5 | 66.7 |
| Magnesite |  | 57.1 | 48.5 | 89.0 | 80.3 | 28.6 | 55.9 | 225 | 3.9 |
| Mica, slabs and splititings ${ }^{\text {I }}$ |  | 1.5 | 1.7 | 2.4 | 0.9 | 2.2 | 28 | 1.8 | 1.5 |
| Sulphur |  | 131.5 | 160.2 | 217.1 | 293.6 | 125.0 | 268.9 | 197.2 | 98.2 |
| Iron ore, other than manganiferous Iron and steel scrap | Mn. tons | $\begin{aligned} & 5.1 \\ & 0.6 \end{aligned}$ | $\begin{aligned} & 5.2 \\ & 0.6 \end{aligned}$ | $\begin{aligned} & 4.5 \\ & 0.9 \end{aligned}$ | $\begin{aligned} & 2.3 \\ & 0.5 \end{aligned}$ | 1.9 | 1.9 | 22 | 4.1 0.2 |
| Bauxite | Th. tons | 249.6 | 302.1 | 112.4 | 87.2 | 47.8 | 241.8 | 172.1 | 162.6 |
| Chromium ore (chromite or chrome iron ore) |  | 37.6 | 50.6 | 87.6 | 56.0 | 99.6 | 36.6 | 93.8 | 50.4 |
| Copper ore (including regulus and matte) and precipitate and cement copper; nickel ore, |  |  |  |  |  |  |  |  |  |
| concentrates and matte | " | 29.6 | 34.1 | 32.7 | 27.7 | 26.5 | 20.3 | 21.8 | 19.4 |
| Cryolite | " | 5.3 | 4.7 | 1.3 | 3.6 | 4.9 | 1.6 | 1.1 3153 | 0.8 |
| Manganese ore | " | 192.7 | 325.0 | 247.1 | 314.2 | 421.2 | 444.6 | 315.3 | 314.9 |
| Molybdenum ore | " | 1.9 | 4.9 | 24 | 4.1 | 7.2 | 6.5 | 0.5 | 1.1 |
| Tin ore and concentrates | " | 55.5 | 54.0 | 83.9 | 65.5 | 43.9 | 520 | 32.9 | 44.9 |
| Tungsten (including tintungten ores) | " | 10.9 | 9.9 | 13.4 | 12.6 | 7.6 | 6.6 | 6.2 | 3.7 |
| Vanadium ores (lead vanadate) |  |  |  |  |  | 2.6 | 27 | 0.6 | 1.3 |
| Zinc ore and concentrates |  | 157.3 | 177.5 | 226.2 | 201.5 | 1427 | 97.1 | 179.0 | 156.6 |
| Timber: |  |  |  |  |  |  |  |  |  |
| Softwoods: |  |  |  |  |  |  |  |  |  |
| Sawn, not further prepared | Mn. standards | 1.5 | 1.2 | 0.7 | 0.5 | 0.3 | 0.5 | 0.4 | 0.7 |
| box-boards | Th. standards | 2979 | 317.9 | 141.0 | 17.8 | 12.3 | 39.7 | 54.8 | 56.6 |
| Hardwoods: |  |  |  |  |  |  |  |  |  |
|  | Mn. cuft | 4.2 | 3.2 | 5.5 | 4.1 | 3.5 | 4.1 | 4.9 | 4.8 |
| Sawn, not further prepared |  | 30.7 | 27.3 | 21.4 | 10.4 | 8.7 | 8.3 | 11.3 | 11.4 |
| Pitprops | Th. Standards | 821.7 | 634.1 | 433.2 | 74.9 | 11.4 | 28.3 | 74.4 | 193.5 |
| Sleepers |  | 117.2 | 69.6 | 13.1 | 25.0 | 41.7 | 14.7 | 51.0 | 60.7 |
| Veneers | Th. tons | 12.3 | 10.9 | 16.6 | 17.6 | 25.4 | 44.6 | 31.5 | 13.8 |
| Cotton, raw (except linters)' |  | 518.3 | 552.4 | 627.8 | 364.1 | 525.9 | 440.8 | 360.3 | 385.7 |
| Wool, raw: |  |  |  |  |  |  |  |  |  |
| Sheep's and lambs'\| Other | Mn. lb. | $\begin{gathered} 624.6 \\ 9.1 \end{gathered}$ | $\begin{array}{r} 730.5 \\ 120 \end{array}$ | $\begin{array}{r} 1,005.3 \\ 15.1 \end{array}$ | $\begin{array}{r} 330.3 \\ 5.5 \end{array}$ | $\begin{array}{r} 411.4 \\ 3.2 \end{array}$ | $\begin{array}{r} 269.5 \\ 2.6 \end{array}$ | $\begin{array}{r} 508.5 \\ \hline 1.9 \end{array}$ | 428.4 9.1 |
| Silk, raw |  | 5.3 | 4.4 | 5.5 | 1.6 | 0.3 | 0.4 | 0.5 | 0.6 |
| Flax (excluding tow or codilla) Hemp (excluding tow or codilla) | Th. tons | $\begin{aligned} & 40.7 \\ & 80.5 \end{aligned}$ | 46.2 100.4 | $\begin{array}{r} 17.3 \\ 152.9 \\ \hline \end{array}$ | 5.4 10.8 | 6.9 88.7 | 12.2 | $\begin{aligned} & 12.9 \\ & 97.3 \end{aligned}$ | 17.7 83.0 |
| Jute, raw I |  | 160.2 | 1420 | 192.0 | 94.8 | 106.1 | 103.1 | 828 |  |
| Seeds, nuts and kernels for expressing oil | Mn. tons | 1.6 | 1.6 | 1.6 | 1.5 | 1.4 | 1.6 | 1.5 | 1.1 |
| Gums and resins' | Th. tons | 90.6 | 106.2 | 96.3 | 54.9 | 70.8 | 82.5 | 33.1 | 67.3 |
| Oils, fats and greases: |  |  |  |  |  |  |  |  |  |
| Tallow, technical |  | 24.3 | 23.8 | 43.2 | 28.6 | 34.7 | 18.7 | 30.4 | 20.9 |
| Whale oil unrefined | ' | 225.7 | 251.9 | 2124 | 61.4 | 58.3 | 23.4 | 8.1 | 46.2 |
| Other fish oil, unrefined including liver oil |  | 21.3 | 16.4 | 36.5 | 37.1 | 33.6 | 29.0 | 35.6 | 18.9 |
| Crude petroleum Vegetable oils, other than essentiall | Mn. galls. Th. tons | $\begin{aligned} & 568.0 \\ & 210.1 \end{aligned}$ | $\begin{aligned} & 541.4 \\ & 246.2 \end{aligned}$ | $\begin{aligned} & 375.4 \\ & 201.7 \end{aligned}$ | $\begin{aligned} & 234.3 \\ & 231.4 \end{aligned}$ | $\begin{aligned} & 141.9 \\ & 217.8 \end{aligned}$ | $\begin{aligned} & 126.5 \\ & 233.5 \end{aligned}$ | $\begin{aligned} & 164.1 \\ & 200.6 \end{aligned}$ | 227.7 153.0 |
| Hides and skins, undressed: |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Wetl | " | 41.3 | 49.9 | 80.5 | 57.1 |  |  |  | 76.6 |
| Dry and dry salted |  | 19.0 | 23.8 | 27.9 | 22.4 | 23.1 | 15.3 | 128 | 14.0 |
| Sheep and lamb skins! <br> Fur skins, undressed, except rabbit |  | 17.4 3.8 | $\begin{array}{r} 18.0 \\ 25 \end{array}$ | $\begin{array}{r} 25.9 \\ 1.5 \end{array}$ | 10.1 0.2 | $\begin{array}{r} 14.5 \\ 0.3 \end{array}$ | 12.4 0.1 | 16.0 0.1 | 17.0 1.0 |
|  |  |  |  |  |  |  |  |  |  |
| Synthetic rubber |  |  |  |  | 16.0.1 | 60.9 0.9 | 99.7 | 99.11 | 27.6 |
| Mineral phosphate of lime |  | 410.5 | 4625 | 413.5 | 799.2 | 287.3 | 788.8 | 675.8 | 642.7 |

## 9.1| Quantity of imports

Principal imports of articles wholly or mainly manufactured

|  | Unit | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Iron and steel: |  |  |  |  |  |  |  |  |  |
| Pig iron Ferro-alloys:Total | Th. .tons | 395.1 | 354.4 | 676.0 | 971.5 | 356.2 | 361.8 | 285.0 | 107.9 |
|  |  | 47.6 | 72.6 | 94.2 | 99.9 | 67.4 | 135.0 | 55.6 | 46.9 |
| Ferro-alloys:Total Ferro-chromium |  | 10.5 | 14.7 | 19.6 | 27.3 | 17.1 | 28.3 | 11.3 | 3.2 |
| Ferro-manganese refinedOther ferro-manganese and spiegeleisen | " | 28 | 4.3 | 4.4 | 2.1 | 25 | 2.3 | 0.1 |  |
|  | " | 0.1 | 0.2 | 0.1 | 0.3 | 0.2 | 1.6 | - |  |
| Ferrosilicon | " | 24.6 | 36.3 | 55.2 | 49.0 | 38.3 | 88.4 | 34.6 | 32.2 |
| Silico-manganese <br> Ingots and semi-fnished stee: | " | 9.2 | 16.5 | 14.7 | 21.0 | 7.7 | 11.8 | 8.7 | 10.9 |
|  |  |  |  |  |  |  |  |  |  |
| Total | " | 373.5 | 830.4 | 2.072 .2 | 2.296 .0 | 1,599.0 | 1,463.1 | 998.9 | 116.6 |
| Steal ingots (non-alloy) |  | 22.6 | 23.5 | 488.2 | 561.5 | 480.4 | 498.1 | 297.9 | 36.4 |
| Steel blooms, billets and slabs (non-alloy) |  | 315.0 | 3699 | 1,254.3 | 1,362.3 | 884.2 | 845.8 | 693.5 | 79.7 |
| Sheet bars and tinplate bars (non-alloy) Finshed steel and wrought iron:Total | y) | 33.9 | 433.9 | 2626 | 2095 | 25.6 | 28.0 | 1.7 |  |
|  | - | 459.4 | 509.1 | 795.2 | 761.2 | 4723 | 834.5 | 394.2 | 328 |
| Wire rods (non-alloy) | " | 60.0 | 66.3 | 150.6 | 118.2 | 118.3 | 1323 | 90.8 | 17.8 |
| Plates and sheets (uncoated) | " | 71.6 | 88.5 | 196.1 | 180.1 | 24.1 | 319.1 | 136.4 | 1.7 |
| Iron and steel manufacturears |  | 68.7 | 54.8 | 51.5 | 48.7 | 14.5 | 19.9 | 30.5 | 9.2 |
| Aluminium and aluminium alloy ingots, blocks, |  | 410 | 577 | 66 | 1327 | 1316 | 130 | 1497 | 21 |
| Copper, unwrought, including roughl |  | 259.6 | 307.6 | 4728 | 449.4 | 441.0 | 494.8 | 451.5 | 143.7 |
| Lead, unwrought |  | 382.1 | 334.3 | 336.5 | 139.3 | 235.5 | 226.5 | 224.9 | 165.4 |
| Magnesium |  | 1.6 | 1.6 | 0.6 | 1.0 | 3.1 | 33.6 | 20.4 | 1.1 |
| Nickel and nickel alloys ${ }^{\text {l }}$ |  | 9.2 | 7.7 | 11.1 | 7.3 | 5.4 | 5.0 | 3.5 | 1.3 |
| Zinc or spelter, unwrought |  | 165.0 | 167.3 | 204.6 | 209.8 | 21.7 | 187.6 | 119.3 | 97.1 |
| Watches, complete and complete movements | ts Millions | 8.1 | 4.8 | 1.8 | 1.0 | 0.5 | 0.6 | 0.9 | 1.2 |
| Wireless apparatus and valves | Emillion | 0.8 | 1.0 | 0.9 | 0.4 | 0.6 | 3.3 | 16.4 | 12.3 |
| Other electrical goods and apparatus |  | 24 | 1.8 | 3.3 | 2.3 | 2.1 | 4.9 | 7.5 | 6.4 |
| Machinery: |  |  |  |  |  |  |  |  |  |
| Agricutural | Th. tons | 8.2 | 10.5 | 21.8 | 29.5 | 25.1 | 30.6 | 19.6 | 7.6 |
| Machine tools, new, completeOther machinery and parts |  | 23.9 | 30.4 | 72.1 | 77.5 | 41.2 | 39.5 | 15.0 | 6.5 |
|  |  | 85.4 | 67.9 | 33.8 | 19.1 | 18.1 | 47.3 | 101.8 | 35.6 |
| Wood and timber manufactures: |  |  |  |  |  |  |  |  |  |
| Plywood Other | Mn. cu.ft | 10.9 | 8.8 | 4.7 | 26 | 27 | 6.3 | 8.2 | 8.4 |
|  | £ million | 2.9 | 23 | 1.2 | 0.6 | 0.6 | 0.7 | 0.9 | 6.8 |
| Cotton yarns and manufictures: |  |  |  |  |  |  |  |  |  |
| Woven piece goods! | Mn.sq. yds . | 45.7 | 30.3 | 26.5 | 16.3 | 10.2 | 34.2 | 17.4 | 128 |
| Jute manufactures: |  |  |  |  |  |  |  |  |  |
| Piece goodsSacks and bags | Th. tons | 55.2 | 56.0 | 90.0 | 34.1 | 37.2 | 25.8 | 67.0 | 43.3 |
|  |  | 39.6 | 84.1 | 131.5 | 28.5 | 39.0 | 35.7 | 42.9 | 29.0 |
| Apparel, not of fur: |  |  |  |  |  |  |  |  |  |
| Outer and under gaments | £milion | 2.2 | 1.5 | 0.3 | 0.1 | 0.2 | 0.3 | 4.4 | 3.4 |
| Gloves Hosiery | Mn. doz prs. | 1.7 | 1.4 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
|  | £milion | 2.5 | 1.7 | 0.4 | 0.2 | 0.2 | 0.3 | 1.0 | 0.8 |
| Footwear Mn | Mn. doz prs. | 1.5 | 1.6 | 1.0 | 0.7 | 0.2 | 0.1 |  | 0.1 |

## 9. | Quantity of imports

|  | Unit | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Superphosphates | Th. tons | 14.4 | 15.4 |  | 30.7 | 73.3 | 134.1 | 60.9 | 70.7 |
| Potassium chloride |  | 89.2 | 119.0 | 7.1 | 87.6 | 110.1 | 144.3 | 213.8 | 165.6 |
| Drugs and medicines <br> Dyes and dyestuffs (including extracts for tanning) | £million | 1.7 | 1.8 | 1.7 | 1.3 | 1.1 | 0.8 | 25 | 3.3 |
|  | Th. tons | 53.8 | 75.5 | 92.6 | 68.7 | 71.3 | 67.6 | 72.5 | 68.5 |
| $\begin{array}{lllllllllll}\text { Essential ois, other than turpentine } & \text { "1 } & 2.1 & 2.3 & 2.7 & 1.5 & 1.2 & 0.6 & 1.1 & 1.1 \\ \text { Petroeum refined: }\end{array}$ |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Kerosene | Mn. gals. | 2064 | 208.0 | 272.6 | 29.6 | 235.2 | 330.9 | 367.3 | 342.1 |
| Motor and other spirit |  | 1,474.8 | 1,390.5 | 1,098.5 | 1,435.1 | 1,278.3 | 1,689.1 | 2,921.9 | 2,151.1 |
| Lubricating oill | " | 103.9 | 97.9 | 150.1 | 1224 | 135.6 | 105.4 | 139.1 | 75.5 |
| Gas oil | " | 157.9 | 181.4 | 204.1 | 2625 | 267.1 | 428.2 | 617.5 | 4820 |
| Fuel oil and diesel oil | " | 687.3 | 574.5 | 926.0 | 1,115.7 | 727.2 | 1,316.2 | 1,334.9 | 1,009.4 |
| Paraffin wax | Th. tons | 40.5 | 43.6 | 67.0 | 56.5 | 59.1 | 37.8 | 28.6 | 33.4 |
| Leather, undressed: |  |  |  |  |  |  |  |  |  |
| Cattle hides and caf hides! | " | 14.8 | 23.5 | 27.7 | 14.3 | 13.7 | 23.4 | 12.6 | 8.8 |
| Skin leather! | " | 4.7 | 5.7 | 5.3 | 2.3 | 3.1 | 28 | 25 | 4.0 |
| Leather, dressed | " | 4.0 | 4.7 | 3.1 | 0.8 | 0.8 | 0.7 | 0.7 | 0.5 |
| Newsprint in rolls | " | 446.3 | 423.1 | 238.6 | 121.9 | 66.9 | 95.4 | 135.2 | 186.1 |
| Packing and wrapping paper | " | 2020 | 255.7 | 125.5 | 9.9 | 11.3 | 11.2 | 13.7 | 33.4 |
| Boards | " | 360.2 | 379.7 | 275.3 | 54.3 | 61.5 | 30.4 | 42.0 | 101.8 |
| Other paper | " | 62. | 70.2 | 38.8 | 7.4 | 6.2 | 6.5 | 9.3 | 18.0 |
| Motor vehicles complete and chassis for |  |  |  |  |  |  |  |  |  |
| Tractors | " | 2.9 | 5.3 | 6.1 | 11.2 | 7.8 | 6.1 | 6.3 | 2.4 |
| Rubber tyres and tubes | Millions | 0.5 | 0.6 | 0.2 | 0.3 | 0.5 | 1.7 | 24 | 1.8 |
| Books, printed I | Th. tons | 16.1 | 128 | 4.3 | 2.6 | 1.9 | 2.2 | 2.3 | 2.6 |
| Starch, not for food |  | 242.1 | 200.0 | 201.7 | 80.4 | 56.3 | 39.3 | 24.6 | 31.8 |

Animals not for food
$\begin{array}{lllllllllll}\text { Cows and hefers for breeding } & \text { Thousands } & 71.6 & 81.0 & 82.1 & 13.4 & 78.7 & 45.0 & 42.4 & 42.9\end{array}$
$\qquad$

1. Retained imports.
. And other printed matter for reading purposes (other than music), manuscripts and typescripts
2. Re-exports exceeded imports.
9.12 Quantity of exports of the produce and manufactures of the United Kingdom Principal articles exported

|  | Unit | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Food, drink and tobacco |  |  |  |  |  |  |  |  |  |
| Wheat, meal and flour | Th. tons | 106.3 | 80.8 | 14.1 | 5.8 | 25 | 4.0 | 4.6 | 26.9 |
| Beer | Th. buk barrels | 281.3 | 284.0 | 266.8 | 225.6 | 94.8 | 107.0 | 7.6 | 130.4 |
| Spirits, home made Mn | Mn. proof galons | 9.1 | 10.5 | 124 | 9.5 | 7.1 | 5.7 | 4.7 | 5.3 |
| Fsis:Fresh or frozen | Th. tons | 53.8 | 29.6 | 1.3 |  |  |  |  | 0.1 |
| Cured, sated or canned |  | 165.0 | 71.3 | 23.0 | 0.9 | 4.0 | 0.2 |  | 10.1 |
| Sugar, refined, incuding candy |  | 362.1 | 314.3 | 16.9 | 44.4 | 25.7 | 3.7 | 8.3 | 79.9 |
| Cigarettes | Mn. lb. | 26.5 | 25.1 | 22.2 | 24.6 | 15.0 | 17.0 | 16.3 | 34.0 |
| Raw materials and articles mainly unmanufactured |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Coal | Mn. tons | 35.9 | 36.9 | 19.6 | 5.1 | 3.6 | 3.6 | 2.6 | 3.3 |
| Wool, raw, sheeess' and lambs': |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Kingdom |  | 12.3 | 8.0 | 28 | 0.2 |  |  |  | 2.9 |
| Wool waste |  | 16.8 | 13.1 | 5.1 | 3.6 | 1.5 | 0.2 | 0.2 | 1.0 |
| Artificial sik waste |  | 19.9 | 37.3 | 17.2 | 20.4 | 6.5 | 6.8 | 6.5 | 16.3 |
| Oils, vegetable, other than | Th. tons | 750 | 366 | 117 | 32 | 0. | 03 | 02 | 40 |
| Tar and pitch |  | 504.3 | 463.5 | 398.0 | 32.0 | 77.7 | 82.0 | 79.0 | 197.5 |
| Articles wholly or mainly manufactured |  |  |  |  |  |  |  |  |  |
| Cement |  | 760.1 | 69.1 | 441.5 | 319.5 | 186.7 | 167.7 | 323.6 | 593.3 |
| Pig iron and ferro-alloys |  | 100.7 | 77.9 | 25.4 | 20.6 | 5.4 | 5.1 | 3.3 | 34.1 |
| Ingots and semi.fnished steel |  | 22.1 | 10.7 | 10.5 | 0.5 | 1.3 | 24 | 0.8 | 22 |
| Frished steel and wrought iron |  | 1,338.3 | 1,138.5 | 817.5 | 347.0 | 175.0 | 73.6 | 1565 | 463.4 |
| Copper and copper manufactures |  | 324 | 28.2 | 20.4 | 20.9 | 9.7 | 5.7 | 5.1 | 19.4 |
| Brass and alloys of copper other than nickel | * | 21.6 | 20.1 | 12.9 | 9.2 | 8.4 | 6.0 | 5.7 | 13.1 |
| Machinery. |  |  |  |  |  |  |  |  |  |
| Agricutural machinery |  | 8.6 | 7.0 | 6.7 | 3.8 | 3.6 | 4.0 | 5.2 | 15.8 |
| Boilers and boiler house plant |  | 56.0 | 42.0 | 22.7 | 21.8 | 15.4 | 123 | 20.0 | 22.6 |
| Cranes, hoist, etc |  | 19.2 | 16.3 | 6.9 | 5.2 | 4.2 | 4.4 | 5.7 | 8.2 |
| Electrical machinery | " | 44.6 | 33.7 | 29.1 | 25.7 | 23.7 | 28.5 | 57.8 | 56.8 |
| Machine tools, metal-working and parts | - | 24.1 | 27. | 11.4 | 7.3 | 20.3 | 127 | 32.3 | 19.8 |
| Mining machinery | - | 25.6 | 27.1 | 18.9 | 10.7 | 5.4 | 4.4 | 4.3 | 5.2 |
| Prime movers | " | 28.6 | 22.4 | 16.1 | 9.5 | 6.5 | 6.9 | 7.0 | 11.5 |
| Pumps |  | 8.2 | 6.8 | 4.9 | 4.4 | 5.5 | 3.3 | 3.7 | 4.1 |
| Sewing machines and parts | " | 11.7 | 14.7 | 9.6 | 5.2 | 1.7 | 0.7 | 1.2 | 2.1 |
| Textie machinery |  | 70.8 | 47.5 | 34.1 | 27.4 | 19.2 | 13.0 | 14.3 | 16.8 |
| Other machinery and parts | " | 151.9 | 114.9 | 85.8 | 64.3 | 51.8 | 45.3 | 40.4 | 60.5 |
| Cotton yams and manufactures: |  |  |  |  |  |  |  |  |  |
| Cotton yams | Mn. 1 b . | 123.0 | 113.7 | 66.7 | 28.9 | 18.8 | 19.2 | 19.6 | 16.1 |
| Cotton woven piece goods | Mn. sq. yds. | 1,368.5 | 1,373.2 | 9528 | 764.6 | 467.5 | 359.1 | 415.6 | 423.9 |
| Finished thread for sewing etc | Mn. lb. | 13.5 | 14.3 | 14.6 | 13.6 | 14.2 | 13.3 | 12.0 | 13.8 |
| Woollen and worsted yarns and manufactures: |  |  |  |  |  |  |  |  |  |
| Wool tops |  | 32.5 | 33.8 | 28.2 | 16.2 | 11.7 | 8.2 | 5.0 | 16.1 |
| Woollen and worsted yarms |  | 27.8 | 26.3 | 14.4 | 11.4 | 9.4 | 7.9 | 7.6 | 7.9 |
| Woolen and worsted woven tissue ${ }^{2}$ | ue ${ }^{2}$ Mn.sq.yds. | 90.4 | 93.3 | 82.1 | 86.2 | 73.0 | 44.2 | 34.2 | 40.6 |

Coal shipped for the use of steamers, etc, engaged in the foreign trade (including fishing vessels)
This item is not an "export" and
shown in Tables $9.4,9.6$ and 9.8 .
2. Excluding "tissues wholly of mohair alpaca and cashmere", "damasks, tapestries, brocades and the like

## 9. 2 Quantity of exports of the produce and manufactures of the United Kingdom

 continued Principal articles exported|  | Unit | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Articles wholly or mainly manufactured (continued) |  |  |  |  |  |  |  |  |  |
| Artifical silk |  |  |  |  |  |  |  |  |  |
| Yarns Tissues | $\begin{array}{r} \mathrm{Mn.} \mathrm{lb} \text {. } \\ \mathrm{Mn.} \mathrm{sq} . \mathrm{yds} . \end{array}$ | $\begin{aligned} & 8.0 \\ & 60.7 \end{aligned}$ | $\begin{array}{r} 6.9 \\ 728 \end{array}$ | $\begin{aligned} & 15.0 \\ & 83.3 \end{aligned}$ | $\begin{aligned} & 20.2 \\ & 88.1 \end{aligned}$ | $\begin{array}{r} 16.3 \\ 114.3 \end{array}$ | $\begin{aligned} & 13.8 \\ & 75.0 \end{aligned}$ | $\begin{aligned} & 15.6 \\ & 90.2 \end{aligned}$ | $\begin{aligned} & 14.2 \\ & 93.4 \end{aligned}$ |
| Cordage and cordage manufactures of hemp, cotton, etc. | Th. tons | 21.4 | 20.1 | 15.0 | 9.2 | 6.2 | 14.7 | 8.7 | 11.5 |
| Linen and hemp manufactures: |  |  |  |  |  |  |  |  |  |
| Jute manufactures, other than corcdage | Th. tons | 74.8 | 624 | 39.0 | 23.7 | 13.0 | 8.1 | 6.2 | 10.3 |
| Footwear, wholly or mainly of leather | Th. doz prs. | 374.0 | 335.1 | 263.8 | 454.5 | 181.6 | 89.5 | 82.3 | 218.7 |
| Chemical manufactures and products: |  |  |  |  |  |  |  |  |  |
| Ammonium sulphate <br> Copper sulphate | Th. tons | $\begin{aligned} & 313.4 \\ & 309 \end{aligned}$ | $\begin{array}{r} 286.2 \\ 31.8 \end{array}$ | $\begin{array}{r} 166.3 \\ 344 \end{array}$ | $\begin{aligned} & 10.2 \\ & 31.3 \end{aligned}$ | $\begin{aligned} & 39.2 \\ & 24.8 \end{aligned}$ | $\begin{array}{r} 6.1 \\ 35.5 \end{array}$ | $\begin{gathered} 133.1 \\ 20.3 \end{gathered}$ | $\begin{gathered} 252.3 \\ 44.3 \end{gathered}$ |
| Disinfectants and insecticides |  | 18.9 | 20.4 | 23.6 | 19.1 | 15.9 | 21.6 | 15.4 | 23.7 |
| Sodium compounds |  | 356.5 | 450.4 | 479.0 | 441.1 | 470.7 | 413.6 | 345.3 | 442.6 |
| Dyes and dyestuffs |  | 14.8 | 15.8 | 13.0 | 10.3 | 10.0 | 10.4 | 7.3 | 9.2 |
| Petroleum, refined: |  |  |  |  |  |  |  |  |  |
| Lubricating oil Other sorts | Mn. gals. | $\begin{array}{r} 17.5 \\ 116.2 \end{array}$ | $\begin{aligned} & 16.4 \\ & 99.2 \end{aligned}$ | $\begin{array}{r} 4.7 \\ 13.6 \end{array}$ | $\begin{aligned} & 3.3 \\ & 2.3 \end{aligned}$ | $\begin{aligned} & 1.6 \\ & 1.0 \end{aligned}$ | $\begin{aligned} & 0.9 \\ & 0.2 \end{aligned}$ | $\begin{aligned} & 1.4 \\ & 5.9 \end{aligned}$ | 4.0 1.1 |
| Soap | Th. tons | 36.7 | 37.3 | 33.2 | 30.3 | 3.4 | 4.0 | 9.0 | 40.4 |
| Paper and board: |  |  |  |  |  |  |  |  |  |
| Printing paper, not coated All other paper and board | Th. tons | $\begin{aligned} & 94.7 \\ & 81.7 \end{aligned}$ | $\begin{aligned} & 70.5 \\ & 85.9 \end{aligned}$ | $\begin{array}{r} 40.4 \\ 108.0 \end{array}$ | $\begin{aligned} & 10.3 \\ & 62.1 \end{aligned}$ | $\begin{array}{r} 6.1 \\ 31.3 \end{array}$ | $\begin{array}{r} 4.3 \\ 23.4 \end{array}$ | $\begin{array}{r} 4.7 \\ 21.5 \end{array}$ | $\begin{array}{r} 8.3 \\ 26.9 \end{array}$ |
| Railway equipment |  |  |  |  |  |  |  |  |  |
| Carriages, wagons, trucks and parts thereof |  | 56.5 | 27.4 | 9.1 | 11.0 | 6.1 | 7.8 | 8.5 | 11.8 |
| Road vehices: |  |  |  |  |  |  |  |  |  |
| Motor cars, new | Thousands | 44.1 | 43.2 | 20.7 | 3.8 | 0.1 | - | - | 2.0 |
| Commercial vehicles, new: |  |  |  |  |  |  |  |  |  |
| Tractors |  | 7.0 | 4.8 | 28 | 0.3 | 0.1 | 0.5 | 1.8 | 5.5 |
| Others ${ }^{2}$ |  | 3.4 | 23 | 3.9 | 2.0 | 0.3 | 1.1 | 3.7 | 5.4 |
| Chassis for motor vehicles with engines |  | 35.0 | 31.9 | 15.4 | 1.0 |  |  | 0.2 | 1.3 |
| Motor cydes and tri-cars |  | 19.8 | 18.9 | 14.4 | 5.2 | 0.8 | 0.5 | 1.7 | 4.0 |
| I. Excluding "pile fabrics", "damasks, tapestries, brocades and the like" Source: Board of Trade "ribbons" and "lace and lace net of all kinds". <br> 2. Including industrial trucks. |  |  |  |  |  |  |  |  |  |

A
hough the war economy was run on the basis of physical planning rather than financial planning the state could not ignore financial matters. Given its increased expenditure on war activities and the adverse movements in the balance of payments the state had to ensure that it could finance both its own expenditure and current account deficit and the external debt

Information on central government finance is presented in two batches of tables: tables 10.3-10.4 provide information
on revenue and expenditure by financial year (that is, 1939 40 represents I April 1939 to 3 | March 1940) and tables | 1.7 - 11.8 provide information on a calendar year basis (the sum of the total revenue from table 11.6 and the total sum of the total revenue from table 11.6 and the total
deficit on the current account in table 11.7 gives total expenditure). The rise in central government expenditure was dramatic: between 1938/39 and 1940/41 it increased from $£$ I billion to almost $£ 4$ billion and by $1944 / 5$ was in excess of $£ 6$ billion; on a calendar year basis it increased from $£ 0.8$ billion in 1938 to a peak of $£ 5.6$ billion in 1943 (tables 10.4 and $11.7-11.8$ ). This rise was almost wholly attributable to increases in expenditure on defence which attributable to increases in expenditure on defence which had accounted for less than $£ 4$ in every $£ 10$ of ordinary expenditure in 1938 but accounted for more than $£ 9$ o of every $£ 10$ spent by 1944 (table 10.4). The rapid expansion of expenditure meant that in the early stages of the war the state had to rely on borrowing rather than taxation to finance it: between 1938 and 1940 tax revenue increased from $£ 0.7$ billion to $£ 1.2$ billion whilst borrowing (as measured by the deficit on the current account) exploded from $£ 0.1$ billion to $£ 2.1$ billion (tables 11.7 - 11.8 ; see also table 10.3). Thereafter tax revenue increased more rapidly than borrowing although it did not exceed the latter until 1944. Thus, between 1939 and 1945 the the latter unti 1944. Thus, between 1939 and 1945 the burden of financing government expenditure was roughly shared between tax revenue and increases in the central
government current account deficit (tables $11.7-11.8$ ).

## 10. Total central government expenditure




Income tax was throughout the war the most important source of tax revenue (accounting for over 40 per cent of the total) the standard rate of income tax doubled from 5 shillings in 1938 to ten shillings in 1942 (that is, from 25 per cent to fifty per cent) and the tax base itself was greatly cent to fifty per cent) and the tax base itself was greatly
widened through such measures as the Pay-As-You-Earn scheme (introduced in 1943) (Sayers 1956: | 12 -3; table II.6). An important new source of tax revenue was the Excess Profits Tax which was an attempt to stop wartime profiteering by taxing profits in excess of peacetime levels was initially set at a rate of 60 per cent but was raised in 1940 to 100 per cent. At its peak in 1944 the Excess Profits Tax yielded 15 per cent of the total tax revenue (table II.7)

Government borrowing was dominated by borrowing at home and since the state wished to keep its wartime debt as illiquid as possible, it focused on accumulating long term debt rather than short term (or floating) debt; during the war the ratio of long term to short term debt was approximately two to one (table II.8). The state pursued a policy of forced savings' by using direct controls and policy of 'forced savings' by using direct controls and
financial inducements to mop up excess money in the financial inducements to mop up excess money in the
economy and this served not only to provide funding for it expenditure but to also restrain inflationary pressures. Direct controls were used to limit investment opportunities and to force the clearing banks to make available their idle balances whist financial inducements included old and new instruments geared towards both the small investor (the National Savings Certificate and Defence Bonds) and to the large investor and firms (the National War Bonds, Savings large investor and firms (the National War Bonds, Savings
Bonds and the Tax Reserve Certificate) (Sayers 1956: 163218 ; tables $10.3,10.5$ and 11.8 ).

The other serious financing problem facing the British war economy was that of the external debt. Total wartime current account debits amounted to $£ 16.9$ billion whilst credits came to only $£ 6.9$ billion leaving a deficit of $\$ 10$ billion to be financed (Sayers 1956: 499). It was partly financed though the disposal of overseas weath: by selling overseas assets, accumulating external liabilities and running down gold and hard currency reserves (table 10.8). Britain pursued the policy of selling overseas assets vigorously (indeed, in the first year of the war the pressure on the British economy was so great that assets in North America were sold off cheaply) and by the end of the war $£$. . billion of overseas assets had been disposed of (table 10.8). Initially, gold and dollar reserves were also depleted rapidly: within eighteen months they were reduced by $£ 531$ million and driven to the point of exhaustion, although thereafter they recovered and between 1941 and the end of the war they increased by $£ 3.9$ million (Sayers 1956: 438-64; table 10.8).

The combined impact of selling both overseas assets and gold and dollar reserves did not match that of the accumulation of external liabilities: in June 1939 the total British overseas debt had stood at $£ 0.5$ billion but by June British overseas debt had stood at $£ 0.5$ bilion but by June
1945 it had increased to $£ 3.4$ billion, of which $£ 2.7$ billion was held in the form of sterling balances (Sayers 1956: 439 497). Sterling balances were credits of other countries which were held in blocked accounts in London and their wartime accumulation was the way Britain effectively paid for the large volume of wartime supplies from Sterling Area countries While they helped to finance Britain's war Area countries. While they helped to finance Britain's war effort their rapid accumulation (by countries such as India
Egypt and Sudan) left the country with a large postwar

burden, not least because interest and service charses would have to be paid on them thus depressing invisible earnings (Milward 1984: 68-9; Pollard 1983: 218-9).

Despite all these measures, however, the pressure on the external account was only relieved by the intervention of the USA which through the Lend-lease arrangements effectively gave Britain a grant for the duration of the wa (Allen 1946). The total amount of Lend-lease aid by the USA to the whole of the British Empire came to $\$ 30$ billion, of which the British government received $\$ 27$ billion
( $£ 5$ billion): against this must be set the reciprocal aid tha Britain provided to the USA which came to $\$ 5.7$ billion ( $£ 1.2$ billion) which thus yields a net figure of approximately $\$ 21$ billion (Allen 1946: 256-63; tables 10.910.10). Taking into account other aid from the USA and other countries net wartime grants financed 54 per cent of the $£ 10$ billion gap in the external account between total debits and credits, compared to 35 per cent accounted for by the accumulation of overseas debt and 12 per cent by the sale of overseas assets (Howlett 1994b: 18-2 1 ).

### 10.3 Central Government revenue (Exchequer receipts)

$\qquad$

|  | 1937/38 | 1938/39 | 1939/40 | 1940/41 | 1941/42 | 1942/43 | 1943/44 | 1944/45 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ordinary and self-balancing revenue |  |  |  |  |  |  |  |  |
| Total | 948.7 | 1,006.2 | 1,132.2 | 1,495.3 | 2,174.6 | 2,922.4 | 3,149.2 | 3,354.7 |
| Ordinary revenue:Total | 872.6 | 927.3 | 1,049.2 | 1,408.9 | 2,074 1 | 2,819 9 | 3,038.5 | 3,238.1 |
| Inland Revenue: |  |  |  |  |  |  |  |  |
| Income tax and surtax | 355.1 | 398.4 | 459.9 | 600.0 | 844.6 | 1,082.2 | 1,259.6 | 1,390.3 |
| Death | 89.0 | 77.4 | 459.9 | 600.0 | 90.9 | 15.3 | 1,259.6 | 17.0 |
| Stamp duties | 24.2 | 21.0 | 17.1 | 13.7 | 14.1 | 15.3 | 17.7 | 17.0 |
| National defence contribution and excess profits tax | 1.4 | 21.9 | 26.9 | 96.2 | 269.1 | 377.5 | 500.1 | 510.4 |
| Other Inland Revenue duties | 1.7 | 1.6 | 1.3 | 1.0 | 0.9 | 1.0 | 1.0 | 0.8 |
|  |  |  |  |  |  |  |  |  |
| Customs | 221.6 | 226.3 | 262.1 | 304.9 | 378.4 | 459.5 | 560.8 | 579.4 |
| Excise | 113.7 | 114.2 | 137.9 | 224.1 | 325.7 | 425.3 | 482.2 | 496.9 |
| Motor vehicle duties | 34.6 | 35.6 | 34.1 | 38.0 | 38.4 | 28.5 | 27.3 | 29.0 |
| Post Office (net receipt) | 10.5 | 9.5 | 3.8 | 15.3 | 13.7 | 12.4 | 0.4 |  |
| Post Office fund |  |  |  |  |  |  |  |  |
| Broadcast receiving licences | -1 | -1 | $5^{-1}$ | $3^{-1}$ | ${ }^{-1}$ | 4.6 | 4.8 | 4.8 |
| Miscellaneous ${ }^{2}$ | 20.0 | 19.9 | 26.5 | 34.8 | 98.4 | 320.3 | 85.3 | 98.5 |
| Self-balancing revenue ${ }^{3}$ | 76.1 | 79.0 | 83.1 | 86.4 | 100.6 | 102.5 | 110.6 | 116.6 |
| Other receipts, repayments, etc. |  |  |  |  |  |  |  |  |
| Total | 267.6 | 190.2 | 808.9 | 2,518.2 | 2,748.1 | 2,852.5 | 2,797.5 | 2.866 .4 |
| Receipts under various Acts: |  |  |  |  |  |  |  |  |
| Applicable to interest outside the per manent debt charge ${ }^{4}$ Other ${ }^{5}$ | - | $\begin{aligned} & 1.9 \\ & 10.0 \end{aligned}$ | 5.8 | 20.6 | $\begin{aligned} & 20.7 \\ & 20.0 \end{aligned}$ | 20.8 | 20.1 | 20.0 |
| Money raised by the creation of debt: |  |  |  |  |  |  |  |  |
| For capital expnditure issues | 17.0 | 22.6 | 22.1 | 11.9 | 9.8 | 9.9 | 9.1 | 6.8 |
| For other issues (net) | 248.9 | 22.6 | 22.1 | 1,939.6 | 2,596.9 | 2,238.3 | 2,224.0 | 2,168.7 |
| Ways and Means advances (net) |  | 14.8 | 33.6 | 429.5 | 22.9 | 93.9 | 1.05.5 | 469.5 |
| Treasury deposits by banks (net) |  |  |  |  |  |  |  |  |
| Repayments in respect of issues under various Acts, etc. ${ }^{6}$ | 1.6 | 2.1 | 2.4 | 5.7 | 10.8 | 17.2 | 18.0 | 19.5 |

1. Included in Post Office self-balancing revenue
2. Including Crown lands and receipts from sundry loans. The figure for $1942 / 1943$ includes
3. Including Crown lands and receipts from sundry loa
$£ 2247$ million Canadian Government contribution.
4. Post Office.
5. Defence Lo

Dence Loans Act, 1937, and Overseas Trade Guarantees Act, 1939
5. Eire (Confirmation of Agreements) Act, 1938 and War Damage Act, 1941.
6. Land Settlement (Facilites) Acts, 1919 and 1921 TTithe Act, 1936; Overseas Trade

Guarantees Act, 1939: North At antic Shipping Act, 19344, Defence Loans Acts, 1937 and
1939. Net repayments of bullion advances are also induded.

PUBLIC FINANCE

## | 0.4 Central Government expenditure (Exchequer issues)

| Years ended 31 March |  |  |  |  |  |  |  | $\frac{£ \text { millior }}{1944 / 45}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1937/38 | 1938/39 | 1939/40 | 1940/41 | 1941/42 | 1942/43 | 1943/44 |  |
| Ordinary and self-balancing expenditure |  |  |  |  |  |  |  |  |
| Total | 919.9 | 1,018.9 | 1,408.2 | 3,970.7 | 4,876.3 | 5,739.9 | 5,909.3 | 6,179.5 |
| Ordinary expenditure: Total | 843.8 | 940.0 | 1,325.1 | 3,884.3 | 4,775.7 | 5,637.4 | 5,798.7 | 6,062.9 |
| Consolidated Fund services | 238.8 | 244.3 | 246.9 | 247.2 | 274.1 | 341.6 | 391.2 | 437.3 |
| Supply services:Total | 605.0 | 695.7 | 1,078.3 | 3,637.1 | 4,501.6 | 5,295.8 | 5,407.5 | 5,625.6 |
| Defence' | 197.3 | 254.4 | 626.4 | 3,220.0 | 4,085.0 | 4,840.0 | 4,950.0 | 5,125.0 |
| Civil votes: Total | 394.1 | 427.2 | 437.4 | 402.3 | 400.6 | 437.7 | 438.8 | 474.4 |
| Education and Broadcasting | 59.9 | 61.6 | 63.1 | 63.3 | 65.6 | 77.5 | 79.5 | 85.3 |
| Heath, Labour and Insurance | 161.6 | 165.7 | 167.2 | 164.7 | 170.0 | 185.6 | 198.7 | 208.4 |
| Other | 172.6 | 199.9 | 207.1 | 174.3 | 165.0 | 174.6 | 160.6 | 180.7 |
| Customs and Excise | 5.9 | 6.0 | 6.1 | 6.2 | 6.3 | 6.0 | 5.6 | 5.8 |
| Inland Revenue | 7.8 | 8.2 | 8.3 | 8.6 | 9.7 | 12.1 | 13.1 | 13.7 |
| Post Office services | - | - | - | - |  |  | - | 6.8 |
| Self-balancing expenditure ${ }^{2}$ | 76.1 | 79.0 | 83.1 | 86.4 | 100.6 | 102.5 | 110.6 | 116.6 |
| Other issues |  |  |  |  |  |  |  |  |
| Total | 296.3 | 177.5 | 532.9 | 42.6 | 46.5 | 35.0 | 37.4 | 41.5 |
| Interest outside the permanent debt charge ${ }^{3}$ |  | 1.9 | 5.8 | 20.6 | 20.7 | 20.8 | 20.4 | 20.0 |
| Issues to meet capital expenditure | 17.0 | 22.6 | 22.1 | 11.9 | 9.8 | 9.9 | 9.1 | 6.8 |
| Issues for the redemption of debt: |  |  |  |  |  |  |  |  |
| Ways and Means advances (net) | 10.4 | - | - | - | - | - | - |  |
| Sinking funds | - | - | 4.2 | - | 12.2 | 0.2 | 5.2 | 10.9 |
| Issues under various Acts |  |  |  |  |  |  |  |  |
| Defence Loans Acts, 1937 and 1939 | 64.9 | 128.1 | 491.8 | - | - | - | - | - |
| Other ${ }^{4}$ | 204.4 | 24.7 | 9.1 | 9.9 | 3.9 | 3.8 | 3.2 | 4.0 |
| Increase in Exchequer balances | -0.3 | 0.1 | -0.1 | 0.2 | -0.2 | 0.4 | -0.4 | - |


3. Issues under the Defence Loans Att, 1937 and the Overseas Trade Guarantes Act, 1939 .
4. Finance Act, 1988, Section 9 ; North Atlantic Shipping Act, 1934-Tithe Act. 1936:
4. Finance Act, 1908, Section 9: North Atlantic Shipoing AAt, 1934-T TThe Act, 1936;

Exchange Equalisation Account Act, 1937 : Eire (Confirmation of Agreements) Act, 19
Anglo-Turkish (Armaments Credit) Agreement Act, 1938; Czecho-Sovakia (Financial


### 10.5 Floating debt


| 0.6 Currency circulation and bank clearings

| lion |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Currency circulation |  |  |  |  | Bank clearings' |  |  |
|  | Notes and coin outstanding |  |  | Held by banks ${ }^{4}$ | Average estimaqted circulation with the public | Total | London Bankers' ClearingHouse$\qquad$ | Provincial clearing houses |
|  | Total | Notes ${ }^{2}$ | Estimated coin ${ }^{3}$ |  |  |  |  |  |
| 1935 | 549 | 480.2 | 69 |  |  |  |  |  |
| 1936 | 582 | 511.7 | 70 | 188.4 | 394 | 136.9 | 122.7 131.9 |  |
| 1937 | 626 | 552.4 | 74 | 186.1 | 440 | 144.3 | 139.5 | 4.53 4.81 |
| 1938 | 635 | 558.3 | 77 | 189.3 | 446 | 133.1 |  | 4.81 4.10 |
| 1939 | 658 | 578.3 | 80 | 189.1 | 446 | 133.1 124.3 | 129.0 120.1 | 4.10 4.16 |
| 1940 | 731 | 644.5 | 86 | 206.1 | 459 525 | 124.3 133.6 | 129.1 | 4.16 4.54 |
| 1941 | 823 | 730.4 | ${ }_{93}$ | 215.0 | 608 | 133.6 144.4 | 129.1 139.6 | 4.54 4.78 |
| 1942 | 1,004 | 902.7 | 101 | 234.9 | $\begin{aligned} & 689 \\ & 769 \end{aligned}$ | 143.4 | 139.6 158.5 | 4.78 4.82 |
| 1943 | 1,184 | 1,072.6 | 112 | 250.4 | 933 | 189.8 | 186.0 | 4.82 3.80 |
| 1944 | 1,364 | 1,244.0 | 120 | 259.0 |  | 207.8 | 204.7 | 3.80 3.08 3 |
| 1945 | 1,519 | 1,391.4 | 128 | 256.0 | 1,263 | 223.6 | 220.2 |  |

1. Averages of working days. Figures are not strictly comparable throughout, owing in particular
to changes in the composition of the clearing while the clearing banks' emergency operations

Sources: Bank of England and were in force from September 1939 .
2. Averages of Wednescdyy for Bank of England notes and averages of Saturdays for Scottish
and Northern lris bank notes.
and Northerm lrish bank notes
A. Excuraing coin other than gold coin in the Bank of England lssue Department.
of notes and coinessays for Bank of England reserve and London clearing banks' holdings
notes and coin. Ten London clearing banks in 1935 and subseauuently eleven

### 10.7 Prices and yields of British Government securities'

|  | Short dated ${ }^{2}$ |  | Medium dated ${ }^{2}$ |  | 31/2\% War Loan |  | 21/2\% Consols |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Price | Yield | Price | Yield | Price | Yield | Price | Yield |
| 1935 | 120.1 | 2.46 | 116.8 | 3.03 |  |  |  |  |
| 1936 | 118.1 | 2.45 | 117.0 | 3.03 2.99 | 105.6 106.0 | 3.08 3.03 3 | $86.4$ | 2.89 |
| 1937 | 112.9 | 2.92 | 111.4 | 3.27 | 100.9 | 3.42 | 74.1 | 2.94 3 3 |
| 1938 | 112.2 | 2.73 | 111.4 | 3.27 | 100.9 | 3.42 3.42 3 | 74.1 | 3.38 |
| 1940 | 107.6 | 3.31 | 104.9 | 3.66 | 93.0 |  | $\begin{aligned} & 14.1 \\ & 67.2 \end{aligned}$ | $\begin{aligned} & 3.72 \\ & 3.40 \end{aligned}$ |
|  | 108.0 | 2.81 | 110.7 | 3.26 | 99.3 | $\begin{aligned} & 3.76 \\ & 3.52 \end{aligned}$ | $\begin{gathered} 67.2 \\ 73.5 \end{gathered}$ |  |
| 1942 | 100.1 | 2.48 |  |  |  |  |  |  |
|  | 100.5 | 2.33 | 101.2 | 2.89 | 104.8 | $\begin{aligned} & 3.08 \\ & 2.96 \end{aligned}$ | $\begin{aligned} & 80.0 \\ & 82.6 \end{aligned}$ | $\begin{aligned} & 3.13 \\ & 3.03 \end{aligned}$ |
| 1943 | 100.3 | 2.45 | 99.7 |  |  |  |  |  |
|  | 100.6 | 2.37 | 99.6 | 3.02 | $\begin{aligned} & 103.8 \\ & 103.3 \end{aligned}$ | $\begin{aligned} & 3.04 \\ & 3.05 \end{aligned}$ | $\begin{aligned} & 80.7 \\ & 79.6 \end{aligned}$ | $\begin{aligned} & 3.10 \\ & 3.14 \end{aligned}$ |
|  | 100.4 | 2.44 | 100.2 | 2.99 | 103.7 | 294 | 85.6 | 292 |
| 1. Averages of working days, allowing for accrued interest. In calculating the yields for shortdated and medium-dated securities redemption is assumed at the later date if price is below par and at the earlier date if price is above par. For $31 / 2 \%$ War Loan a flat yield is taken if price is below par and redemption is assumed in 1952 if price is above par. For $21 / 2 \%$ Consols a flat yield is taken throughout. Income tax is neglected in calculating the yields. <br> 2. Representative securities changed from time to time, namely: Short-dated: $5 \%$ Conversion <br> Loan 1944-64 in 1935 to 1940; $21 / 2 \%$ National War Bonds 1945-47 in 1941 and $1942 ; 21 / 2 \%$ <br> National War Bonds 1949-51 in 1943 and 1944; 21/2\% National War Bonds 1952-54 in 1945. <br> Medium-dated: 4\% Funding Loan 1960-90 in 1935 to 1940; $3 \%$ War Loan 1955-59 in 1941 and 1942; $3 \%$ Savings Bonds $1960-70$ in 1943 to 1945 . |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

### 10.8 External disinvestment

|  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Total million |  |  |  |  |  |  |

Comprising banking liabilities, less assets, and funds held in the United Kingdom as cover for
overseas currencies, etc.
After deduution of outstanding liabilites to provide gold against sterling liabilities and of
liabilities to convert U.SA holdings of sterling into dollars on demand.
liabilities to convert U.S.A. holdings of stering into dolars on demand

## I 0.9 United States lend-lease aid to the British Empire

|  | 1941 |  |  | 1943 | 1944 |  | 1945 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | December ${ }^{\text {to }}$ |  |  |  |  | January | July |
|  |  |  |  | to June |  | to August |
| Total aid to British Empire | 30,073 | 1,082 | 4,757 |  | 9,031 | 10,766 | 3,604 | 833 |
| Ships (sail-away) | 2,107 | 65 | 195 | 1,078 | 540 | 160 | 69 |
| Munitions destined for: |  |  |  |  |  |  |  |
| United Kingdom | 8,648 | 86 | 987 | 2,797 | 3,807 | 822 | 149 |
| Australia | 899 | 8 | 152 | 280 | 225 | 180 | 54 |
| New Zealand | 144 | - | 52 | 58 | 21 | 8 | 5 |
| South Africa | 194 | - | 40 | 88 | 55 | 10 | I |
| India | 1,422 | 8 | 230 | 371 | 555 | 227 | 31 |
| Colonies | 325 | 8 | 74 | 129 | 89 | 23 | 2 |
| Other war theatres | 3,902 | 76 | 610 | 1,205 | 1,349 | 493 | 169 |
| Other goods destined for: |  |  |  |  |  |  |  |
| United Kingdom | 7,442 | 576 | 1,404 | 1,782 | 2,405 | 1,094 | 181 |
| Australia | 483 | 6 | 83 | 165 | 167 | 52 | 10 |
| New Zealand | 95 | । | 17 | 35 | 28 | 11 | 3 |
| South Africa | 67 | - | 20 | 29 | 18 |  |  |
| India | 766 | 1 | 87 | 175 | 295 | 157 | 51 |
| Colonies | 235 | 2 | 20 | 32 | 75 | 97 | 9 |
| Services | 3,344 | 245 | 786 | 807 | 1,137 | 270 | 99 |
|  |  |  | Sources: Reports to Congress on lend-lease operations, and Professor R. G. D.Alen's paper "Mutual Aid between the U.S. and the British Empire, 1941-45 "read before the Royal Statistical Society, 1946. |  |  |  |  |


| £ million |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | To 30 June <br> 1943 | Year ended 30 June |  | I July to 1 September 1945 |
|  |  |  | 1944 | 1945 |  |
| Total reciprocal aid | 1,896.0 |  |  |  |  |
| Aid to United States: |  |  |  |  |  |
| Total | 1,201.2 | 229.7 | 420.9 | 481.6 | 69.0 |
| In United Kingdom: |  |  |  |  |  |
| Military stores | 189.6 | 46.3 | 61.6 | 74.1 | 7.6 |
| Petroleum | 213.6 | 5.4 | 58.9 | 135.1 | 14.2 |
| Food | 19.1 | 0.1 | 8.1 | 8.9 | 14.2 2.0 |
| Services | $297.5$ | 41.9 | $108.3$ | 128.8 | 18.5 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Military stores | 25.2 | 17.6 | 5.6 | 1.5 | 0.5 |
| Food and materials Miscellaneous and Services | 65.2 | 2.3 | 19.4 | 37.1 | 6.4 |
| In overseas theatres: |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Petroleum, India | 60.7 | 16.4 | 29.2 | 24.5 | $2.5{ }^{\prime}$ |
| Petroleum, other | 22.5 | 2.4 | 12.0 | 38.3 | $8.0{ }^{\prime}$ |
| Construction | 8.7 | 0.5 | 7.9 | 13.2 | 2.8 |
| Aid to U.S.S.R. | 312.0 | 187.7 | 93.3 | 27.0 | 4.0 |
| Aid to other countries | $382.8{ }^{\text {² }}$ |  | .. |  |  |
| 1. Estimated. <br> 2. Incomplete. |  |  |  | and Profes S. and the the Roy | D. Allen's paper Emplre, 1941-45" al Society, 1946. |

## NATIONAL INCOME

necessary expenditure); immense potential inflationary pressures within the war econ wthin the war economy and the state needed to against such latent destabilising forces. Thus, in devising its budgetary policy the state first needed to assess what the potential of the the potential of the involved the calculation Ivolved the calculation of national income and
its main components; then, it could calculate what level of taxation and forced savings were necessary to dampen inflationary pressures within the economy, and which would also provide finance for government expenditure. The 1941 budget adopted this approach (utilising the work of Meade and Stone) and at the same time transformed the budget and Stone) and at the same time transformed the budget
speech from a bland statement of government revenue and speech from a bland statement of government revenue and expenditure into the comprehensive survey of the economy that we are now used to. It also transformed budgetary policy from a merely reactive tool into a proactive one in that price and income stabilisation became explicit goals, albeit within a simplified framework in whic trade and capital were both tightly controlled by the state (Sayers 1956: 108-10; Booth 1989: 68-9).

The wartime trends in nominal national income reveal rapid growth: national income increased by two-thirds between 1939 and 1945 , with the most rapid period of growth occurring between 1939 and 1945 (table I I.3) There was also a marked shift in the distribution of national expenditure as wartime commitments caused the government sector to expand rapidly: in 1938 the government sector had accounted for an eighth of total national expenditure, by 1940 its share was 42 per cent, in the following year it had reached half the total, and it

peaked at 52 per cent in 1943 (table II.3). The growth of the government sector was at the expense of consumption, whose share of national expenditure fell from 75 per cent in 1938 to 54 per cent in 1943 (expenditure on non-essential household goods, private motoring and clothing were affected most), and investment (there was substantial negative non-war capital formation throughout this period) (tables 11.3 and 11.9 ). Given the wartime inflation and the increased size of the working population the performance in real terms was less impressive: real Gross Domestic Product (GDP) at its wartime peak was 25 per cent higher than it had been in 1939 and real GDP per person employed was 15 per cent higher (which almost certainly still overstates the true position since the average hours worked per employee also increased sharply in the first half of the war), and both had fallen back to below their 1940 level by 1945 (Howlett 1994b: 4-7). However, compared to the other major combatant nations the wartime increase in real GDP was still impressive with only the powerhouse of the USA economy (whose real GDP increased by 65 per cent economy (whose real GDP increased by 65 per cent
between 1939 and 1944) performing better (Howlett between 1939
1994b: 7-10).

## | . 3 National income, depreciation and expenditure

| £ million |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| National income <br> Wages <br> Salaries <br> Pay and allowances of the Armed Forces <br> Professional earmings <br> Income from farming <br> Profts of other sole traders and partnerships <br> Trading profits of companies <br> Operating profits of public enterprises <br> Rent of land and buildings | $\begin{array}{r} 1,735 \\ 1,110 \\ 78 \\ 84 \\ 60 \\ 440 \\ 543 \\ 25 \\ 395 \end{array}$ | $\begin{array}{r} 1,835 \\ 1,150 \\ 124 \\ 82 \\ 80 \\ 860 \\ 715 \\ 22 \\ 404 \end{array}$ | $\begin{array}{r} 2,100 \\ 1,220 \\ 386 \\ 78 \\ 143 \\ 490 \\ 965 \\ 22 \\ 408 \end{array}$ | $\begin{array}{r} 2,400 \\ 1,350 \\ 621 \\ 80 \\ 191 \\ 545 \\ 1,105 \\ 33 \\ 404 \end{array}$ | $\begin{array}{r} 2,655 \\ 1,390 \\ 805 \\ 86 \\ 217 \\ 580 \\ 1,260 \\ 77 \\ 400 \end{array}$ | $\begin{array}{r} 2,800 \\ 1,450 \\ 999 \\ 94 \\ 231 \\ 585 \\ 1,290 \\ 91 \\ 400 \end{array}$ | $\begin{array}{r} 2,815 \\ 1,515 \\ 1,175 \\ 1, \\ 98 \\ 208 \\ 610 \\ 1,280 \\ 72 \\ 401 \end{array}$ | $\begin{array}{r} 2,810 \\ 1.580 \\ 1,223 \\ 105 \\ 194 \\ 690 \\ 1,225 \\ 22 \\ 403 \end{array}$ |
| Income arising in the United Kingdom Net income from abroad | $\begin{array}{r} 4,470 \\ \hline \end{array}$ | $\begin{array}{r} 4,872 \\ 140 \end{array}$ | $\begin{aligned} & 5,812 \\ & 140 \end{aligned}$ | $\begin{array}{r} 6,729 \\ \hline 110 \end{array}$ | $\begin{aligned} & 7,470 \\ & 70 \end{aligned}$ | $\begin{array}{r} 7,940 \\ 60 \end{array}$ | $\begin{aligned} & 8,174 \\ & 50 \end{aligned}$ | $\begin{aligned} & 8,252 \\ & 50 \end{aligned}$ |
| National income | 4,638 | 5,012 | 5,952 | 6,839 | 7,540 | 8.000 | 8,224 | 8,302 |
| Provision for depreciation | 450 | 470 | 490 | 490 | 505 | 510 | 515 | 535 |
| National income and provision for depreciation | 5,088 | 5,482 | 6,442 | 7,329 | 8,045 | 8.510 ch | 8,739 | 8,837 |
| National expenditure Consumption |  |  |  |  |  |  |  |  |
| goods and services <br> Public authorities current expenditure | 4,304 | 4,422 | 4,661 | 4,933 | 5,210 | 5,291 | 5,562 | 6,027 |
| on goods and services | 724 | 1,198 | 3,100 | 4,239 | 4,715 | 5,054 | 5,076 | 4,217 |
| Additions to assets: Gross domestic capital formation Net lending abroad and purchase of | 770 | (808) | (345) | (87) | (8) | (137) | (44) | (693) |
| assets and financial claims from overseas | -70 | -250 | -804 | -816 | -663 | -680 | -659 | -875 |
| Gross national expenditure at market prices Subsidies Less Indirect taxes | $\begin{array}{r} 5,728 \\ 37 \\ -677 \end{array}$ | $\begin{array}{r} 6,178 \\ 47 \\ -743 \end{array}$ | $\begin{array}{r} 7,302 \\ 102 \\ -962 \end{array}$ | $\begin{array}{r} 8,443 \\ 176 \\ -1,290 \end{array}$ | $\begin{array}{r} 9,270 \\ 209 \\ -1,434 \end{array}$ | $\begin{array}{r} 9,802 \\ 241 \\ -1,533 \end{array}$ | $\begin{aligned} & 10,023 \\ & 258 \\ & -1,542 \end{aligned}$ | $\begin{array}{r} 10,062 \\ 302 \\ -1,527 \end{array}$ |
| Gross national expenditure | 5,088 | 5.482 | 6,442 | 7,329 | 8,045 | 8.510 | 8,739 | 8,837 |

### 11.4 Revenue account of persons

|  | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Receipts <br> Wages <br> Salaries 1,110 <br> Pay and allowances of the Armed Forces Mixed incomes <br> Rent, dividends and interest <br> Transfer incomes | $\begin{array}{r} 1,735 \\ 1,150 \\ 78 \\ 584 \\ 1,111 \\ 272 \end{array}$ | $\begin{array}{r} 1,835 \\ 1,220 \\ 124 \\ 622 \\ 1,139 \\ 263 \end{array}$ | $\begin{array}{r} 2.100 \\ 1,350 \\ 386 \\ 711 \\ 1,167 \\ 266 \end{array}$ | $\begin{array}{r} 2,400 \\ 1,390 \\ 621 \\ 816 \\ 1,153 \\ 280 \end{array}$ | $\begin{array}{r} 2,655 \\ 1,450 \\ 805 \\ 883 \\ 1,205 \\ 300 \end{array}$ | $\begin{array}{r} 2,800 \\ 1,555 \\ 999 \\ 910 \\ 1,234 \\ \quad 32 \end{array}$ | $\begin{array}{r} 2,815 \\ 1,580 \\ 1,175 \\ 916 \\ 1,291 \\ 325 \end{array}$ | $\begin{array}{r} 2,810 \\ 1,223 \\ 989 \\ 1,335 \\ 503 \end{array}$ |
| Personal income | 4.890 | 5,133 | 5,850 | 6,620 | 7,238 | 7,718 | 8,068 | 8,440 |
| Payments <br> Expenditure on consumers' goods and services <br> Direct taxes: <br> On income <br> On capital <br> Additions to tax reserves <br> Net saving | $\begin{array}{r} 4,304 \\ 364 \\ 78 \\ 5 \\ 139 \end{array}$ | $\begin{array}{r} 4,422 \\ 382 \\ 77 \\ 30 \\ 222 \end{array}$ | $\begin{array}{r} 4,661 \\ 565 \\ 79 \\ 63 \\ 482 \end{array}$ | $\begin{array}{r} 4,933 \\ 730 \\ 163 \\ 192 \\ 602 \end{array}$ | $\begin{array}{r} 5,210 \\ 875 \\ 160 \\ 146 \\ 847 \end{array}$ | $\begin{array}{r} 5,291 \\ 1,108 \\ 151 \\ 71 \\ 1,097 \end{array}$ | $\begin{aligned} & 5,562 \\ & 1,254 \\ & 156 \\ & 21 \\ & 1,075 \end{aligned}$ | $\begin{array}{r} 6,027 \\ 1,301 \\ 158 \\ 34 \\ 920 \end{array}$ |
| Personal outlay and saving | 4,890 | 5,133 | 5,850 | 6,620 | 7,238 | 7,718 | 8,068 | 8,440 |

NATIONAL INCOME
| . 5 Revenue account of public authorities

| E million |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| Receipts |  |  |  |  |  |  |  |  |
| Direct taxes: On income On capital | $\begin{aligned} & 441 \\ & 78 \end{aligned}$ | $\begin{gathered} 494 \\ 77 \end{gathered}$ | $\begin{gathered} 688 \\ 79 \end{gathered}$ | $\begin{aligned} & 1,048 \\ & 163 \end{aligned}$ | $\begin{aligned} & 1,338 \\ & 160 \end{aligned}$ | $\begin{array}{r} 1,739 \\ 151 \end{array}$ | $\begin{array}{r} 1,937 \\ 156 \end{array}$ | $\begin{aligned} & 1,965 \\ & 158 \end{aligned}$ |
| Indirect taxes | 677 | 743 | 962 | 1,290 | 1,434 | 1.533 | 1,542. | 1,527 |
| Miscellaneous income from property Less Debt interest | $\begin{array}{r} 544 \\ -291 \end{array}$ | $\begin{array}{r} 53 \\ -302 \end{array}$ | $\begin{array}{r} 49 \\ -314 \end{array}$ | $\begin{array}{r} 66 \\ -342 \end{array}$ | $\begin{array}{r} 113 \\ -397 \end{array}$ | $\begin{array}{r} 132 \\ -453 \end{array}$ | $\begin{gathered} 118 \\ -511 \end{gathered}$ | $\begin{array}{r} 70 \\ -555 \end{array}$ |
| Revenue | 959 | 1,065 | 1,464 | 2,225 | 2,648 | 3,102 | 3,242 | 3,165 |
| Payments |  |  |  |  |  |  |  |  |
| Expenditure on goods and services Subsidies <br> Transfers to | $\begin{array}{r} 724 \\ 37 \end{array}$ | $\begin{aligned} & 1,198 \\ & 47 \end{aligned}$ | $\begin{aligned} & 3,100 \\ & 102 \end{aligned}$ | $\begin{aligned} & 4,239 \\ & 176 \end{aligned}$ | $\begin{array}{r} 4,715 \\ 209 \end{array}$ | $\begin{array}{r} 5,054 \\ 241 \end{array}$ | $\begin{array}{r} 5.076 \\ 258 \end{array}$ | $\begin{array}{r} 4,217 \\ 302 \end{array}$ |
| Revenue account of persons Private capital account | $272$ | $\begin{array}{r} 263 \\ 12 \end{array}$ | $\begin{array}{r} 266 \\ 52 \end{array}$ | $\begin{aligned} & 280 \\ & 263 \end{aligned}$ | $\begin{aligned} & 300 \\ & 221 \end{aligned}$ | $\begin{aligned} & 325 \\ & 190 \end{aligned}$ | $\begin{aligned} & 356 \\ & 117 \end{aligned}$ | $\begin{aligned} & 503 \\ & 170 \end{aligned}$ |
| Surplus on current account | -81 | -455 | -2,056 | $-2,733$ | -2,797 | -2,708 | -2,565 | $-2,027$ |
| Current expenditure and surplus | 959 | 1,065 | 1,464 | 2,225 | 2,648 | 3,102 | 3,242 | 3,165 |

## | | . 6 Combined capital account

| £ million |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| Receipts |  |  |  |  |  |  |  |  |
| Net saving by: |  |  |  |  |  |  |  |  |
| Persons |  |  |  |  | 847 | 1,097 | 1,075 | 920 |
| Companies | $\begin{aligned} & 170 \\ & -81 \end{aligned}$ | 175 -455 | 175 | 175 | 2215 | 235 | 235 | 245 |
| Additions to tax reserves by: |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Companies | 10 | 104 | $\begin{array}{r} 63 \\ 335 \end{array}$ | $\begin{aligned} & 192 \\ & 282 \end{aligned}$ | $\begin{aligned} & 146 \\ & 208 \end{aligned}$ | $\begin{aligned} & 71 \\ & 62 \end{aligned}$ | $\begin{array}{r} 21 \\ -13 \end{array}$ | $\begin{array}{r} 34 \\ -59 \end{array}$ |
| Provision for depreciation by: |  |  |  |  |  |  |  |  |
| Enterprises |  | 385 | 410 |  |  |  |  |  |
| Public authorities | 90 | 85 |  | 75 | 80 | 80 | 80 | 85 |
| Transfers from public authorities | 7 | 12 | 52 | 263 | 221 | 190 | 117 | 170 |
| Total sums set aside | 700 | 558 | -459 | -729 | -655 | -543 | -615 | -182 |
| Payments |  |  |  |  |  |  |  |  |
| Gross capital formation at home (l)Net lending abroad and purchase of assetsand financial claims from overseas | 770 | (808) | (345) | (87) | (8) | (137) | (44) | (693) |
|  | -70 | -250 | -804 | -816 | -663 | -680 | -659 | 875 |
| Gross capital formation at home and abroad | 700 | 558 | -459 | -729 | -655 | -543 | 615 | -182 |
| 1. The figures given for this item are residuals, not dire | estimat |  |  |  |  | Sourc | Central Static | Office |

## I 1.7 Central government revenue

| £ million |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| Direct taxes |  |  |  |  |  |  |  |  |
| Income tax and surtax | 371 | 410 | 551 | 741 | 921 | 1,184 | 1,353 | 1,426 |
| National defence contribution | 15 | 28 | 24 | 23 | 27 | 33 | 35 | 34 |
| Excess profts tax |  |  | 44 | 211 | 318 | 453 | 482 | 440 |
| Death duties | 78 | 77 | 79 | 88 | 94 | 97 | 107 | 119 |
| War damage premiums |  |  |  | 75 | 66 | 54 | 49 | 39 |
| Miscellaneous | - |  | 8 | 5 |  | -2 | -3 | -4 |
| Total | 464 | 515 | 706 | 1,143 | 1,426 | 1,819 | 2,023 | 2,054 |
| Indirect taxes |  |  |  |  |  |  |  |  |
| Customs and excise duties | 337 | 382 | 474 | 676 | 851 | 992 | 1,088 | 1,092 |
| Motor vehicle duties | 35 | 34 | 37 | 38 | 32 | 27 | 28 | 35 |
| Stamp duties | 21 | 19 | 14 | 14 | 16 | 17 | 17 | 23 |
| Post Office surplus | 11 | 8 | 19 | 25 | 31 | 36 | 39 | 37 |
| War risks insurance premiums |  | 14 | 124 | 239 | 199 | 152 | 58 | 14 |
| Miscellaneous | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 10 |
| Total | 412 | 465 | 676 | 1,000 | 1,137 | 1,233 | 1,239 | 1,211 |
| Total tax revenue | 876 | 980 | 1,382 | 2,143 | 2,563 | 3,052 | 3,262 | 3,265 |
| Income from property |  |  |  |  |  |  |  |  |
| Miscellaneous | -20 | -221 | 18 -242 | -33 | 79 -328 | 93 -386 | 80 | 33 -492 |
| Less National Debt interest | -223 |  |  |  |  |  |  |  |
| Total revenue | 673 | 771 | 1,158 | 1,905 | 2,314 | 2.759 | 2,897 | 2,806 |
|  |  |  |  |  |  | Source: | Itral Sta | al Office |

## | . 8 The finance of the central government deficit on current account

| £ million |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| Public borrowing at home |  |  |  |  |  |  |  |  |
| Small savings | 4 | 62 | 466 | 602 | 600 | 719 | 702 | 668 |
| Other public issues (net) | 73 | 10 | 567 | 1,031 | 1,047 | 1.059 | 896 | 1,176 |
| Floating debt | -179 | 280 | 517 | 903 | 476 | 1,017 | 1,081 | 557 |
| Tax reserve certificates |  |  |  | 17 | 453 | 177 | 113 | 41 |
| Total | -102 | 352 | 1,550 | 2,553 | 2,576 | 2,972 | 2,792 | 2,442 |
| Finance through government agencies |  |  |  |  |  |  |  |  |
| Extra-budgetary receipts, etc. | 254 | 185 | 598 | 217 | 210 | -100 | -60 | 298 |
| Less Sinking funds | -11 | -14 | -12 | -17 | -13 | -15 | -16 | -16 |
| Total | 243 | 171 | 586 | 200 | 197 | 115 | -76 | 314 |
| Gifts and loans from abroad |  |  |  |  |  |  |  |  |
| Canadian Government interest-free loan |  | - |  |  | 157 | -4 | $-13$ | -14 |
| Reconstruction Finance Corporation Loan |  | - | - | 87 | 4 | -7 | -11 | -10 |
| Credit granted by the United States Government as part of the Lend-Lease settlement |  | - |  |  |  |  |  | 161 |
| Total | - | - | - | 87 | 161 | -11 | $-24$ | 137 |
| Less Lending and net capital formation | -33 | -33 | -21 | -18 | -25 | - 20 | - 20 | -134 |
| Total deficit on current account | 108 | 490 | 2,115 | 2,882 | 2,909 | 2,826 | 2,672 | 2,131 |

## NATIONAL INCOME

## | . 9 Personal expenditure on consumers' goods and services (i) at current market prices


(ii) re-valued at 1938 prices

| $£$ million |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| Food | 1,305 | 1,310 | 1,145 | 1,082 | 1.114 | 1,076 | I. 137 |  |
| Alcoholic beverages | 285 | , 296 | 276 | 288 | 267 | 269 | 1,1374 | 1.154 297 |
| Tobacco | 177 | 182 | 178 | 196 | 206 | 204 | 205 | 225 |
| Rent, rates and water charges | 491 | 504 | 508 | 502 | 497 | 498 | 503 | 225 506 |
| Fuel and light | 197 | 199 | 203 | 205 | 199 | 187 | 193 | 197 |
| Durable household goods | 234 | 219 | 164 | 115 | 81 |  |  |  |
| Other household goods | 54 | 55 | 52 | 48 | 42 | 40 | 40 | 82 |
| Clothing | 446 | 444 | 372 | 275 | 273 | 247 | 275 | 279 |
| Books, newspapers and magazines | 64 | 63 | 59 | - 61 | 63 63 | 67 | 273 | 277 |
| Private motoring | 127 | 113 | 38 | 30 | 17 | 67 | 13 | 25 |
| Travel | 163 | 156 | 137 |  |  |  |  | 224 |
| Communication services | 29 | 29 | 27 | + 27 | 181 31 | 193 37 | 196 | 224 |
| Entertainments | 64 | 61 | 53 | 75 | 87 | 87 | 42 | 40 |
| Other services | 483 | 467 | 432 | 411 | 373 | 350 | 343 |  |
| Other goods | 177 | 177 | 162 | 131 | 109 | 110 | 113 | 120 |
| Income in kind of the armed forces | 17 | 28 | 66 | 97 | 105 | 135 | 151 | 147 |
| Less Foreign tourists' expenditure in the United Kingdom | -43 | -34 | -8 | -11 | -21 | -48 | -84 | 147 -39 |
| Personal expenditure in the United Kingdom | 4,270 | 4,269 | 3,864 |  |  |  |  |  |
| Personal expenditure abroad | 34 | 38 | 24 | 28 | -624 | 73 | 92 | ${ }_{8}^{3,85}$ |
| Total | 4,304 | 4,307 | 3,888 | 3,715 | 3,669 | 3,602 | 3.711 | 3,922 |

12 ENS STbens
12 Iss provewages AND NMIVIIIIUP PRICES minhmemin

he war brought about shortages of both goods
and labour (the latter spreading from a shortage skilled labour in the early years of the war to a shortage of all forms of labour by 1943) and it was therefore inevitable that both wages and prices would rise. This posed problems for the state as it desired neither wage nor price inflation (at the very least such inflation would increase the inflation (at the very least such inflation would increase
cost to the state of fighting the war) but it had to be careful not to alienate labour by imposing wage controls that were seen to be too strict or punitive. Thus, the state
evolved a series of measures, including food subsidies and ationing, to try and minimise the effects of these pressures.

The increased demand from the armed forces for men and, from the munitions industries, for labour, was the cause of the rise in wages: the increase in the weekly wages cause of the rise in wages. the increase in the weers in all industries and services in the frst year of the war ( 13.8 per cent) exceeded the total increase over the previous five years; over the whole period of the war wages rose by almost 50 per cent, although the increase was most rapid between 1939 and 1941, and after 1942 the annual increase in weekly wages never exceeded five per cent (Department of Employment and Productivity 1971:53). The pressure in the labour market can be further illustrated by conditions in the key industry of engineering where the minimum rates for skilled workers increased by $42-45$ per cent from 1938 to 1945 whilst those for labourers increased by $57-60$ per cent (Inman 1957: 341).

Changes in wage rates, however, do not tell the whole story of the wartime remuneration of manual workers because the war also brought many changes in work practices: more overtime was worked; working at

## I2.I

Average weekly earnings during wartime (at July of each year)


## I 2.2 The cost of living index


weekends became more common, as did night shift work there was an extension of schemes based on payment-by results in some industries; and the composition of both the workforce (in terms of gender and of skill differentiation) and industrial structure changed. In the engineering and allied industries sector (which formed the core of the munitions industries), for example, the number of firms using a two shift pattern of work had increased from less than one sixth in January 1941 to a third in December 1942 and those using three shifts had increased from 2 per cent to six per cent; also, the general trend was for the proportion of workers being paid at skilled and unskilled rates to fall whilst those being paid at semi-skilled rates ose (overall in these industries the propor of worl paid at semi-skilled rates increased from 31 per cent in June 1940 to 38 per cent by June 1943); and examples of the increased employment of women included marine engineering (where the proportion of women employed increased from 2 per cent in 1938 to 16 per cent in 1944) motor vehicles, cycle and aircraft manufacture and repair ( 10 per cent to 37 per cent), and electrical cables, apparatus, etc. (41 per cent to 61 per cent); finally, the percentage of all male wage-earners paid under a payment-by-results scheme increased from 18 per cent in 1938 to 24 per cent in 1947 (Inman 1957: 79-80, 424; Department of Employment and Productivity 1971: 157).

The impact of such changes is better captured by changes in average earnings rather than wages. Average weekly male earnings in industry displayed a similar, if more
pronounced, trend to wages: between 1938 and 1945 they increased by 76 per cent (from 69 shillings to 121 shillings) with the most rapid increases coming in the early years of the war (by July 1941 they had already increased by 44 per cent) (table 12.3). Female average earnings followed a different pattern with the most rapid rises occurring different pattern with the most rapid rises occurring
between 1941 and 1943, which reflected the later timing of female industrial mobilisation and subsequent tightening of the female labour supply (table 12.3). Although female average earnings increased more rapidly during the war than male average earnings, this did little to erode the wide gender differential and in 1945 the average male worker gender differential and in 1945 the average male worker
still earned twice as much as the average female worker; the situation is slightly better if the changes in average hours worked is taken into account because the average amount of hours worked per week by female workers increased less rapidly than that of male workers, and thus on the basis of average earnings per hour female earnings increased from 52 per cent of male earnings in 1938 to 60 per cent of male earnings in 1945 (table 12.3-12.4).

The cost of living index measures the cost of maintaining a fixed standard of living in working class families (in effect, the change in cost to such a family over time of buying a fixed basket of goods). Sharp rises in the cost of living index often lead to increased wage demands and can therefore offer a crude indicator of potential wage inflation pressure. Thus, the state could help to moderate wartime wage inflation by manipulating the cost of living index. This it did through the use of price controls and the subsidising

of key items in the cost of living index, rationing aso helped to reduce wage pressure. The impact of the actions taken by the state were dramatic both on prices and on the cost of living index itself, with sharp rises in the period 1939-4। (of 18 per cent in the latter) followed by much more moderate increases between 1941 and 1945 (indeed the monthly cost of living index was virtually stable
between April 1941 and the end of the war) (Department of Employment and Productivity 1971: 170; tables 12.612.9). The explicit manipulation of the cost of living index by the state was an important reason why the tightening of the labour market in the second half of the war was matched, somewhat paradoxically, by falling rates of wage increases.
| 2.3 Average weekly earnings in manufacturing and certain other industries

|  | All operatives |  | $\begin{gathered} \text { Men } \\ \text { (aged } 21 \text { and over) } \end{gathered}$ |  | Youths and boys |  | Women (aged 18 and over |  | Girls |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Earnings | $\begin{gathered} \text { Percentage } \\ \text { increase } \\ \text { over } 1938 \\ \hline \end{gathered}$ | Earnings | $\begin{gathered} \text { Percentage } \\ \text { increase } \\ \text { over } 1938 \\ \hline \end{gathered}$ | Earnings | Percentage increase over 1938 | Earnings | Percentage increase over 1938 | Earnings | Percentage increase over 1938 |
| 1938 October | $\begin{aligned} & \text { s. } \text { d. } \\ & 53 \end{aligned}$ | - | $\begin{array}{cc} \text { s. } \\ 69 & \text { d. } \end{array}$ |  | $\begin{gathered} \text { s. } \\ 26 \\ i \end{gathered}$ | - | $\begin{array}{cc} s_{5}^{s .} & d . \\ 32 & 6 \end{array}$ |  | $\begin{array}{cc} \text { s. } & \text { d. } \\ 18 & 6 \end{array}$ |  |
| 1940 July | 692 | 30 | 890 | 29 | 35 | 35 | 3811 | 20 | 224 | 21 |
| 1941 July | 7510 | 42 | 995 | 44 | 41 | 61 | 4311 | 35 | 250 | 35 |
| 1942 January | 779 | 46 | 1020 | 48 | 426 | 63 | 476 | 46 | 2610 | 45 |
| July | 852 | 60 | 1115 | 61 | 462 | 77 | 542 | 67 | 303 | 64 |
| 1943 January | 8711 | 65 | 113 | 65 | 45 । | 73 | 586 | 80 | 32 । | 73 |
| July | 937 | 76 | 121 | 76 | 472 | 81 | 622 | 91 | 3310 | 83 |
| 1944 January | 957 | 79 | 123 | 79 | 4610 | 80 | 639 | 96 | 343 | 85 |
| July | 968 | 82 | 1244 | 80 | 474 | 81 | 643 | 98 | 3411 | 89 |
| 1945 January | 939 | 76 | 1193 | 73 | 44 I | 69 | 632 | 94 | 338 | 82 |
| July | $96 \quad 1$ | 80 | 1214 | 76 | 456 | 74 | $63 \quad 2$ | 94 | 35 । | 90 |

## | 2.4 Average weekly hours worked'

|  | All operatives | Men <br> (aged 21 and over) | Youths and boys | Women <br> (aged 18 and over) | Girls |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1938 October | 46.5 | 47.7 | 46.2 | 43.5 | 44.6 |
| 1943 July | 50.0 | 52.9 | 48.0 | 45.9 | 45.1 |
| 1944 January | 49.2 | 52.0 | 47.1 | 45.2 | 44.6 |
| July | 48.6 | 51.2 | 46.7 | 44.6 | 44.2 |
| 1945 January | 47.0 | 49.4 | 45.2 | 43.1 | 43.0 |
| July | 47.4 | 49.7 | 45.6 | 43.3 | 43.5 |

## I2.5 Average weekly earnings in certain industries'

|  | Chemicals, explosives, paints and oils | Metals, engineering and shipbuilding | Textiles |  | Clothing |  | Food, dr tobac |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Men aged 21 and over | s. d. | s. d. | s. | d. | s. | d. | 65 | d. | s. | d. | s. | d. |
| 1938 October | 693 | 750 | 57 | 3 | 64 | 3 | 65 | 0 | 66 | 0 | 70 | 0 |
| 1940 July | 879 | 1025 | 75 | 10 | 71 | 10 | 76. | 4 | 84 | 11 | 85 | 2 |
| 1941 July | 985 | 1122 | 81 | 6 | 83 | 7 | $87^{\circ}$ | 4 | 97 |  | 92 |  |
| 1942 January | 1002 | 1192 | 84 | 6 | 85 | 0 | 88 | 3 | 84 | 2 | 92 | 10 |
| July | 10711 | 128 । | 90 | 5 | 91 | 4 | 93 | 1 | 102 | 0 | 99 | 1 |
| 1943 January | 1109 | 1316 | 93 | 5 | 95 | 0 | 96 | 9 | 94 | 8 | 99 | 9 |
| july | 1163 | $138 \quad 3$ | 96 | 11 | 98 | 9 | 101 | 8 | 108 | 4 | 104 | 2 |
| 1944 January | 1202 | 14110 | 97 | 8 | 101 | 2 | 104 | 0 | 101 | 6 | 108 | 3 |
|  | 1205 | 1391 | 101 | 10 | 105 | 3 | 106 | 6 | 107 | 11 | 114 | 3 |
| 1945 January | 1180 | 1312 | 100 | 4 | 106 | 5 | 106 | 7 | 104 | 5 | 110 | 10 |
| July | 12210 | 1330 | 104 | 7 | 110 | 8 | 110 | 4 | 111 | 4 | 114 | 10 |
| Women aged 18 and over |  |  |  |  |  |  |  |  |  |  |  |  |
| 1938 October | 328 | 334 | 31 | 9 | 32 | 9 | 32 | 11 | - |  | 34 |  |
| 1940 July | 373 | 4310 | 40 | 5 | 36 | 3 | 35 | 4 |  |  | 43 | 6 |
| 1941 July | 4411 | 48 I | 42 | 0 | 41 | 2 | 40 | 3 |  |  | 59 | 6 |
| 1942 January |  | 537 | 43 | 5 | 41 | 2 | 41 | 6 | 46 | 1 | 60 | 7 |
| July | 565 | 607 | 48 | 5 | 47 | 1 | 45 | 11 | 51 | 5 | 67 | 5 |
| 1943 January | 614 | 665 | 50 | 3 | 48 | 4 | 47 | 11 | 52 | 5 | 67 | 2 |
| July | 637 | 6910 | 52 | 11 | 50 | 3 | 50 | 10 | 61 | 5 | 71 | 5 |
| 1944 January | 653 | 718 | 53 | 7 | 50 | 10 | 53 | 1 | 60 | 4 | 74 | 8 |
| July | 6411 | 710 | 55 | 7 | 53 | 4 | 53 | 11 | 61 | 11 | 79 | 1 |
| 1945 January | 621 | $70 \quad 4$ | 53 | 9 | 53 | 0 | 54 | 8 | 59 | 6 | 78 | 7 |
| July | 6210 | 69 | 58 | 2 | 55 | 7 | 56 | 7 | 60 | 5 | 81 |  |
| 1. See footnotel to Table 12.3. <br> 2. Including laundries and dry cleaning. <br> 3. Excluding railways. |  |  |  |  |  |  | Source: Ministry of Labour and National Service |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

## I 2.6 Wage rates and cost of living



## | 2.7 Agricultural price indices'

| England and Wales |  | $1936-1938=100$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| All products Cereals and farm crops Live stock and live stock products² Fruit,vegetables and glass house produce | $\begin{aligned} & 102 \\ & 93 \\ & 104 \\ & 111 \end{aligned}$ | $\begin{aligned} & 103 \\ & 99 \\ & 106 \\ & 94 \end{aligned}$ | $\begin{aligned} & 143 \\ & 138 \\ & 143 \\ & 153 \end{aligned}$ | $\begin{aligned} & 172 \\ & 169 \\ & 161 \\ & 239 \end{aligned}$ | $\begin{aligned} & 183 \\ & 199 \\ & 177 \\ & 198 \end{aligned}$ | $\begin{aligned} & 186 \\ & 195 \\ & 178 \\ & 215 \end{aligned}$ | $\begin{aligned} & 190 \\ & 192 \\ & 184 \\ & 215 \end{aligned}$ | $\begin{aligned} & 196 \\ & 198 \\ & 192 \\ & 204 \end{aligned}$ |
| Wheat ${ }^{3}$ Barley Oats | $\begin{aligned} & 100 \\ & 90 \\ & 99 \end{aligned}$ | $\begin{aligned} & 104 \\ & 113 \\ & 99 \end{aligned}$ | $\begin{aligned} & 128 \\ & 194 \\ & 189 \end{aligned}$ | $\begin{aligned} & 149 \\ & 270 \\ & 198 \end{aligned}$ | $\begin{aligned} & 164 \\ & 381 \\ & 204 \end{aligned}$ | $\begin{aligned} & 182 \\ & 293 \\ & 213 \end{aligned}$ | $\begin{aligned} & 195 \\ & 254 \\ & 221 \end{aligned}$ | $\begin{aligned} & 202 \\ & 242 \\ & 220 \end{aligned}$ |
| Potatoes ${ }^{4}$ <br> Sugar beet <br> Hops | $\begin{gathered} 79 \\ 109 \\ 100 \end{gathered}$ | $\begin{array}{r} 75 \\ 118 \\ 104 \end{array}$ | $\begin{aligned} & 98 \\ & 154 \\ & 133 \end{aligned}$ | $\begin{aligned} & 129 \\ & 161 \\ & 169 \end{aligned}$ | $\begin{aligned} & 134 \\ & 204 \\ & 198 \end{aligned}$ | $\begin{aligned} & 136 \\ & 201 \\ & 205 \end{aligned}$ | $\begin{aligned} & 137 \\ & 192 \\ & 227 \end{aligned}$ | $\begin{aligned} & 143 \\ & 211 \\ & 241 \end{aligned}$ |
| Fruit: <br> Total <br> Dessert and cooking apples Pears <br> Plums <br> Cherries <br> Blackcurrants <br> Gooseberries <br> Strawberries <br> Raspberries | $\begin{aligned} & 126 \\ & 128 \\ & 111 \\ & 153 \\ & 123 \\ & 125 \\ & 109 \\ & 109 \end{aligned}$ | $\begin{aligned} & 82 \\ & 83 \\ & 87 \\ & 63 \\ & 90 \\ & 91 \\ & 89 \\ & 98 \\ & 96 \end{aligned}$ | $\begin{aligned} & 140 \\ & 162 \\ & 166 \\ & 90 \\ & 136 \\ & 151 \\ & 156 \\ & 135 \\ & 149 \end{aligned}$ | $\begin{aligned} & 249 \\ & 229 \\ & 623 \\ & 253 \\ & 445 \\ & 150 \\ & 92 \\ & 210 \\ & 86 \end{aligned}$ | 192 222 300 138 205 129 207 159 111 | 191 229 344 152 205 138 185 165 121 | $\begin{aligned} & 200 \\ & 228 \\ & 314 \\ & 150 \\ & 211 \\ & 195 \\ & 200 \\ & 156 \\ & 130 \end{aligned}$ | $\begin{aligned} & 183 \\ & 188 \\ & 1802 \\ & 168 \\ & 173 \\ & 140 \\ & 198 \\ & 170 \\ & 130 \end{aligned}$ |
| Vegetables: <br> Total <br> Carrots <br> Onions <br> Cabbage <br> Cauliflower and broccoli <br> Brussels sprouts <br> Peas <br> Beans | $\begin{aligned} & 100 \\ & 129 \\ & 128 \\ & 94 \\ & 93 \\ & 92 \\ & 96 \\ & 122 \end{aligned}$ | $\begin{aligned} & 101 \\ & 121 \\ & 169 \\ & 160 \\ & 101 \\ & 93 \\ & 102 \\ & 92 \end{aligned}$ | $\begin{aligned} & 150 \\ & 197 \\ & 795 \\ & 142 \\ & 148 \\ & 149 \\ & 133 \\ & 107 \end{aligned}$ | $\begin{aligned} & 208 \\ & 159 \\ & 546 \\ & 219 \\ & 200 \\ & 195 \\ & 218 \\ & 197 \end{aligned}$ | $\begin{aligned} & 207 \\ & 140 \\ & 506 \\ & 148 \\ & 247 \\ & 265 \\ & 182 \\ & 227 \end{aligned}$ | $\begin{aligned} & 239 \\ & 162 \\ & 466 \\ & 265 \\ & 173 \\ & 170 \\ & 375 \\ & 368 \end{aligned}$ | $\begin{aligned} & 235 \\ & 204 \\ & 381 \\ & 207 \\ & 151 \\ & 183 \\ & 340 \\ & 444 \end{aligned}$ | $\begin{aligned} & 229 \\ & 208 \\ & 448 \\ & 225 \\ & 171 \\ & 172 \\ & 377 \\ & 277 \end{aligned}$ |
| Glasshouse produce ${ }^{5}$ | 101 | 101 | 194 | 303 | 190 | 195 | 187 | 182 |
| Hay: Meadow | $\begin{aligned} & 93 \\ & 99 \end{aligned}$ | $\begin{aligned} & 108 \\ & 134 \end{aligned}$ | $\begin{aligned} & 151 \\ & 184 \end{aligned}$ | $\begin{aligned} & 193 \\ & 241 \end{aligned}$ | $\begin{aligned} & 225 \\ & 283 \end{aligned}$ | $\begin{aligned} & 229 \\ & 286 \end{aligned}$ | $\begin{aligned} & 230 \\ & 287 \end{aligned}$ | $\begin{aligned} & 230 \\ & 289 \\ & \hline 9 \end{aligned}$ |
| Fat cattle <br> Fat cows <br> Fat sheep Fat lambs Bacon pigs <br> Sows | $\begin{array}{r} 106 \\ 108 \\ 86 \\ 93 \\ 87 \\ 102 \\ 104 \\ 108 \end{array}$ | $\begin{array}{r} 108 \\ 113 \\ 95 \\ 97 \\ 95 \\ 106 \\ 108 \\ 118 \end{array}$ | $\begin{aligned} & 136 \\ & 145 \\ & 128 \\ & 153 \\ & 110 \\ & 153 \\ & 141 \\ & 174 \end{aligned}$ | $\begin{aligned} & 141 \\ & 153 \\ & 138 \\ & 165 \\ & 129 \\ & 162 \\ & 143 \\ & 169 \end{aligned}$ | $\begin{aligned} & 152 \\ & 152 \\ & 150 \\ & 150 \\ & 145 \\ & 141 \\ & 187 \\ & 154 \\ & 169 \end{aligned}$ | $\begin{aligned} & 157 \\ & 148 \\ & 155 \\ & 155 \\ & 143 \\ & 189 \\ & 155 \\ & 169 \end{aligned}$ | $\begin{aligned} & 160 \\ & 161 \\ & 161 \\ & 165 \\ & 149 \\ & 188 \\ & 155 \\ & 169 \end{aligned}$ | $\begin{aligned} & 164 \\ & 166 \\ & 177 \\ & 173 \\ & 160 \\ & 195 \\ & 199 \\ & 169 \end{aligned}$ |
| Fowls Ducks | $\begin{aligned} & 105 \\ & 101 \end{aligned}$ | $\begin{aligned} & 107 \\ & 104 \end{aligned}$ | $\begin{aligned} & 138 \\ & 137 \end{aligned}$ | $\begin{aligned} & 170 \\ & 171 \end{aligned}$ | $\begin{aligned} & 185 \\ & 211 \end{aligned}$ | $\begin{aligned} & 185 \\ & 208 \end{aligned}$ | $\begin{aligned} & 173 \\ & 167 \end{aligned}$ | $\begin{aligned} & 185 \\ & 201 \end{aligned}$ |
| Eggs Butter Cheese | $\begin{aligned} & 104 \\ & 107 \\ & 106 \\ & 102 \end{aligned}$ | $\begin{aligned} & 106 \\ & 107 \\ & 108 \\ & 101 \end{aligned}$ | $\begin{aligned} & 162 \\ & 141 \\ & 122 \\ & 156 \end{aligned}$ | $\begin{aligned} & 194 \\ & 1666 \\ & 122 \\ & 161 \end{aligned}$ | $\begin{aligned} & 212 \\ & 184 \\ & 122 \\ & 195 \end{aligned}$ | $\begin{aligned} & 207 \\ & 187 \\ & 127 \\ & 185 \end{aligned}$ | $\begin{aligned} & 207 \\ & 197 \\ & 125 \\ & 191 \end{aligned}$ | $\begin{aligned} & 212 \\ & 202 \\ & 127 \end{aligned}$ |
| Wool | 75 | 91 | 116 | 135 | 153 | 152 | 152 | 152 |
| Taking account of Exchequer payments but exclu the Agriculture Act, 1937, and the Agricultural D Excluding dairy cows and store stock. <br> Including acreage payments based on estimated Including acreage payments based on estimated tot Tomatoes, cucumbers and grapes. |  | on the Act, 193 <br> (1943 <br> on (194 |  | ley and <br> crops). crops) | under |  | Ministry C | culture heries |

## |2.8 Stock and fertilizer price indices



### 12.9 Wholesale prices (Annual averages)

|  |  |  |  | rial materials | and manufactur |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | tobacco | Total (including fuel) | Basic materials | Intermediate products ${ }^{\prime}$ | Manufactured articles | materials ${ }^{2}$ |
| 1935 | 87.7 | 89.2 | 87.1 | 95.0 | 83.9 | 84.7 | 90.1 |
| 1936 | 93.0 | 94.2 | 92.4 | 106.5 | 89.3 | 87.6 | 92.9 |
| 1937 | 107.2 | 105.1 | 108.2 | 132.4 | 104.2 | 99.3 | 100.1 |
| 1938 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 1939 | 101.4 | 100.0 | 101.9 | 107.4 | 101.9 | 99.3 | 100.7 |
| 1940 | 134.6 | 136.4 | 133.7 | 158.6 | 138.7 | 119.3 | 117.0 |
| 1941 | 150.5 | 150.2 | 150.6 | 179.5 | 158.0 | 132.3 | 133.9 |
| 1942 | 157.1 | 161.1 | 154.6 | 181.8 | 161.9 | 135.8 | 139.2 |
| 1943 | 160.4 | 164.4 | 158.3 | 187.2 | 163.9 | 138.2 | 143.8 |
| 1944 | 163.7 | 162.4 | 164.5 | 198.3 | 167.5 | 141.5 | 147.3 |
| 1945 | 166.7 | 162.5 | 168.8 | 202.2 | 173.0 | 143.5 | 151.4 |
| 1. The greater rise in the basic materials index is essentially due to its containing various items such as paper-making materials, which rose very greatly in price and forwhich there were no corresponding quotations available under intermediate products or manufactured articles; similarly the index for intermediate products is raised above that for manufactured articles mainly because it includes timber. <br> 2. Selected items included in the indices for industrial materials and manufactures. |  |  |  |  |  | Source: Board of Trade |  |

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## DEFINITIONS AND NOTES

The purpose of this section is to supplement the footnotes given in each table and to make it possible to interpret the statistics more fully. The notes and definitions in this section are arranged in the same order as the tables. Certain definitions of general application throughout the Digest are also given in the Introductory Notes on page v .

## I. POPULATION AND VITAL

 STATISTICS
## POPULATION

1.3- For 1939 all figures for the population of the United
1.5 Kingdom refer to the population actually in the country (resident population): they exclude members of the armed forces serving overseas and merchant seamen at sea. The number so excluded is estimated at about a quarter of a million at June 1939.

The figures for total population include from 1940 all members of the armed forces and merchant navy whether at home or overseas.

## VITAL STATISTICS

1.6 Births

Figures for England and Wales relate to births occurring during the year; those for Scotland and Northern Ireland relate to the number of births registered in each year.

Birth rates have been calculated as follows: (a) For 1939 by relating birth registrations (occurrences in the case of England and Wales) to the resident population, that is excluding members of the armed forces overseas and merchant seamen at sea
(b) From 1940 by relating birth registrations (occurrences in the case of England and Wales) to the total population, including members of the armed forces overseas and merchant seamen at sea.

### 1.7 Reproduction rates

Reproduction rates
Reproduction rates are an indication of the extent to which the female population of child-bearing age is being replaced by births. A rate of I represents
exact replacement. In the "gross" rate no allowance is made for the losses due to death before completion of the child-bearing period. The effective" and "net" rates both make provision for such losses but while the "effective" rate used for England and Wales assumes a continued improvement in mortality, the "net" rate used for Scotland is based on the mortality experienced in
the year of calculation the year of calculation
1.8 Infantile mortality

For England and Wales the rates of deaths of infants under one year of age are based on live births occurring in the several periods to which the deaths in the age groups comprising the first year of life relate. For Scotland and Northern Ireland the rates are based on live births registered in the year in which the deaths took place.
. 9 Deaths
The figures relate to the number of deaths registered during the year, the normal time lag between occurrence and registration being a matter of days only.

The figures for male deaths refer to civilians only for England and Wales and Scotland from 3rd September 1939 and for Northern Ireland from 1941.

The figures for female deaths refer to civilians only for England and Wales and Scotland from I st June 194I and for Northern Ireland from January | 94 |

## 2. SOCIAL CONDITIONS

## PUBLIC HEALTH

2.3, Deaths by cause and age
2.4 The figures are tabulated according to the Fifth Revision of the International List of Causes of Death Revision of the International List of Causes of Death
from 1940 for England and Wales and Northern reland and from 1941 for Scotland. The figures for 1939 (and 1940 in the case of Scotland) are 1939 (and 1940 in the case of Scotland) are tabulated according to the Fourth Revision of the International List. The figures in brackets following each cause of death are the reference numbers to that particular cause in the Fifth Revision of the international List

Notifications of infectious diseases The figures for the years 1939 to 1943 for England and Wales incorporate such corrections as were reported on the weekly card returns and correspond with the numbers published in the
quarterly and annual reports of the Registrar quarterly and annual reports of the Registrar General. Those for 1944 and 1945 show the corrected number of notifications, incorporating revisions of diagnosis, either by the notifying medical practitioner or by the medical superintendent of the infections diseases hospital.

The term "formal notifications" as applied to cases of tuberculosis in England and Wales and Scotland covers new cases notified under the Public Health (Tuberculosis) Regulations, 1930. The figures exclude transfers between areas so far as they could be ascertained, duplicate notifications and a few cases brought to the notice of Medical Officers of Health otherwise than by formal notification under the regulations.
2.6 Venereal disease

The table shows the number of cases of venereal disease dealt with at civilian treatment centres in Great Britain and includes cases from the Services. The totals of all cases comprise cases under treatment or observation on Ist January of each year, cases removed from the register during any previous year which returned during the year in question for treatment of the same infection, new cases and cases dealt with for the first time during the year in question and known to have received the year in for the same infection or to have been treatmer for ther hospitals.

In the number of new infections with syphilis are included cases of syphilis primary, secondary, laten in the first year of infection, all later stages and congenital. New infections with gonorrhoea include cases at first year of infection and at later stages.

## NATIONAL INSURANCE

2.7, National health insurance and pensions
2.9 The various enactments relating to national health insurance, widows', orphans' and old age contributory pensions and old age noncontributory pensions were consolidated in the National Health Insurance Act, 1936, the Widows Orphans' and Old Age Pensions Act, 1936 and the Old Age Pensions Act, 1936 respectively. Similar legislation applies to Northern Ireland.

Persons insured for health and pensions comprised broadly the following classes:-
(a) Persons employed under contract of service by way of manual labour or (if non-manually employed) remunerated at a rate not exceeding $£ 250$ per annum up to 4 th January 1942 and $£ 420$ thereafter. Seamen on foreign going British ships are included.

There are numerous exceptions in so far as national health insurance is concerned, the most numerous being civil servants, many employees of local authorities, rallway companies and other statutory companies or undertakings, teachers covered by the Teachers Superannuation Acts, etc. Most of these excepted categories were, however, insured for
Certain. classes of persons not employed under contract of service, for example, outworkers, manual labour contractors, share fishermen and taxi drivers plying for hire with vehicles obtained under contract of bailment. (c) Soldiers, sailors and airmen (d) Persons employed in certain classes of war occupation abroad.
(e) Voluntary contributors.
2.8 Unemployment insurance Persons insured against unemployment under the Unemployment Insurance Acts were broadly the categories indicated at (a) and (d) on previous page for national health and pensions insurance with the following exclusions: (i) private domestic servants, (ii) female professional sick nurses and (iii) from 1942 persons engaged as a result of the war in employment for less than 30 hours a week

## JUSTICE AND CRIME

2.11- It is necessary to preface these tables with the
2.18 warning that differences exist in varying degree between the legal and judicial systems of England and Wales, Scotland and Northern Ireland which make it impossible to collate the statistics on a completely comparable basis. The differences between the systems of England and Wales and Scotland are the most pronounced.

## Classification of offences

n all the relevant tables in this section offences are analysed under three broad headings. For England and Wales and Northern Ireland these are:
(a) indictable offences
(b) non-indictable offences, and (c) offences against Defence Regulations; for Scotland they are: (a) crimes,
(b) miscellaneous offences, and (c) offences against war legislation. Generally speaking these groups are broadly
comparable. comparable.

The first two groups represent a division of criminal offences according to the nature of the proceedings in which the accused persons are tried. Thus, the procedure at Courts of Assize and Quarter Sessions is by a "bill of indictment" as opposed to a summons, warrant or charge at summary courts; therefore all offences which in the ordinary course are tried at Assize or Quarter Sessions are called "indictable" offences. All common law offences and all offences created by statute are indictable unless there is some statutory provision which expressly provides for some other mode of disposal. Originally, indictable offences could be tried at Assize or Quarter Sessions only but there are now many offences committed by adults which may be dealt with summarily with the consent of the person accused. Offences which are ordinarily within the jurisdiction of summary courts only are designated "non-indictable" courts only are designated "non-indictable"
offences; such offences are created by statutes offences; such offences are created by statutes
which contain express provision for summary treatment.

The last mentioned group (offences against Defence Regulations or war legislation) is of course Defence Regulations or war legislation) is of course a temporary one which came into existence during the war years and which arose out of the emergency powers taken by the Government to prevent acts which might be prejudicial either to the country's security or to the prosecution of its war effort. The difference in nomenclature of this group as between England and Wales and Northern Ireland on the one hand and Scotland on the other, is that the Scottish figures, in addition to covering offences under the various regulations made under the Emergency Powers (Defence) Acts, 1939 and 1940 (Defence Regulations), include offences under the National Registration Act, 1939, War Charities Act, 1940 and Goods and Services (Price Control) Act, 194 I which are included under non-indictable offences in the case of England and Wales and Northern Ireland.

### 2.11- Finding of guilt and conviction

2.13 In the statistics for England and Wales the term "persons found guilty" covers not only persons convicted but also those found guilty without
conviction (mainly persons dealt with under the Probation of Offenders Act, 1907 by dismissal, binding over or placing on probation). In the statistics for Scotland, however, persons so dealt with are not included in the term "persons convicted or found guilty" since there is in Scotland neither finding of guilt nor conviction in such cases.

## Offences known to the police; persons

 proceeded against and found guilty Offences known (or made known) to the police include offences reported to the police or otherwise coming to their knowledge within each year whether committed by the same or different persons and whether any apprehension took place within the same year or not.A person proceeded against and charged at the same time with several offences appears as one person only. In selecting the offence for tabulation the principle is followed that a charge resulting in conviction has preference over any others, and where there are convictions on more than one charge the most serious offence (that is, the offence for which the heaviest sentence is awarded) is selected. Only cases disposed of within each year are included. Cases pending at the end of a year are included in the figures for the following year

### 2.14- Juvenile delinquency

2.14- Juvenile delinquency
2.16 For England and Wales and Scotland "juveniles" are defined as children or young persons under the age of 17 ; for Northern Ireland, however, the age limit is under 16 years.
2.17 Prison population

The prison statistics for Scotland are not altogether comparable with those for England and Wales and Northern Ireland. The main difference is in respec Northern Ireland. The main difference is in ress of the inclusion of criminal lunatics and menta defectives in the statistics for Scotland. In England and Wales and Northern Ireland the institutions in which criminal lunatics and mental defectives are detained do not come under the control of the Prison Commission, though the prison statistics may include such persons if received as ordinary prisoners before removal to the appropriate institution either by order of a court or by certification.
2.18 Divorce proceedings

During the years 1937 to 1939 new legislation relating to divorce was introduced which had a marked effect on the number of petitions filed. In England and Wales the Matrimonial Causes Act,

1937 came into effect on Ist January 1938 and gave additional grounds for divorce. The Divorce (Scotland) Act, 1938 gave additional grounds for divorce and also lowered the period of desertion necessary as a ground for divorce from four to three years.

The Matrimonial Causes Act (Northern Ireland), 1939 came into operation on Ist October 1939 and instituted a judicial for a legislative system of divorce. Before this Act the High Court of Justice in Northern Ireland had power to grant a decree of divorce a mensa et thoro, but such a decree did not dissolve the marriage and amounted only to what is known elsewhere as a judicial separation.

## HOUSING AND BUILDING

2.20 Construction activity

This table shows the estimated value of work (both new work and repairs and maintenance) carried out by frrms registered in the twelve main trades of the building and civil engineering industries; namely, general builders, building and civil engineering contractors, civil engineering contractors, plumbers, joiners and carpenters, painters, roofers, plasterers, glaziers, demolition contractors, scaffolding specialists and miscellaneous. Firms in these twelve trades consisting solely of working principals and therefore employing no operatives are excluded; a working principal is an owner, partner or director who also works as a craftsman or labourer.

The table also excludes building and civil engineering work carried out by the following:(a) Firms in the seven specialist trades, namely:constructional engineers, reinforced concrete specialists, heating and ventilating engineers electrical contractors, asphalt and tar spraying contractors, flooring contractors and plant hire frms.
(b) Building operatives employed directly by local authorities, Government departments, public utility and transport undertakings and by private firms outside the building and civil engineering industries. (c) Prisoner-of-war labour.

The work done by the agencies excluded was, in 1946, about 40 per cent of the total output of building and civil engineering work. This percentage is not known for earlier years.

The figures for mining include the cost of raising opencast coal, since such work was undertaken by firms in the building and civil engineering industries. The item "all other work" includes all housing work other than new construction and war damage
repairs and all work on shops, commercial premises, farm buildings, etc.

## 3. MANPOWER

3.3 Distribution of total manpower

The figures represent estimates of the total number of males aged 14-64 and females aged I4-59 gainfully employed, whether employers, employees or persons working on their own account, together with those who had not yet taken up employment since leaving HM Forces and insured persons registered as unemployed. Indoor private domestic servants are excluded. Women in part-time paid employment are included, two part-time workers being counted as equivalent to one full-time worker. The figures exclude prisoners-of-war but include such other foreign workers as had entered individually into civilian employment.

The heading "National Government Service" covers all employees of the Government except those employees in dockyards, royal ordnance factories, etc. who are included in their appropriate industry classifications. It also includes British employees of Classificat

ARMED FORCES
The figures in Tables 3.3-3.9 relate to men and women who served in the armed forces and auxiliary services of the United Kingdom, British subjects usually domiciled in Great Britain and Northern Ireland. Certain of the tables, annotated accordingly, include British subjects and other persons domiciled elsewhere who individually enlisted and served in the armed forces and auxiliary services of the United Kingdom.
All the tables exclude men and women who served in units and contingents of His Majesty's forces other than those of the United Kingdom or in Allied units and contingents under British or Allied command.
3.4 Strength

The term "strength" includes only those actually serving, that is, it excludes men whose service had been deferred, men or Reserve, men released to industry and, except where otherwise stated, men reported prisoners-of-war or missing. It excludes women whose service had been deferred and except in 1941, the ATS Unemployed List.

Men on T. 124 agreements were merchant seamen serving with the Royal Navy under special agreements.

The nursing services include Queen Alexandra's The nursing services include Queen Alexandra's
Royal Naval Nursing Service, Queen Alexandra's Imperial Military Nursing Service, Territorial Army Nursing Service, Princess Mary's Royal Air Force Nursing Service and members of Voluntary Aid Detachments serving with the armed forces.
3.6,
3.8

## Casualties

Casualties are given by date of notification and not be date of occurrence. The strength figures for the Army include a number of casualties which had not been reported at the dates to which the figures
relate. relate.
Casualties include the following categories:(a) Killed. Deaths from enemy action and injury are included, but not deaths from natural causes or (except in the case of the Royal Air Force) suicices. The figures for the Royal Naw, however, include deaths from diseases attributable to war serv
(b) Wounded. Non-battle injuries sustained on war service are included, but absence from duty due to sickness is excluded. The Army exclude all non-battle injuries and the Royal Air Force include injuries occurring during training.
(c) Missing. (c) Missing.
(d) Prisoners-of-war and internees. The figures for prisoners in Europe were based on official notifications received from Germany and Italy. The figures for prisoners in Japanese hands were based partly on official notifications and partly on information received from the prisoners themselves.

In Table 3.6 the number of casualties represents those notified during the period less the missing who subsequently rejoined their units and repatriated prisoners. In Table 3.8 these two categories are included and the figures for prisoners-of-war also include internees. Men reported missing but subsequently reported killed, wounded or prisoners-of-war have been transferred from "missing" to the other category.

The figures relate to the gross number of casualties and not to the number of men who became casualties. A man who was reported missing, wounded or prisoner-of-war more than once has been counted as a casualty on each occasion so reported.
3.7 Releases

Men and women released for a temporary period are excluded, but those released locally abroad or repatriated from the United Kingdom are included.

The scheme of release from the forces after the end of hostilities of men and women called up under the National Service Acts provided for release in the following classes:-
(a) Class $A$ in which release was based on age and length of service.
(b) Class B in which out-of-turn release was offered to men and women for employment in certain occupations essential to the reconstruction programme
(c) Class C in which release was granted for an indefinite period on compassionate grounds.

Releases are counted from the date of dispersal and not from the date of completion of the period of paid leave.

## CIVILIAN EMPLOYMENT

### 3.12 Agriculture

The table shows the number of workers (excluding occupiers and their wives, domestic servants and children still at school) employed on the day of the census on agricultural holdings of more than one acre in Great Britain.

Regular workers absent through sickness or holidays and working partners of the occupier are included.

Casual labour includes contract work, that is, labour supplied by County War Agricultural Executive Committees, contractors, etc., and all regular part-time agricultural workers, including those temporarily away through sickness or holidays.

The figures for the Women's Land Army relate to those in full-time employment in agriculture, horticulture and timber work.

### 3.13- Manufacturing industries

3.24 The mid-year figures are based on the numbers of insured workers in each industry as estimated from the annual exchange of unemployment insurance books, less those registered as unemployed, together with one-half of the number of part-time female workers. The subsequent quarterly figures are obtained by application of the percentage changes in the numbers employed derived from the returns rendered by employers under various Orders made between 1940 and 1943, the last of the series being the Undertakings (Records and Information and Inspection of Premises) Order, 1943. The figures thus exclude employees over insurable age ( 65 for men and 60 for women), the
relatively small number of non-manual workers whose earnings were above the salary limit for unemployment insurance, the employers themselves (proprietors, directors, partners, etc.) and persons working on their own account. Earlier figures have been adjusted to include an allowance for the extension of the salary limit for unemployment insurance from $£ 250$ to $£ 420$ per annum which came into force in September 1940 and to exclude women aged 60-64 who ceased to be insurable in July 1940.

The allocation between orders for Supply departments (Admiralty, Ministry of Supply and Ministry of Aircraft Production), home market and export has been made on the basis of figures supplied by employers in the employment returns referred to above. Employment on orders for Supply departments relates only to munitions and other equipment and stores for the use of the armed forces. Merchant shipbuilding and repairs is included in home market.

It should be noted that the figures shown for particular industries do not necessarily include the whole of the employment in the manufacture of the finished product; for example, part of the employment in the manufacture of aircraft parts and equipment is included in the general engineering, electrical engineering, scientific instruments, etc., industries.
3.25 Railway staff

The table shows all staff employed during the week of the census in March of each year by the railway companies of Great Britain (excluding the Manchester Ship Canal where staff fluctuated between 1,500 and 1,600 during the period), the London Passenger Transport Board and the Railway Clearing House.The figures represent the numbers receiving salaries or wages for the full week combined with the equivalent number of full-time workers where employees were paid for less than the complete week.

### 3.26, Civil Service

3.27 The tables include both established and unestablished staff irrespective of their industrial classification. Staff in Northern Ireland, other than reserved and agency services, is excluded. Two part-time workers are counted as one whole-time worker. The figures are taken from returns made quarterly to the Treasury by all Government departments.

The table of non-industrial civil servants relates to clerical, executive and administrative staffs, their
professional and technical counterparts and Post Office manipulative grades (postmen, telephonists, etc.).

In the case of industrial staff, in so far as they are employed in establishments which carry on work similar to that performed by employees of private firms (for example, engineering, building, etc.), they are also included in the tables for the particular industries concerned.
3.28 Government building programme The table shows the labour employed on that part of the building programme subject to direct Government control. The figures cover male operatives aged 16 and over employed on the following types of work:-
(a) direct, authorised and assisted work of a
(b) licensed work;
(c) repair of houses made uninhabitable by war damage; salvage operations and war debris clearance; and first aid repairs carried out by the Special Repair Service.
"Direct" work is work on Government-owned property. "Assisted" work is work for which the Government granted financial assistance. "Authorised" work is work of construction or alteration for local authorities and public utility undertakings which required to be authorised by the appropriate government department. Repair and maintenance work for such authorities and undertakings and items of new work under $£ 100$ in value were exempted from authorisation.

Work for private firms, private institutions and individuals required to be licensed with the exception of items of work of a value below $£ 100$ and, until the end of 1941 , all works of demolition repair, decoration and maintenance.
The exemption limit of $£ 100$ for authorised and licensed work was reduced to $£ 10$ in the London licensed work was reduced to $£ 10$ in the Lond Civil Defence Region in October 1944 and in certain other dist.
3.29 Government training centres and emergency training establishments The table relates to the number of civilians trained or in training at Government training centres emergency training establishments. The latter emergency training establishments. The latter utilised for training purposes all facilities available at technical colleges and industrial establishments not being used in operations essential to the war effor The figures for completed training include all
persons who completed the course in Government training centres together with terminations after passing the placing test in emergency training establishments. Trainees were required especially under schemes conducted by industrial establishments to undergo a placing test before completion of the course of training. These courses were of fixed duration, varying with the type of training required, but normally of eight weeks' duration.

## 4. AGRICULTURE AND FOOD

## AGRICULTURE

4.3, Area of crops and grass
4.4 The statistics of area are obtained from returns made by all occupiers of more than one acre of agricultural land in Great Britain. In Northern Ireland returns are required from all occupiers of one quarter of an acre or more of agricultural land. The areas shown exclude woodlands, buildings, roads, yards, ponds, etc.

The figures of specific crops relate to those which were actually in the ground on the date of the June census, or for which the land was being prepared at that date. Any catch crops grown for livestock feed or for ploughing-in in the period between the harvest and the sowing of the next season's main crop are not shown in the acreage returns. The case is similar for vegetable crops.

The number of acres under each crop was reported to the nearest quarter-acre. Any crops not specified in the return or grown in patches of less than one quarter of an acre are shown under the heading "Other crops".

The permanent grass acreage relates only to that grassland which was not under rotation.
4.5,

Crops and grass harvested
4.6 The estimates of the quantity harvested were for the most part obtained by combining the areas returned in June with estimates of yields made by technical officers employed by the Departments of
Agriculture. Agriculture.
4.7,

Livestock
The tables show the number of cattle, sheep, pigs
and poultry as returned by all occupiers of more than one acre of agricultural land in Great Britain and one quarter of an acre or more in Northern Ireland.

## FOOD

4.1I Movement off farms

Wheat, barley and oats
The series for wheat, barley and oats show as nearly as possible the sales of the home crops of these cereals as food. Thus no account is taken of farm sales specifically for animal feed, although small quantities were diverted for this purpose. The wheat figures show receipts by flour mills; the barley figures show receipts by brewers, maltsters, flakers, roasters, distillers, pot barley manufacturers, the Ministry of Food and (for a short period of 1943 and 1944 when flour was diluted) flour millers; the figures for oats are receipts by oatmeal millers (including a small quantity in 1943 for flour dilution), flakers and maltsters, and the Ministry of Food.

Potatoes:
The series shows the quantity of ware potatoes (excluding chat and seed) sold directly for food (including exports) and also for processing. The figures include the quantity of surplus ware potatoes fed direct to livestock under the Ministry of Food scheme or under special licences. Allowance has been made for human consumption on farms but production on allotments and gardens is excluded.

Sugar:
The production of refined and raw sugar (in terms of refined) from home-grown sugar beet. In 1939 the average relates to "the campaign year" -
October, 1939 to January, 1940
4.12 Animals purchased for slaughter

The figures relate to the number of animals purchased by the Ministry of Food from farms in Great Britain including fat animals imported from
 Eire and Northern Ireland for slaughter in Great
Britain. Pigs fattened by pig clubs or other domestic producers and killed under licence are excluded.
4.13 Milk sales through the marketing scheme The figures cover sales through the marketing scheme, for liquid consumption and for the manufacture of milk products including farm chees The quantity consumed by farm households and used on farms for butter production or calf rearing is excluded.

### 4.14 Processed food: Production

Wheat and oat milling
The series under the heading "Flour milling" show the quantity of home-produced and imported wheat milled and the resulting output of flour and offals. The latter two series include also the small
quantity of oats and barley used for the dilution of flour in 1943 and 1944. The figures for oats show the quantity used by oatmeal millers, flakers and maltsters.

Seed crushing and vegetable oil consumption: The five series show the quantity of oilseeds and nuts processed by crushing, expelling and extraction, the resulting production of crude oil and oilcake or meal and the consumption of the oil The consumption figures include the crude oils used as such for soap and other industrial purposes, and the crude oil equivalent of the refined oils used for the manufacture of margarine and cooking fats and other food uses. Exports are included both in total disposals and in disposals for food. Castor meal, cocoa-cake and meal, which are unsuitable for animal feed, are excluded from the oilcake and meal figures.

Whale, herring and seal oil:
Consumption is calculated on the same basis as that of vegetable oils.

Meat:
Up to and including March 1940 the production of carcase meat and offal has been calculated from the estimated number of animals slaughtered From April 1940 onwards the figures relate to sales by the wholesale meat supply associations and to meat and offal produced by pig clubs and other domestic producers. Meat from imported fat stock and fresh meat from Eire are included throughout.

## Bacon and ham

The figures relate to the output of curing factories from both home-killed and imported carcases. Bacon cured for pig clubs or other domestic producers is included.

Butter:
The figures relate to the output of home creameries. The production of butter on farms is excluded.

Cheese:
The series shows all graded cheese purchased by the Ministry of Food from creameries or farms. Processed cheese is excluded as being a
remanufacture of graded cheese.
4.15 Food and animal feeding-stuffs:

Consumption
The consumption figures relate to deliveries from stocks held or controlled by the Ministry of Food
taking into account changes in stocks of wholesalers and manufacturing users. They should not be confused with retail purchases. In addition to deliveries to home food distributors, for civilians and for the Services, the figures include deliveries to manufacturers of products other than food and to exporters. Whenever these items are quantitatively important deliveries "for food" are shown separately. Where foods are used in the manufacture of other goods (for example, sugar the manufacture of jam, biscuits, sweets) the quantities used for this purpose are included in the food column. The following points should be noted.

Rice:
The series gives total disposals which in addition to issues of whole rice, including issues of broken rice to manufacturers for brewing and for the production of ground rice, inedible starch, etc., and losses in recleaning as well as milling and drying losses.

Starch:
The series includes the quantity issued to industrial users as well as that issued to glucose and other food manufacturers

Fresh, frozen and cured fish (landed weight) Total disposals are the landed weight of fresh and frozen fish supplied to wholesalers, certain retailers and institutions, the Services, manufacturers of oil and fish meal and exporters, together with the quantity of cured fish issued to wholesalers, manufacturers and exporters. The condemned fish and offal which are included are taken by fishmeal manufacturers for the production of fertilizers and animal feed.

The figures for disposals for food in the United Kingdom give the landed weight of fresh and frozen fish and net weight of home-cured fish, but exclude quantities supplied to exporters and fish taken by fishmeal manufacturers.

## Eggs in shell:

The figures show the consumption of imported and commercially-produced eggs plus an estimate of the number of eggs obtained by domestic poultry keepers.

## Potatoes:

Total disposals exclude seed and chat potatoes, stock-feed outside Ministry schemes and waste on arms. Disposals for food in the United Kingdom further exclude stock-feed under Ministry schemes and exports, and relate to the distribution of

DEFINITIONS AND NOTES
potatoes intended for human consumption. No allowance is made for waste in distribution or for feed to domestic animals.

## Barley:

The figures for brewing and food show the quantity
used by brewers, maltsters, flakers, roasters,
distillers and pot barley manufacturers.
Maize:
Total disposals relate to the quantity used by manufacturers for production of edible starch, glucose and cereal breakfast foods, maize issued for pigeons and maize and maize meal used as feed.

## Oilcake and meal:

This series covers sales of high, medium, and low protein oilcake by oilseed crushers to dealers together with the quantity processed by provender millers and compounders. Low protein oilcake, such as coconut cake and palm kernel cake, was issued as part of the "cereal" feeding-stuffs ration.

## Milling offals:

The figures relate to sales by flour millers to
dealers, together with the quantity processed by
provender millers and compounders.
Conversion factors for items in the food tables Flour:

Changes in the rate of extraction of flour from wheat:

At 3rd September 1939
From 26th October 1939
70
73
From 28th April 1941
From 23rd March 194
From Ist October 1944
From 31 st December 1944 to
23rd February 1946
Oilseeds:
Crude oil equivalent
Cottonseed
Groundnuts decorticated
Groundnuts undecorticated
Copra
Palm kernels
Linseed
Rapeseed
Sunflower seed

## 5. FUEL AND POWER

## COAL

5.3- Production, consumption and stock
5.5 The series showing weekly averages for individual months are based on weekly or monthly returns. The weekly averages for each year are based on returns for the calendar year where available.

Saleable mined coal:
Production figures show the tonnage of coal raised and weighed at the pithead at coal mines in Great Britain, after deducting the weight lost in the elimination of stones and dirt by screening and washing. Miners' free and concessionary coal and all coal (of whatever quality) used for colliery purposes is included.

## Opencast coal:

Coal obtained by opencast working of deposits near the surface.

### 5.4 Inland consumption

Public utility undertakings:
Gasworks include both statutory and non-statutory undertakings as well as gasworks of railway and transport undertakings.

Electricity undertakings comprise public supply and transport power stations.

Consumption of coal by railways is the amount used by the main line railways and the London Passenger Transport Board for locomotives, in workshops and stations and for marine purposes. It should be noted that coal consumed by the railways for the generation of electricity is included under "Electricity" and that for the production of gas under "Gasworks".

## Coke ovens

The series relates to coal carbonised by coke ove plants.
Industrial consumers:
The figures include only coal consumption of undertakings with an annual consumption of 100 tons or more of coal and coke

## Miners' coal:

Coal supplied by the collieries free of charge or at specially reduced prices to miners and their dependants, officials, clerks, etc., employed at the mines, miners' welfare bodies and other authorised persons and institutions.
4.16 Arrival of lend-lease foodstuffs

The figures given in this table cover arrivals of lendlease food supplies originating in the United States of America only. Arrivals from other countries are shown in the small table at the foot of page 72.

Merchants' disposals
The figures relate to the distribution of house coal, anthracite and boiler fuel by merchants to premises not separately programmed for their supplies and to other merchants for resale. In addition to private residences these premises include shops, offices, hotels, cinemas, institutions and the like and the smaller industrial consumers of solid fuel House coal sold landsale by colliery undertakings acting as merchants is included.

Collieries:
The amount of coal, irrespective of quality, consumed at collieries for all purposes, including engine fuel.

## Miscellaneous:

Water works, Service departments, shipments to Northern Ireland, industrial undertakings with an annual consumption of less than 100 tons,
coastwise bunkers and non-industrial undertakings (that is, hospitals, schools, hotels, offices, shops, local authorities, Government buildings, etc., whose supplies are programmed and are not included in "merchants' disposals")

## Distributed stocks

Distributed stocks relate to the amount of coal held by industrial consumers with an annual consumption of more than 100 tons of coal and coke, public utilities, railways, coke ovens, Government dumps (that is, coal held in Government stocking sites) and miscellaneous consumers and by merchants for domestic consumption. Stocks held in Northern Ireland are excluded.

### 5.6 Mined coal: Productivity

The figures before 1943 for the average number of shifts worked and possible and for the absenteeism percentage are based on returns collected by the Joint Accountants to the industry, in which the number of wage-earners differed from those obtained from the Ministry's own returns shown in the first column of the table. Average output per manshift before 1943 has not been calculated from these figures but from the annual statutory returns of the Ministry.

Wage-earners on colliery books.
This series includes all wage-earners, male and female, engaged in raising or handling coal or other minerals obtaned with coal. Clerical and administrative staff are excluded.

## Shifts worked

The average number of shifts worked per wage-
earner per week is the total number of manshifts worked in the period divided by the number of wage-earners on colliery books at the end of each week in the period.

## Shifts possible

Shifts possible are the sum of shifts worked and shifts lost through absenteeism of the workers. Shifts lost owing to recognised holidays, disputes, accidents, repairs, breakdown of machinery, etc., at the mines are not included.

## Absenteeism percentage:

The absenteeism percentage is the total number of shifts lost through absenteeism multiplied by 100 and divided by the total number of shitts possible.
Output per manshift:
The average output in tons per manshift worked is the output of saleable coal divided by the total number of manshifts worked, at the coal face and overall.

## COKE

5.7 produced at coke ovens consists of furmace coke and foundry coke. Production at gasworks includes coke used at these undertakings in the manufacture of water gas, in some cases that used for heating retorts and all other purposes.

Total inland consumption includes coke consumed at gasworks, blast furnaces and other industrial undertakings, by railways, non-industrial establishments and Service departments, disposals by merchants to domestic premises and shipments to Northern Ireland.

Total stocks relate to the amount held at producers' works, blast furnaces and other industrial undertakings, by railways, non-industrial establishments and Service departments and at merchants' yards. Stocks held in Northern Ireland are excluded.

## GAS AND ELECTRICITY

5.9 Gas

Tota gas available is the sum of gas produced at all authorised and non-statutory gas undertakings in Great Britain (excluding from the year 1943 that produced at works of railway and transport authorities) together with the amount bought from coke oven plants by gasworks for resale. Gas produced by coke ovens for the iron and stee industry and sold direct to other industries for consumption for other purposes is not included.

## DEFINITIONS AND NOTES

5.1I Electricity

The figures relate to authorised undertakings and railway and transport power stations only. Electricity generated by industrial establishments for their own use is not included.

## PETROLEUM

The annual totals given in this series of tables and the weekly averages derived from them include certain revisions which have not been made to the monthly figures. The monthly figures in Tables 5.13 to 5.16 are for four or five week periods; in Tables 5.17 to 5.19 they are for calendar months. The figures given for deliveries into consumption represent deliveries by the bulk petroleum distributors and not actual consumption.

### 5.13- Petroleum products

5.17 Motor spirit:

Motor spirit includes distillation benzines used for industrial processes.

Lubricating oils
Lubricating oils include medicinal paraffin and mineral jelly.

## Bitumen

Bitumen refers only to asphaltic bitumen refined by
the distillation of asphaltic base crudes
Process oils
Products intended for use as raw materials in refineries.

Approximate conversion factors
Imperial gallons
per long ton
310
300
284
276

264
250
235
255
245
250

> Aviation spirit Motor spirit White spirit Kerosine (paraffin) Gas oil (including fuel for dieselengined road vehicles) Diesel ool Fuel lois (imports) Lubricating oils: White oils Other Crude and process oils
5.13 Arrivals of tanker-borne petroleum products and crude and process oils
The term "arrivals of tanker-borne petroleum
products" covers liquid petroleum products carried
in bulk in tankers; surplus bunkers removed from in bulk in tankers; surplus bunkers removed from vessels of all descriptions; packed lubricants,
whether carried as deck cargo or forehold cargo in tankers or in other vessels. It excludes paraffin wax, grease and natural bitumen. The figures for "refined petroleum products" refer to the quantities oaded at the port of shipment and are subject to a deduction of one-half per cent. for ocean leakage. Owing to differences in definition these figures which were provided by the Petroleum Board may differ, particularly in short-term periods, from the figures given in the Accounts relating to the Trade and Navigation of the United Kingdom.
5.15 Production from indigenous materials of petroleum products and substitutes Indigenous production covers products obtained from refining shale oil and indigenous crude petroleum. It includes receipts by the bulk petroleum distributors from hydrogenation, low temperature carbonisation, tar distillation and benzole recovery plants. The figures under bitumen refer to the quantity of creosote used as a fluxing agent. The series quoted refer only to the output distributed by the Petroleum Board.

The figures for aviation and motor spirit include production of white spirit and kerosine.

Home production of fuel oil comprises mainly tar oils.
5.17 Deliveries into civilian consumption of motor spirit
This analysis of deliveries into consumption is based on coupon issues and does not take into account on coupon issues and does not take into account the use of coupons for purposes for which they re tities delived. Consumption inclaces Service dervered against coupons exchanged for Service department requisitions (private cars) and indents (public service and goods vehicles).

## Private cars and motor cycles

Deliveries for cars taxed on horse-power and for Deiveries for cars taxed on horse-power and for
motor cycles, including private hire cars and invalid carriages, but excluding cars and cycles operated by Government departments, local authorities and the police services.

## Commercial vehicles

This heading includes deliveries for consumption by goods vehicles, buses, coaches, taxis, Government departments, local authorities, the police services, vehicles distributing petroleum products, etc.

## Industrial uses

Deliveries for unlicensed vehicles, ambulances
(other than those owned by local authorities), vehicles operating on trade plates, plant, machinery and watercraft used for industrial purposes, lighting plants and motor spirit used for industrial processes.

## Agricultural uses

Deliveries for farmers' vans, lorries and tractors not operating under carriers' licences or permits, agricultural engines (5s. class) and agricultural stationary engines.
5.18 Deliveries into consumption of fuel for diesel-engined road vehicles
This table is based on the total deliveries into consumption of gas oil on which duty is paid for use in diesel-engined road vehicles and on figures of coupon issues to consumer groups. The figures include quantities delivered against coupons exchanged for Service department indents.
5.19 Deliveries into consumption of gas, diesel and fuel oil
Bunkers
Including deliveries to certain coastal vessels which are linked with concerns operating ocean-going vessels.

Burning
Burning Deiveries of oil for central-heating, steam raising
and industrial furnaces.
Power
Deliveries of oil for stationary and mobile engines and for bunkers for fishing and coastal vessels excluding those linked with concerns operating ocean-going vessels.

## Manufacture

Deliveries mainly for gas works and grease blending plants.

## 6. RAW MATERIALS

6.3 Iron ore and manganese ore

Iron ore
The ferrous content of home iron ore is about 30 per cent, compared with $55-60$ per cent for imported iron ore.

Production figures for 1940-45 include small quantities of manganese ore.

Consumption figures relate to the consumption of raw and calcined ore as charged, except in the case of the figures for home iron ore in 1937 and 1938
which relate to raw ore and the raw equivalent of calcined ore. The 1937 and 1938 consumption figures for both home and imported ore include manganese ore, but exclude consumption in steel works. Consumption of imported ore in blast furnaces includes consumption in sinter plant.

Stocks of imported iron ore include ore in ships discharging and in transit to works.

Manganese ore
Stocks are the quantities held at works and in transit in the United Kingdom.
6.4 Pig iron

This comprises haematite, basic, foundry and forge pig iron, direct iron castings and blast furnace ferroalloys.

Consumption includes refined and cylinder pig iron consumed in refined iron works.

Total stocks include stocks at wrought iron and refined iron works and in Ministry of Supply stockyards.

Where cumulative adjustments have had to be made to annual figures for production and consumption, these may not correspond exactly with the monthly figures.
6.5 Iron and steel scrap and steel ingots and castings Iron and steel scrap
Consumption figures relate to the quantity of steel and cast iron scrap (including scrap arising in own works) consumed in the production of steel ingots and castings, excluding the scrap consumed in blast furnaces.

Stocks are the quantities held at steel works and steel foundries.

Receipts of "bought" scrap are receipts of scrap bought in the home market. Figures before 1940 are estimated.

Steel ingots and castings
From July 1943 alloy steel figures relate to steel, other than high speed steel, containing a minimum of 0.4 per cent of chrome or nickel, 0.1 per cent of molybdenum, tungsten or vanadium, or 10.0 per cent of manganese. Before July 1943 the minimum proportions of these elements in alloy steel were 0.5 per cent, 0.25 per cent or 12.0 per cent. respectively.

Where cumulative adjustments have had to be made to annual figures for production and consumption, these may not correspond exactly with the monthly figures.
6.6 Semi-finished and finished iron and steel Billets, blooms and slabs
Figures relate only to material for the production of heavy and light rolled products. From 1941 alloy steel is excluded.
Heavy rails and sleepers
Rails over 36 lb . per yard (perfects and defectives) and sleepers, fishplates and soleplates for use with them.

Heary and medium plates
Boiler plate $3 / 16$ inch thick and over; other plates $3 / 16$ inch thick and over; medium plates and sheets under $3 / 16$ inch thick, down to and including 3 mm . thick.

Other heavy steel products
Angles, tees and sections over 4 united inches; channels over 3-inch web; girders, joists and beams 3 -inch web and over; rounds, squares and
hexagons 3 -inch and over, and fleel (ingots billets and 5 -inch shot and bombs).

## Light rolled products

Rails under 36 lb . per yard, and accessories; steel arches and accessories; angles, tees and sections 4 united inches and under; channels 3 -inch web and under; joists and "H" bars under 3-inch web; wire rods: ferro-concrete bars and other bars, rounds, squares, hexagons, etc., under 3-inch and flats 5 inch wide and under; hot rolled hoop and strip.

Cold rolled strip
Under 18 -inch wide.
Sheets
Under 3 mm . thick, coated and uncoated, but excluding tin, terne and blackplate.
Tin, terne and blackplate
Includes tinned sheets and uncoated tinplate base.

## Steel castings

Net weight of fettled castings produced, machined necessary to ensure soundness.
Steel forgings
Net forged weight of drop forgings and other type forgings.

## Tyres, wheel and axles

Tyres, rolled rings, straight axles, solid wheels, disc
wheel centres and assembled wheels and axles.

## Stocks of steel

Ingots, semi-fnished and finished steel held at producers' works, in British Iron and Steel Corporation stockyards and in transit in the United Kingdom. Consumers' stock are excluded.
6.7 Chrome ore and ferro-alloys

Chrome ore
Stocks are the quantities held by consumers, importers and the Ministry of Supply. Stocks in transit are excluded except in 1940.

Tungsten, molybdenum and vanadium Production and consumption figures relate to the hon-ferrous metal content of ferro-alloy and other finished products. Stock figures relate to the nonferrous metal content of stocks of the ferro-alloys and of the ore (allowing for losses in refining) held by producers, consumers, merchants and the Ministry of Supply.

Ferro-chrome, silico-mangnese, ferro-mangnese, erro-silicon, calcium silicide
Stocks are the quantities held at consumers' works, in British Iron and Steel Corporation stockyards and in transit in the United Kingdom. Figures for stocks and consumption of ferro-silicon exclude special grade used for aeronautical purposes.

### 6.8 Non-ferrous metal

Except where otherwise stated, figures for stocks of copper, zinc, lead, nickel, tin, bauxite, cryolite, alumina and magnesite relate to quantities held by the Government and by consumers and include stocks in transit in the United Kingdom. Stocks of magnesium and magnesium alloys are Government stocks only and include stocks not taken on charge.

## Refined copper

Production figures relate to production on toll contracts from imported blister, including scrap refined on private account from 1943.

Virgin copper
Unwrought copper (electrolytic, fre refined and blister).

Zinc concentrates
Consumption figures from 1942 include consumption other than for zinc production.

## Virgin zinc

Unwrought zinc, excluding re-melted zinc. Some secondary material is included in the production figures for the years 1935 to 1939 .

## Refined nickel

Includes ferro-nickel.

## Refined lead

English refined lead is included from 1942. Reexports on toll transactions are included in total disposals and also in home consumption where fabrication had taken place before re-export.

Production figures for 1935 to 1942 relate to production from imported and domestic ores and concentrates; for 1943 to 1945 they relate to lead reclaimed from secondary and scrap material, and lead refined from domestic ores.

Virgin tin
Figures for production from 1942, and for total disposals throughout, include residues refined on toll and re-exported.

Bauxite
Expressed in terms of high grade bauxite.
Magnesium and magnesium alloys Production includes scrap recovery. Consumption figures relate to despatches to consumers.

Magnesite (calcined and dead burnt) Production figures refer to metal extracted from sea water.
6.9 Aluminium

Virgin aluminium
Consumption figures include the aluminium content of virgin alloys. Stocks are total stocks, including consumers' stocks and stocks in transit, and they include the virgin aluminium content of all alloys.

## Secondary aluminium

Production includes production from crashed aircraft. Consumption figures relate to releases by the Light Metals Control. Stocks are total stocks, including consumers' stocks and stocks in transit.

### 6.10 Softwood and hardwood

 leepers and crossings of all kinds are excluded, except in figures for production before 1942.Softwood excludes pitwood, boxboards, pulpwood and poles. Hardwood excludes pitwood, logs for veneer production and staves.

Production of softwood and hardwood is the estimated output, based on deliveries from sawmills, of timber sawn from home-grown logs. In the figures for production after 1941 and in all
figures for consumption of home-grown timber an allowance of 10 per cent. (softwood) and 5 per cent. (hardwood) has been made for conversion to square-edged material.

Consumption of home-grown softwood and hardwood is calculated from production and changes in stocks; that of imported, from the Timber Control's records of arrivals at ports to their account and changes in stocks.

Stocks of home-grown softwood and hardwood are the quantities held by the Home Timber Production Department, by merchants, by consumers (including railways) and in National stock. Ineffective stocks, estimated from July 194| at $\mid 2,000$ standards (softwood) and 1.25 million cubic feet (hardwood), are excluded

Stocks of imported softwood and hardwood are National stocks (including stocks awaiting discharge), importers', merchants' and consumers' (including railways') stocks and stocks of recovered timber. Imported hardwood stocks exclude ineffective stocks of hardwood, which until August 1941 amounted to 4 million cubic feet and from September 194 । to 2 million cubic feet.

Stocks in the hands of firms whose normal stocks are less than 20 standards (softwood) or 1,000 cubic feet (hardwood) are excluded.
6.1I Pitwood and plywood

## Pitwood

All mining timber specially prepared for use underground in mines for propping or shoring or as pit sleepers. It is shown in Gothenburg standards (equivalent to 180 piled cubic feet) calculated in the case of round pitwood in accordance with the Gothenburg scale, and in the case of other mining timber on an equivalent basis.

Round pitwood comprises pitprops, including sawn and quartered props, round bars and long pitwood. Sawn pitwood comprises other sawn mining timber.

The figures for production show the quantities despatched by the trade and by the Home Timber Production Department.

Consumption is calculated from deliveries to mines adjusted for changes in stocks at mines. Stocks are National stocks (including stocks in transit and piling) and colliery stocks (including, from 1943, stocks held underground).

## Constructional plywood

All rectangular boards, including block board, etc. of standard construction, excluding plywood of special shape or construction or of technical specification.

Production figures show the quantity of homeproduced plywood taken into National stock.
Consumption is calculated from deliveries from National stock adjusted by changes in private stocks.

Stocks are National stocks, including stocks awaiting discharge. Merchants' and certain consumers' stocks are included up to June 1943.

## Technical plywood

Plywood produced for special requirements of the Service departments.

### 6.12 Hides, skins and finished leathe

 Cattle hidesProduction figures show deliveries to tanners of native raw hides. Stocks consist of native hides and imported wet, wet salted, dry and dry salted cattle and buffalo hides held by tanners and dressers. Stocks in transit in the United Kingdom are included.

Kips and calfskins
Production figures show deliveries to tanners of native raw kips and calfskins.
Stocks consist of native and imported kips and calfskins held by tanners and dressers.

## Goatskins

Stock figures relate to imported goatskins held by tanners and dressers.

## Sheepskins

Production figures show the quantity of native sheep and lamb pelts fellmongered, including deliveries of woolled skins to dressers for dressing with the wool on.

Stocks consist of native and imported sheep and lamb pelts and wool led skins for dressing with the wool on held by tanners and dressers and in
Government reserve.

## Rough tanned hides and kips

East Indian kips, calfskins and buffalo hides, including quantities in transit in the United Kingdom, held by tanners and dressers, factors and merchants. Rough tanned goat and sheepskins

Imported rough tanned goat and sheepskins. including quantities in transit in the United Kingdom, held by tanners and dressers, factors and merchants.

Heavy leathers (leathers sold by weight) Sole leather bends and offal, hide mechanical and textile leathers.

Consumption figures for heary leathers represent deliveries by producers; for sole leather they also include imports and are adjusted for changes in certain stocks.

Stocks of heavy leathers comprise sole leather bends, offal and cut stock held by tanners, boot manufacturers, factors, merchants, sole cutters and heel builders and hide mechanical and textile eathers held by tanners, factors and merchants. Stocks in transit in the United Kingdom and any stocks in Government reserve are included.

Light leathers (leathers sold by area) Upper and lining leather, gloving leather, chamois, upholstery, case, clothing, hat, bookbinding and other light leathers

The consumption figures represent deliveries by producers; for upper and lining leather they also include imports and are adjusted for changes in certain stocks.
Stocks are the quantities held by producers, boot manufacturers, factors and merchants. Stocks in transit in the United Kingdom are included.

### 6.13 Rubber

Waste rubbe
Crumb rubber is included in 1942.
Production is the collection of waste rubber from all sources including manufacturing scrap and domestic collections and the arrival of battlefielc scrap at authorised dumps in the United Kingdom From July 1944 the figures relate to collections at Ministry of Supply dumps only.

Consumption is the processing of waste into reclaimed rubber. From July 1944 the figures relate to issues from Ministry of Supply dumps only.

Stocks are the quantities held at Ministry of Supply dumps and, before July 1944, by cable strippers, licensed merchants, reclaimers, rubber manufacturers, and at Service dumps.

## Reclaimed rubber

Natural, synthetic and, in the monthly figures for 1943, crumb rubber.

Production figures give production by reclaimers and, up to July 1944, by rubber manufacturers.

Consumption includes direct usage of waste rubber until July 1944. From that date figures are estimated and cover reclaimed rubber only

Stocks are the quantities held by reclaimers, rubber manufacturers and the Ministry of Supply. Government lend-lease stocks are excluded in the figure for the end of 1941 .

## Natural rubber

Includes latex (except in the monthly figures for 1942) but excludes balata and gutta percha.

Consumption includes exports except in the monthly figures for 1942 .

Stocks are the quantities held by H.M. Government, by manufacturers and, before January 1942, by importers and dealers in London and Liverpool. Stocks in transit are included from January 1942

## Synthetic rubber

G-R-S type, neoprene, butyl, N-type, and
miscellaneous synthetic rubbers. "Thiokol" and "Novoplas" are excluded from July 1944. Consumption figures include exports.

Stocks are the quantities held by H.M. Government and by rubber manufacturers.
6.14 Chemicals

Industrial alcohol
Ethyl alcohol expressed as 68 O.P. spirit
Consumption shows deliveries to consumers including methylators.

Stocks are quantities held on behalf of the Government and by producers.

## Industrial methylated spirit

Consumption shows deliveries to consumers.

## Methanol

Consumption shows deliveries to consumers.
Stocks are quantities held on behalf of the Government and by producers and consumers

Ure
Consumption shows deliveries to consumers.

## Nitric acid

Production in acid works, including Government acid plants.

Stocks are the quantities at acid works and Government plants.

Pyrites
Imported and home-produced pyrites for the manufacture of sulphuric acid.

Production figures relate to arrivals of homeproduced material at acid works.

Stocks comprise the Government reserve and material at acid works, including Government acid plants. Stocks in transit in the United Kingdom are included from June 1943

Sulphur (for acid)
Production figures relate to arrivals of homeproduced material at acid works.

Stocks comprise the Government reserve and material at acid works, including Government acid plants. Stocks in transit in the United Kingdom are included from 1943.

Sulphur (regular)
Production figures relate to recovered sulphur Stocks comprise the Government reserve and material at consumers' works and include manufactured forms. Stocks in transit in the United Kingdom are excluded.

Spent oxide and anhydrite
The figures relate only to material for use and consumed in the manufacture of sulphuric acid. Production figures show arrivals of home-produced material at acid works.

Stocks are the quantities at acid works.

## Sulphuric acid

As 100 per cent acid. From 1941 acid made at Government factories is included.

Stocks are the quantities at acid works and Government plants.

## Calcium carbide

Consumption figures relate to despatches from works.
6.15 Fertilizers, ammonia and molasses Nitrogenous fertilizers (nitrogen content) Production figures relate to ammonium sulphate, "Nitro-chalk" and concentrated compound fertilizers.
Consumption and stock figures relate to ammonium sulphate, "Nitro-chalk," concentratec compound fertilizers, Chile nitrates of soda and potash, Trail ammonium phosphate, ammonium nitrate, nitrate of lime and cyanamide.

Non-agricultural uses are excluded except in the series for total disposals which includes exports of ammonium sulphate for all purposes.

Superphosphate ( $\mathrm{P}_{2} \mathrm{O}_{5}$ content) Consumption figures relate to deliveries by manufacturers and from Government stores to merchants and farmers for direct application, and quantities used in ordinary compound fertilizers.

Stocks are the quantities held by manufacturers and by dry mixers. From February 1945 imported material is included.

Ground basic slag ( $\mathrm{P}_{2} \mathrm{O}_{5}$ content) Production figures relate to slag ground in the United Kingdom from home-produced raw slag.

Consumption relates to deliveries of home-ground material to merchants and farmers for direct application.

Stocks are the quantities held by manufacturers.
Ground phosphate ( $\mathrm{P}_{2} \mathrm{O}_{5}$ content)
Production relates to phosphate ground in the United Kingdom from imported phosphate rock

Consumption relates to phosphate ground in the United Kingdom delivered by grinders for direct application or for mixing in compound fertilizers.

Stocks are home-produced material held by manufacturers and compounders.

All other phosphatic fertilizers ( $\mathrm{P}_{2} \mathrm{O}_{5}$ content) Production figures relate to organic fertilizers, treated phosphate rock and concentrated compound fertilizers.

Consumption figures include in addition ammonium phosphate, triple superphosphate and, in 1943 and 1944 only, calcium metaphos. They relate to quantities delivered to merchants and
farmers for direct application or used by compounders.

Stocks comprise treated phosphate rock, concentrated compound fertilizers and, in the figures for 1942 to 1945 , triple superphosphate The figures relate to home-produced and imported material held by superphosphate manufacturers and dry mixers.

Potash ( $\mathrm{K}_{2} \mathrm{O}$ content)
Agricultural potash only.
Consumption figures relate to quantities delivered in ordinary or concentrated compound fertilizers or for direct application.

Stocks are the quantities held by merchants and compounders.

Compound fertilizers (excluding concentrated compound fertilizers)
Total weight of product.
Consumption relates to deliveries by all
compounders to merchants and farmers.
Stocks are the quantities held by compounders.
Phosphate rock
Consumption figures show the quantity used in the manufacture of fertilizers or for other industrial purposes.

Stocks are the quantities held for use in fertilizers by the Government, superphosphate makers and grinders, and quantities held by manufacturers for other industrial purposes

## Ammonia

The figures exclude ammonia produced in by product factories and converted directly into sulphate of ammonia.

Consumption figures show deliveries by producers to consumers and for export.

Stocks are the producers' stocks at works, including stocks in Government factories. Consumers stocks are included in the figure for 1942.

## Molasses

The figures are expressed in terms of blackstrap containing 52 per cent sugars.
Production is the production from sugar cane and sugar beet of molasses handled by the Government.

Consumption figures give deliveries for distilling: for cattle feed including silage, sweetened pulp and straw ration; and for tanning, solvents, yeast, coremaking, citric and lactic acid, and Ministry of Food requirements.

Stocks are those held in depots and refineries and by consumers. The figure for 1945 includes the molasses equivalent of sugar awaiting conversion to high test molasses.

### 6.16 Plastics and materials for plastics

 producers' own factories and deliveries to consumers (including Government consumers).
### 6.17 Paper and papermaking materials

## Papr" means paper orboard. "mills" mean

 paper mills or board mills.Papermaking materials other than woodpulp Consumption figures relate to consumption by mills.

Stock figures of pulpwood, straw for papermaking, and esparto show the quantities held at mills. The stock figures for rags, waste ropes, etc., and waste paper are prepared from returns made by mills and merchants; they cover all mills and the principal merchants.

## Paper equivalent

The paper equivalent figures show the approximate amount of paper which it is estimated can be produced from the papermaking materials other than woodpulp shown as consumed or in stock. The approximate paper equivalents are: pulpwood $37 / 1 / 2$ per cent, straw 43 per cent, rags, etc., $66^{2 / 3}$ per cent, waste paper 80 per cent, esparto 42 per cent.

## Pulpwood

Imported pulpwood and home-grown timber,
including wood waste and chippings.
Woodpulp for papermaking
This comprises chemical sulphite pulp (bleached, partly bleached, bleachable, easy bleaching, strong and bamboo), chemical sulphate pulp (bleached, partly bleached, bleachable, easy bleaching, knotte and screenings, and kraft); and mechanical pulp (wet and dry mechanical pulp) in terms of air dry weight used or held by papermakers and manufacturers of cellulose wadding.

## ndustrial woodpulp

The woodpulp held or used by manufacturers of rayon and transparent cellulose film.

## Newsprint

Consumption figures for 1939 give the quantities of ewsprint used by publishers of newspapers and periodicals; subsequent figures also include quantities licensed for other purposes, exports and re-exports.
Stock figures show the quantity of newsprint held at mills and by publishers of newspapers and periodicals.
Building boards and other paper and board Building boards comprise insulation board, laminated wallboard and hardboard.

Consumption is derived by adding together the paper imported and the home-produced paper invoiced out by mills, and adjusting at the end of every four months for any reduction or increase in the stocks of paper held by manufacturers, merchants and large consumers.

Stocks are the quantities held by papermakers, paper merchants, bag makers, box makers, wallboard merchants, converters, manufacturing stationers and consumers. The returns made by bag makers, box makers, papermakers, and wallboard merchants are believed to cover all engaged in the trade. The principal converters who are omitted are periodical publishers and printers, although certain printers are included in the other categories where for example, they eperate also as merchants. The returns obtained perate also as merchants. The returns obtained
 are ilkely to hold considerable stocks, but the eturns obtained from consumers relate only to miscellaneous selection of arge firms. National
stocks of building boards are included in the figures for 1945
6.18 Raw cotton, cotton waste and cotton linters
Raw cotton home consumption figures show the quantities used by (a) cotton spinning mills for cotton spinning, and (b) other consumers for spinning in mixture with cotton waste, wool, and asbestos and for the manufacture of surgical dressings, upholstery, rayon and, until March 1943, explosives.

Stocks are the quantities held by merchants until Ist April 194 | when such stocks were
requisitioned by the Cotton Control. The estimated weight of raw cotton unloading at ports and in transit in the United Kingdom is included.

Cotton waste
Cleaning waste is included from January 194 I.
Production figures relate to merchants' receipts of cotton waste from spinning, doubling, weaving and hosiery mills in the United Kingdom.

Home consumption figures show the amount of cotton waste used mainly in waste, woollen and cotton spinning and in the manufacture of surgical dressings, upholstery, cleaning waste and, until August 1943, explosives. Consumption in purification factories, for which the figures are Control deliveries to such factories up to the end of June 1941 and thereafter actual consumption, is included.

Stocks are the quantities held by the Cotton Control, merchants and commercial users (including stocks at purification factories).

## Cotton linters

Home consumption figures show the use of imported first and second cut linters, United Kingdom and salvage linters, mainly in the manufacture of rayon, plastics, paper, bedding, surgical dressings, insulation material and explosives.
Stocks are those held by the Cotton Control, merchants, oilcake manufacturers and consumers.

### 6.19 Cotton yarn

Cotton yarn
Production figures give the total conditioned weight of single cotton yarn, whether sold or used in single or doubled form. They include yarn spun for sale, yarn used for further manufacturing processes in the same firm, and yarn spun on commission. They exclude yarn spun from waste, and spun rayon and mixture yarns.

Deliveries are the total weight of yarn delivered by cotton spinners or used by them for further processing against orders approved by the Cotton Control under the Cotton Allocation Scheme. Cotton waste yarn and cotton and spun rayon mixture yarn are included. Yarn for industrial uses is that used in certain manufactures (for example surgical dressings, hosiery, tyres and narrow fabrics), whether for home consumption or export, and for certain essential home services. Yarn for
the export trade is yarn exported as yarn, thread, piece goods or made-up goods.

Consumption by weavers of cotton yarn is the amount of cotton and cotton waste yarns used in the manufacture of cotton fabrics and cotton and rayon mixture fabrics.

## Cotton waste yarns

Production figures relate to yarns wholly of cotton waste.

Spindles running
Average of the number of single yarn spindles unning during each week of the period on cotton only up to October 1941, and thereafter on cotton, spun rayon and mixture yarns. Figures are given as mule equivalents. Spindles running on waste yarns are excluded.

### 6.20 Rayon, rayon yarn and woven fabrics

 RayonProduction figures from 1941 give the quantity of rayon and other synthetic fbres produced in the United Kingdom on a delivered weight basis. Before 194| the figures are excise figures less an estimated allowance for waste.

## Spun rayon and mixture yarns

Production figures cover yarns of spun rayon, cotton and rayon mixtures, cotton and wool mixtures, and waste yarns other than those of cotton waste and raw cotton

## Woven cotton fabrics

Production is the output of grey and coloured woven cotton cloth made for sale or commission on looms of not less than 23 -inch reed space. The figures cover jacquard cloths and cloth for made-up cotton goods, including towels, quilts, bed-coverings, surgical bandages and dressings and tyre cord and fabric. They exclude hosiery, lace net and machinery belting and other cotton smallwares. The figures represent the linear yardage of cloth in the grey state before undergoing finishing processes.

## Woven rayon and mixture fabrics

 Production is the output of fabrics made wholly from continuous filament or spun rayon, from nylon (after August 1944) and from mixtures of rayon, nylon and cotton yarn. Weaving is on looms of not less than 23 -inch reed space. The fabrics included are those containing not less than 85 per cent by weight of cotton, rayon or nylon yarn. The
## figures represent the linear yardage of cloth in the

 grey state before undergoing finishing processes.
## Rayon yarn

Consumption figures give the consumption by weavers of yarns made of continuous filament, spun rayon (long or short staple) and other synthetic fibres (such as nylon) in the manufacture of rayon and mixture fabrics.

## Looms running

Until December 1943 the average of the number of looms (of not less than 23 -inch reed space) running on cotton, rayon, nylon and mixture fabrics during each week of the period. From January 1944 the figure given is the number of looms running on the last full working day of the month. The annual figures for 1944 and 1945 are monthly averages.

### 6.21 Wool and silk

Raw wool
Production figures show the intake of United Kingdom fleece and skin wool. From 1937 to 1940 the figures are estimated. From 1941 they give the actual weight of wool taken up by the Ministry of Supply, the Board of Trade or the Ministry of Agriculture and Fisheries.

Home consumption is the estimated clean weight consumed in combing, woollen spinning and felt making.

Stock figures show the estimated clean weight of raw wool in Government ownership or held by the UK/Dominion Wool Disposals, Ltd. (Join
Organisation), merchants, top-makers, spinners and manufacturers. Stocks held by farmers are excluded.

## Worsted yarn

From 1942 the figures show the wool content of manufacturers' deliveries. The figure for 1937 relates to the production (total weight) of yarn wholly or mainly of wool, including admixtures amounting to about 5 inches wide

Woven wool fabrics (excluding blankets) Production figures relate to deliveries except in 1937. All lengths are expressed as the equivalent length of cloth 54 per cent.

## Blankets

Production figures relate to deliveries computed on the basis of I blanket $=21 / 2$ linear yards and 4 cot blankets $=\mid$ full size blanket

## aw silk

Consumption figures from 1941 give the total amount of raw silk, undischarged weight, put into process. Figures for 1937 and 1938 show deliveries to mills.

Stocks are those held in the United Kingdom by consumers and by the Control, including stocks in transit but excluding material in process.

Silk noils
Production is by waste silk spinners. From March 1942 production from cartridge bag cuttings is also included.

Consumption shows quantity put into process.
Stocks are held by waste silk spinners, by noil spinners, and by the Government. From February 1942 garnetted material is included in Government stocks.
6.22 Jute, flax and hemps Raw jute
The home consumption figures show the quantity of raw jute used in jute yarn spinning.

Stocks are those held by the Control. spinners and dealers.

## mported jute goods

The home consumption figures relate to deliveries by merchants against disposal licences issued by the Control; consumption by large consumers who buy direct from the Control; quantities sold by the
Control to departments; and imported rove and other yarn sold by the Control to weavers, carpet manufacturers and other users. Home-produced goods from Control stocks are included from March 1942 to March 1945.

Stocks cover imported jute goods held by the Control, merchant distributors and consumers purchasing direct from the Control, and, from March 1942 to March 1945, home-produced goods taken into Control stock.

Flax
From April 1944, production includes imports from Eire.

Home consumption figures show the amount of flax spread for spinning by flax spinners and sales to the paper and other trades. Hemp and hemp tow used by flax spinners are included in the figures for 1940 and 1941.

DEFINITIONS AND NOTES
Stocks are the quantities held by the Flax Control and by spinners. Hemp and hemp tow used by flax spinners are included in the figures for 1940 and 1941

Soft hemps
True hemp comprises Italian, Central European (including Turkish) and Chilean hemp. The figures for consumption and stocks in 1940 and 1941 exclude some portion of true hemp taken over by the Flax Control and used by flax spinners.

Stocks of soft hemps are the quantities held by the Control and by spinners and papermakers excluding stocks in transit in the United Kingdom.

Hard hemps
Sisal, manila, phormium tenax and other varieties.
Home consumption is the amount of hemp used by spinners, papermakers and bedding
manufacturers.
Stocks are the quantities held by the Control and by spinners, papermakers and bedding manufacturers, excluding stocks in transit in the United Kingdom.

## 7. PRODUCTION

## SHIPBUILDING

7.3- Figures of completions refer to vessels which have 7.8 completed their trials and been handed over to

## tandard displacemen

The standard displacement of a surface vessel is the displacement of the vessel complete, fully manned, engined and equipped ready for sea, including all armament and ammunition, equipment, outfit, provisions and fresh water for crew, miscellaneous stores and implements of every description that are intended to be carried in war, but without fue or reserve feed water on board.

The standard displacement of a submarine is the surface displacement of the vessel complete (exclusive of the water in non-watertight structure) fully manned, engined and equipped ready for sea, including all armament and ammunition, equipment, outfit, provisions for crew, miscellaneous stores and implements of every description that are intended to be carried in war, but without fuel, lubricating oil, fresh water or ballast water of any kind on board

## Deep displacement

Deep displacement of surface vessels is the same as standard displacement except that it includes fuel and reserve feed water

## Light displacement

Light displacement is the displacement of the ship complete with ammunition, but excluding oil, water, petrol, provisions, canteen stores, naval stores officers' slops, navigation stores and paymasters slops.

## War load displacemen

For landing craft, war load is the light displacemen plus the full weight of armoured fighting vehicles, mechanical transport, troops, permissible ammunition, stores, fuel and crew.

## Gross tonnage

Gross tonnage is the total volume of all the enclosed spaces of a vessel above the inner bottom. The unit of measurement is a ton of 100 cubic feet.
7.4 Naval vessels: Ocean and coastal convoy etc. Minelayer
This series comprises fast minelayers, controlled minelayers, minelaying lighters and coastal minelayers
Minesweepers, trawlers and boom defence vessels
These include fleet minesweepers; minesweeping anti-submarine, and minesweeping anti-submarine trawlers; boom, gate and net vessels.

## Mosquito craft

This series comprises steam gun boats, motor torpedo boats, motor anti-submarine boats, motor launches and motor minesweepers.

Landing craft
Types included are tank, flak, gun, mechanized, assault, support, personnel and infantry landing craft.

## MUNITIONS

7.9- This section gives a summary of United Kingdom 7.21 production of the more important munitions and warlike stores during the rearmament period immediately preceding the outbreak of war and during the war itself. The munitions section and the separate sections giving the production of miltary aircraft and naval vessels taken cover the major groups of war production for the
rmed forces. There are important connections armed forces. There are important connection example, this section includes the production of guns for aircraft and naval vessels. A large part of the munitions tables relates to production administered by the Ministry of Supply, which was esponsible not only for Army requirements but also for some production for the requirements of the Royal Navy and the Royal Air Force. The most mportant tems of production of this type included in these tables are small arms ammunition, explosives and the filling of shells and bombs. Except for this production the other two Supply departments remained responsible for their major munitions requirements. Of the production shown in the munitions tables, the Admiralty was responsible for the production of all naval guns (Table 7.11), the Oerikon gun (Table 7.12), naval propellant production (included in Table 7.17) and for most types of empty components for naval ammunition (Table 7.16): the Ministry of Aircraft Production was responsible for the production ircraft guns including the Hispano-Suiza (Table 12) and to a varying extent for the supply of empty bomb components (Table 7.16).

The choice of items shown in the tables has necessarily been limited, although for certain ecessanly been inited ath certain groups the coverage of the figures is more amping whoured ghting vehicles, artilery, ight guns and small arm me it hese items lend themselves more readily to eneric grouping than do certain others such as engineer stores, signal equipment and artillery instruments. The difficulty of dealing with groups this latter type where only a limited selection of tems has been included is overcome to some extent for Ministry of Supply production by prefacing the munitions tables with an index of munitions production (Table 7.9) from which the general trend of production in each main group can be readily seen. Some important groups are omitted entrely, both from these tables and from the index of production - for example, medica stores, clothing and general equipment and stores.

The statistics given in these tables come from two main sources. Those covering the period of the war and a small number of pre-war figures are extracted from the departmental records of the Admiralty and the Ministry of Supply (including the Admerds of aircratt munitions production now in the records of arcrat Minitry of Supply). Most of the possessig figures on the other hand come from Deficiency Progress Reports submitted to the

Committee on Imperial Defence by Service departments during the rearmament period.

With lexeption the labes With one exception the tables cover new
production only in the United Kingdom. The figures therefore exclude repairs, reconditioning conversions and supplies from overseas. An exception is made for armoured fighting vehicles overseas supplies of these vehicles were of exceptional importance and such supplies are shown alongside United Kingdom production in Table 7.18. Production of spare parts is excluded from all the tables.

The basis of enumeration in these tables is generally "deliveries passed inspection" and, for naval guns after January 1942 "acceptances after proof". For the few items where the basis is "deliveries ex factory" this is shown in the footnotes to the tables. The production figures elate to periods of three months (not necessarily ending on the last day of a calendar quarter) or to periods of 13 weeks ending near the end of the alendar quarter. The effect of these small variations in the time series is slight.

A double line drawn horizontally across a column indicates that the production of the particular item of equipment ceased in the preceding quarter.

The various abbreviations used in the column headings are listed and explained at the beginning of the Digest.
7.9 Index of Ministry of Supply munitions production
$\qquad$ that is, predominantly but not entirely to Army equipment. The major items in each of the groups equipment. The major inems in each of the groups varied with the different groups of stores. Owing to the very large number of spares produced and the lack of information regarding them, it was not found possible to make any allowance for spares in the index. From various estimates which were made, however, it is evident that the omission of spares from the index brings it appreciably lower owards the end of the war than it would otherwise have been.

The basis of the weighting system employed was fixed value. This was first calculated with prices uling at October 1939, but a revision was made in mid-1942 as price changes had by that time appreciably affected the weighting. The revisis was carried back to March 1941, the index being
adjusted to produce a smooth join with the earlier figures.
As the index is based on fixed prices it relates to changes in deliveries and not to changes in changes in deliveries and not to changes in
expenditure. Any distortion due to differences in expenditure. Any cistortion due to diferences excluded.

The index is not adjusted for holidays.
7.10 Artillery equipment, instruments and tank and anti-tank guns
Deliveries of experimental or pilot models are not in general included in the figures.

The figures for light anti-aircraft equipment relate to the 40 mm . Bofors only. Up to the outbreak of war all supplies of this equipment were imported.

Only new production is included in this table and the figures therefore exclude the extensive programme of conversion which was in force immediately preceding and during the early stages of the war. The scale of this programme can be seen from the following figures:

| Equipment | Number <br> Pre-war | War <br> Field 18 pdr. to <br> 25 pdr. | 611 | 829 |
| :---: | ---: | ---: | ---: | ---: | | Duration |
| ---: |
| of pogramme |

### 7.11 Naval guns

The distinction between "short" and "long" range guns under anti-aircraft is broadly the same as that between "light" and "heavy" in Table 7.10. Short range guns comprise the 2 pdr. and 40 mm . Bofors. Long range covers all larger calibres.
7.12 Armoured fighting vehicles

This is the only table in the section to include supplies from sources other than the United Kingdom. The term "overseas" covers the United States of America, Canada, South Africa, Australia and New Zealand. Supplies of tanks were from The term "supplies" includes deliveries not only to The term "supplies" includes deliveries not only to the United Kingdom, but also to United Kingdom,
Dominion and Colonial forces in any theatre of war Dominion and Colonial forces in any theatre of war
irrespective of whether the forces were under War irrespective of whether the forces were under War
Office control or not. The figures include 2375 Office control or not. The figures include 2,375
Canadian tanks retained in Canada and about

15,500 armoured carriers and cars retained in Canada and Australia for home defence.

The weight shown for tanks is the weight "in action", that is, including armament and allowance for ammunition, wireless and other equipment and crew.
7.13 Wheeled vehicles

The figures in this table cover production for the Service departments only. Total production of motor vehicles in the United Kingdom is given in Table 7.31 .

The vehicles in this analysis, which are broadly designated as mechanical transport, include all mechanical wheeled vehicles except vehicles classified as fighting vehicles, that is, except armoured cars, scout cars and armoured command vehicles.

The classification used is based on broad general groupings. The various lorries and trucks are not all conventional load-carriers; a considerable number are vehicles with special bodies and fittings for special loads as well as for numerous technical purposes. It may, however, be useful to aggregate purposes. It may, however, be useful to aggregate
production in terms of load-carrying capacity and for this purpose heavy tractors should be regarded as equivalent to 6 -ton lorries and light tractors and as equivalent to 6 -ton lorries and light tractors
ambulances to 1 --ton lorries; heavy cars are vehicles of 16 h.p. and upwards, while light cars and vehicles of $16 \mathrm{~h} . \mathrm{p}$. and upwards, while ight
vans are below $16 \mathrm{~h} . \mathrm{p}$. It should be noted, vans are below 16 h.p. It should be noted,
however, that the load classification of Service vehicles in the main is not the same as for civil vehicles in the main is not the same as for civil
vehicles - for example, a Service 3 -ton vehicle is vehicles - for example, a Service 3 -ton venicle
the equivalent of a commercial 5 -ton vehicle.

### 7.20 Signal equipment

This table gives a limited but representative selection of signal equipment. Radar equipment is excluded.
7.21 Engineer stores

Production of engineer stores covered a wide range of field, bridging and civil engineering equipment and amenity items, for example, refrigeration and air-conditioning equipment. The items included in this table are confined mainly to bridging equipment and are not a representative selection of engineer stores.

## AIRCRAFT

7.23 Production of aircraft by structure weight The structure weight of an aircraft is the empty weight of the fuselage, wings, undercarriage, engine nacelles and flying controls. Engines, propellers,
turrets, guns, electrical equipment and radio sets are excluded.

### 7.24 Index of aircraft production

 Neither structure weight nor unadjusted manhours taken separately were found to be a satisfactory basis for an index of aircraft production. Accordingly, this index is based on manhours standardised by reference to structure weight for the three main groups of aircraft produced, namely, heavy, medium and fighter bombers; other operational aircraft; and trainers.7.25 Aircraft awaiting repair and repaired The aircraft repair figures relate to repairs carried out by the Civilian Repair Organisation only and exclude repairs by squadrons.
7.26 Engines: Production, imports and repairs The figures for imports relate to engines imported for the Royal Air Force and Royal Navy. They exclude engines returned to the United Kingdom for repair and re-export.

Repairs are those carried out by the Civilian Repair Organisation and exclude repairs by squadrons.
7.27, Arrivals of aircraft from North America
7.28 The term "arrivals" covers aircraft despatched both by air and by sea and imported for the Royal Air Force and Royal Nay

## MANUFACTURED GOODS

7.29 Deliveries of machine tools, small tools, welding sets and electric motors Machine tools
For definition see the Control of Machine Tools (No. 12 ) Order 1942. The table excludes, except from the 1935 figures, metal-working and woodworking tools of value less than $£ 50$. The value

> figures exclude replacement parts.

Metal-working machine tools
The following types are included: automatics, borers, broaches, drills, gear-cutters, grinders, lappers and honers, capstans and turrets, lathes, millers, planers, presses, saws, shapers, shears, sheet metal working, slotters, screw, thread and miscellaneous metal-working machine tools.

Wood-working machine tools
The following types are included: saws of all types (except hand saws), drills, grinders and sharpeners gluers, lathes, morticing and tenoning machines, dove-taling machines, planes and moulds, routers,
sanders, veneering machines and miscellaneous wood-working machine tools

Engineers' small tools These include cutting tools, chucks, jigs and fixtures, press tools and gauges.

## Welding sets

The value figures exclude replacement parts.
7.31 Locomotives and motor vehicles Locomotives
The figures show the number of steam locomotives produced by railway workshops and by private makers and include production for the Services.

Main line types comprise passenger tender, passenger tank, freight tender (including mixed traffic), freight tank, Garratts and other steam types.

Industrial locomotives include shunters for docks.
7.32 Woven cloth, household textiles, hosiery and footwear
Supplies for home civilian use include retained imports where these are distinguished in the Trade and Navigation Accounts, supplies for N.A.A.F.I. and for local authorities, hospitals, etc., but exclude supplies for Government orders and for export. For 1935 the figures are based on the Census of Production, adjusted for retained imports and exports.

## Woven wool cloth

Supplies are the deliveries by manufacturers of tissues containing 15 per cent and over of wool fibre, excluding hair fabric used for interlining and similar purposes. Cloth for uniforms for Civil Defence, transport purposes or hospitals, etc. is not included if specially issued by the Wool

## Control.

Woven non-wool cloth
Supplies are the deliveries by manufacturers and Suppies are the deliveries by manufacturers and
merchant converters registered under the Apparel merchant converters registered under the Appare
and Textiles Order. Cloth for handkerchiefs and babies' napkins is included.

Wool hand-knitting yarn
All hand-knitting yarn, including yarn of Service shades and mending yarn, produced on wool machinery.

## Blankets

The figures relate to supplies of full-size and cot blankets, and are based on manufacturers' deliveries.

Towels
towels include roller towels, tea towels, glass cloths, etc.

Hosiery
Garments made up from warp knitted fabric are excluded. The figures for children's garments cover all children under 14 and thus include infants' wear. The pre-war figures quoted are estimates for 1937.

## Footwear

Total production for all uses is the output by manufacturers during the period. Production for home civilian use is the quantity of footwear transferred to warehouse stock by all manufacturers of leather footwear, excluding production for export or for which leather is procured under permit from the Director of Service Footwear; thus footwear for the Home Guard, Civil Defence and Women's Land Army is excluded. All rubber boots and shoes and canvas excluded. All rubber boots and shoes and canvas
shoes with rubber soles are excluded, but other shoes with rubber soles are excluded, but oth appropriate heading. Children's footwear includes that for infants.

### 7.33 Pottery, hollow-ware and brushes

 Production figures relate to manufacturers' sales Supplies for home civilian use include retained imports where these are distinguished in the Trade and Navigation Accounts, supplies for N.A.A.F.I. and for local authorities, hospitals, etc., but exclude supplies for Government orders and for export. PotterySmall plates are those of 8 -inch diameter or less, large plates are over 8 -inch diameter.

Coffee-pots are included from March 1943 only.
Until February 1943 the figures for cooking-ware relate to pie and baking dishes only

## 8. TRANSPORT

## MERCHANT SHIPPING

## Gross tonnage

the total volume of all the enclosed spaces of a vessel above the inner bottom. The unit of measurement is a ton of 100 cubic feet.

## Deadweight tonnage

The number of tons $(2,2401 \mathrm{~b}$.$) of cargo, stores,$ bunkers, equipment, etc., that a vessel carries when floating at her summerload draught.

## Net tonnage

Net tonnage is the gross tonnage less certain deductions on account of crew space, engine room, water ballast and other spaces not used for passengers or cargo.
8.3- Merchant shipping under British control 8.5 Foreign vessels

Bareboat charter transfers to the charterer, the responsibility for manning, upkeep and other functions normally assumed by the owner.
8.II Shipping movement at United Kingdom ports: Entrances and clearances in the foreign trade
oreign trade
Trading vessels engaged in voyages direct from any port abroad (including the Channel Islands and Eire) to a port in the United Kingdom (including the Isle of Man) or vice versa. Vessels calling at more than one United Kingdom port in the course of a single voyage are recorded as entered or cleared at one port only.

The figures exclude naval vessels or vessels with naval crews requisitioned or chartered for naval or military transport services, but vessels on Government service with mercantile crews are included. Other exclusions are pleasure yachts sailed privately, tugs engaged on the coasts of the United Kingdom, vessels entering ports for shelter through stress of weather and British fishing vessels.

Vessels with cargo
Vessels loading or unloading cargo, even though principally engaged in carrying passengers. Cargo consists of merchandise (other than Government stores, ships' stores or bunkers), bullion, specie or mail.

Vessels in ballast
Vessels other than those defined above under vessels "with cargo". The figures include vessels unloading or loading only Government stores, that is, goods consigned direct to Allied or Commonweath forces in this country or reshipment of such goods; goods shipped by a United Kingdom Government department for the use of United Kingdom forces abroad or reimports of such goods and imports of captured enemy military equipment.
8.12 Arrivals of shipping at United Kingdom ports
Vessels calling during the course of a single voyage at more than one port are recorded as arrived and
departed at each port. The extent of the duplication, so far as inward movement is affected can be seen by comparing the figures for foreign trade arrivals in this table with those for entrances in Table 8.11.

The terms "cargo" and "ballast" are defined as for Table 8.11

## RAILTRANSPORT

8.16 Repair and availability of rolling stock
$\qquad$
Steam, electric, petrol, oil and oil electric locomotives but excluding rail-motors. Figures do not necessarily show the number owned by the railway companies as account has been taken of loans made to and by the railway companies, the Service departments, the Ministry of Supply, etc.

Passenger-carrying vehicles
Rail motor vehicles and steam and electric coaches. Account has been taken of loans made to and by the railway companies, the Service departments, the Ministry of Supply, etc

Trucks and wagons
Most of the privately-owned wagons in Great Britain were requisitioned in September 1939, with the exception of tank wagons, certain specially constructed wagons and wagons set aside for special traffic such as tarred road materials, cement salt, et
8.17 Passenger and goods traffic

Passenger journeys
The figures of passenger journeys show the number of journeys originating on the railway system of Great Britain, including through booked passenger journeys commenced by road and completed by rail:

Children for whom tickets are issued are treated as adults, but infants in arms are excluded. Return tickets are counted as two journeys and the number of journeys by season ticket holders are on the basis of 600 journeys per annum. Government department traffic (for example, naval, military, etc.), tickets under bulk travel arrangements and other reduced fare traffic are included.

Estimated passenger miles
Figures relate to main line companies only and are estimated.

Goods, mineral and livestock traffic The figures show the tonnage of revenue-earning
traffic conveyed by trains on the railway system. Cross-channel traffic invoiced to interior stations is treated as originating at the port of entry.

Free-hauled traffic, which includes servicing materials for the railways conveyed without charge on revenue-earning trains, and traffic conveyed on ballast trains or departmental trains is excluded.

Estimated net ton-miles
The product of the load conveyed and the miles travelled including free-hauled traffic

### 8.18 Operating statistic

The distance run by all types of revenue-earning trains calculated on the actual distance worked to the nearest mile. Coaching trains are trains made up entirely of coaching vehicles for the conveyance of passengers and other traffic scheduled as passenger train traffic, such as parcels, mails, etc. Freight trains are those composed of wagons, trucks, etc., used for the conveyance of goods traffic at freight train charges. The mileage of trains consisting of both coaching and freight vehicles and scheduled as "mixed" has been divided equally between coaching and freight.

Loaded wagon-miles
The mileage of loaded wagons including those loaded with free-hauled traffic worked on revenueearning trains. Each vehicle is counted irrespective of its capacity or its load. The distances correspond to those for train-miles but no mileage is included for the distances covered by wagons when being shunted.
9.19 Traffic receipts

From Ist September 1939, under the Railway Control Agreement, the receipts of the controlled undertakings (the four main line railway companies, London Passenger Transport Board, their joint lines and certain minor railways) were pooled and clearances between undertakings were not made These figures represent, therefore, the originating receipts of the major portion of the Pool.

On I th June 1939 railway passenger fares in the London area, including those on the London Passenger Transport Board, were increased by 5 per cent to the level of fares outside London; on Ist May 1940 railway passenger fares (except season tickets and workmen's fares) and freight rates were increased by 10 per cent; on Ist December 1940 this percentage was raised to $162 / 3$. On the London Passenger Transport Board increases in railway passenger fares above 5 d .
became effective from 1st May 1940 and increase in certain other railway and road transport fares became effective from 3rd July 1940 and Ist December.
Passenger receipts
Passenger receipts are the receipts from passenger fares of all kinds. Charges for platform tickets, seat reservations, left luggage, etc., which are classed as miscellaneous receipts are excluded.
Parcels, mails, etc.
Include receipts from the conveyance of small parcels and other merchandise by passenger train as well as mail and parcel post.
Merchandise
This class includes all freight train traffic except coal and coke and minerals and other commodities carried in bulk.

Minerals
This class covers traffic in Classes I to 6 of the general ralway classification, that is, minerals an other heavy freight carried in bulk, for example bricks, iron ore, lime, limestone, pig-iron, road stone and stone in the rough.
Coal and coke
Includes coal, coke, patent fuels, slack smudge, cannel and coal cinders for fue!

## ROADTRANSPORT

8.20, Vehicles with licences current and new 8.21 registrations

These figures are compiled from information received by the Ministry of Transport from all icensing authorities in Great Britain which administer the relevant sections of the Roads Act, 1920. The statistics are thus a by-product of administration and the classes shown correspond in the main to taxation classes. The figures include all vehicles which pay tax and certain vehicles which are exempt from the payment of tax. Most of the latter carry a form of licence known as a "nil" licence.

Exempt vehicles are of three kinds: (a) vehicles which are designed and used for certain particular purposes; (b) those which make little or no use of public roads; and (c) vehicles owned by
Government authorities.
Vehicles in the first class (such as ambulances, invalid vehicles, road construction vehicles and fire
service vehicles) are registered when they are first brought into use and pay no tax but they do carry a "ni"" licence. They therefore appear in the statistics of licences current. During the war, fire service vehicles were temporarily transferred to the National Fire Service and operated under O.H.M.S. certificates instead of "nil" licences, and during this period they disappeared from the statistics.

Of vehicles in the second class, those which are never used on the public roads (for example farm or works tractors used solely on the farm or site) are not required to bear a licence or to be registered, and are therefore outside the statistics altogether. Vehicles which make no use of roads repairable at the public expense, or make little use, that is they thevel not more than six miles per that is, they travel not more than six miles per week while passing between different parts of the Therefors, they are not induded in the statistics of licences current.

Vehicles belonging to the armed forces are not egistered and carry O.H.M.S certificates. Hence they are not included in either table.

Agricultural tractors may fall into the 5 s. or $£ 12$ class according to the uses to which they are put by the owner. The 5 s . agricultural tractor class ncludes locomotive ploughing engines and other agricultural engines and covers those which are used on roads only for hauling their own equipment, farming implements and the like, or for hauling agricultural produce or requisites provided that the owner is engaged in agriculture and the vehicle is used primarily for work on the land. It lso includes some trench diggers, excavators and mile cranes which are used on roads only for proceeding to and from working sites. Mowing machines are also included. The stes. Mowing machines are aso incluced. The E 2 and over clas (other than vehicles subirt to a duty 5 s) whes e ristered in the name of a person S.) which e registered in the name of a person engaged in griculture and which are used on the roads solely for the haulage of the prod his own agricultural land.

Agricultural vans and lorries are goods vehicles egistered in the name of a person engaged in agriculture and used on roads solely for the conveyance of the produce of and requisites for his agricultural land.

## 9. EXTERNALTRADE

9.3- The tables covering external trade have been 9.10 compiled from information published in the Annual Statements of Trade of the United Kingdom and from the monthly Accounts relating to the Trade and Navigation of the United Kingdom.

## Quantities and values

Both quantities and values are based on the declarations of importers and exporters, or their agents, which may be verified by Customs officials. The value of the imports represents the open market value as defined by Section 10 of the Finance Act, 1935. Briefly stated, this value is the price which the goods would fetch on sale in the open market at the time of import if the goods were delivered to the buyers at the port or place of importation, freight, insurance, commission and all other costs, charges and expenses incidental to the making of the contract of sale and the delivery of the goods at that port or place (except any of the goods at that port or place (except any paid by the seller. The value of the exports paid by the seller. The value of the exports abroad, including packing, inland and coastal transport in the United Kingdom, dock dues, loading charges and all other costs, profits, charges loading charges and all other costs, proftts, and expenses (for example, insurance and commission) accruing up to the point where the goods are deposited on board the exporting vesse Ireland, and is known as the "free on board" value.

## Imports and export

Military stores
Stores owned by the Government of this country shipped for the use of United Kingdom forces abroad are excluded from the export figures. Similarly, military stores carried in Government vessels and captured enemy equipment imported by Government departments are excluded.

Stores and equipment imported direct by Commonwealth and allied forces and auxiliary bodies based in the United Kingdom are excluded. Imports by a United Kingdom Government department (unless carried in Government vessels) even though transferred subsequently to such forces within the United Kingdom are however included in the figures.

Stores for N.A.A.FI., the Y.M.C.A. and other similar organisations are included.

## Munitions

The figures for 1942 to 1945 exclude imports, exports and re-exports of "munitions", that is, aircraft and other vehicles and parts (except rubber tyres and tubes), arms, ammunition and military and naval stores. From 1938 to 1941 such goods are included under the appropriate headings of the Trade Accounts except that certain warlike stores imported for Government use are included under a comprehensive heading for Government stores (Class III, Group U (Miscellaneous articles wholly or mainly manufactured)).
Relief and rehabilitation, lend-lease and mutual aid Exports of goods for relief and rehabilitation of liberated countries in Europe are included in the figures whether exported by U.N.R.R.A., by a United Kingdom Government department or on behalf of the country concerned.

Goods imported under lend-lease and mutual aid arrangements are included throughout under the appropriate headings; those imported by U.N.R.R.A. for its official use are excluded.

Parcels for prisoners of war and the armed forces Parcels despatched to prisoners of war are excluded from the export figures.

Parcels despatched to United Kingdom or allied forces abroad are included as exports under the heading of "parcel post" except where they contain tobacco or other goods exported on drawback when they are included under the appropriate export heading.

Parcels from North America to United States and Canadian forces in this country are excluded. All other parcels are included as imports, those containing goods liable to import duty being recorded under the appropriate headings and not under parcel post.

## Miscellaneous exclusions

Bullion and specie, ships' stores and bunkers and ballast of no commercial value are excluded from both exports and imports. In addition, exports exclude personal and household effects taken by passengers for private use and articles exported solely for temporary exhibition in galleries and museums abroad. Imports exclude fresh fish and shell fish of British taking landed from British ships, gifts for members of the forces and for approved war charities, etc.

## DEFINITIONS AND NOTES

## 10. PUBLIC FINANCE

### 10.4 Floating debt

Advances from the Bank of England
Ways and Means advances.

Advances from Government departments Certain loans made to the Treasury by Public Departments, principally by the Paymaster-Genera and the National Debt Commissioners, out of accruing receipts.
Treasury bills
The total value of bills held by the market, by Public Departments and the Issue Department of the Bank of England.

Treasury deposits by banks
Loans to the Treasury by the banks for periods of six months.
0.5 Currency circulation and bank clearings Currency circulation
The series showing the estimated circulation of notes and coin with the public relates to the total note issues of the Bank of England, the Scott banks and the Northem Irish Banks, plus the bronze and nickel-brass coin in circulation less bronze and coin held by the Bank of England (Banking Department) by the Scottish and (Banking Department), by the Scottish and Northem insh Banks (as published in the London and Belfast Gazettes) and by the London Clearing Banks

## Bank clearings

The clearings reported by the London Bankers Clearing House represent the total of bankers' effects (cheques, drafts, bills, interest warrants, etc.) passed through the clearing houses for collection from the banks.

Before the war the clearing house in London published its figures under three regions - Town, Metropolitan and Country - which covered broadly the City of London, the London suburbs and the rest of England and Wales (apart from the purely local provincial clearings) respectively. This classification ceased when the clearing banks emerging operations came into force in September emerg
1939.

During the war years the figures include the large volume of transactions settled between the head offices, and branches of the same banks but not cheques cashed over the counter. A partial return
to pre-war methods, which excluded these transactions, began in October 1945.
Provincial clearings represent similar collections at the 12 clearing houses operating in the provinces.
10.6 External disinvestment

This summary table estimates, over the period from the outbreak of war in Europe to 30 th June 1945, the effect of the war upon the United Kingdom in terms of capital loss in the overseas financial position. This loss took the form of the realisation of investments, the incurring of debts in the form of sterling liabilities, etc., and the running down of gold and dollar reserves. The sum of these represents the loss of overseas wealth which the United Kingdom suffered in order to meet overseas miltary expenditure and the cost of essential services and supplies from abroad.

## 10.7, Lend-lease and reciprocal aid

0.8 The material contained in the two tables dealing with lend-lease and reciprocal aid has been extracted from a paper "Mutual Aid between the US and the British Empire, 1941 - $45^{\prime \prime}$ read before the Royal Statistical Society by Professor R.G.D Allen on 29 th May 1946. A brief description of the nature of the material used and of its source is given below. Fuller information can, however, be obtained from Professor Allen's paper (Journal of the Royal Statistical Society, VoI. CIX, Part III, I 1946, pp. 243-277).

United States lend-lease aid to the British Empire he figures relate to goods transferred and services endered under lend-ease as recorded by the Foreign Economic Administration (F.E.A.) and published in the Reports to Congress on lend-lease operations made quarterly by the President. Certain major revisions were made on the cumulative returns after June 1945. Aid to the British Empire shown in this table agrees with the revised F.E.A. figures cumulatively to 30 th June 1945 and to 31 st August 1945. The analysis by eeriod to mid-1945 is obtained from differences in F.E.A. cumulative figures on the unrevised basis, except for adiustments in services and in industrial roducts (metals and machinery) arising from the revision (he alysis by periods must therefore be revision. The analysis by periods must therefore be accepted with caution.

The classification adopted is as follows
(a) Munitions: aircraft, ordnance, combat and motor vehicles and related equipment; small water-craft and naval equipment; signal engineer, quartermaster, medical, chemical warfare and other military stores.
(b) Ships (sail-away): naval and merchant vessels delivered under their own power. (c) Other goods: agricultural products, raw Services ship reur and manuractres (d) Services: ship repair, freights, ships' stores and other shipping services; ferrying of aircraft; training of personnel; storage and transportation; materials and charges for construction of bases; miscellaneous expenses.

Since Canada did not receive lend-lease aid, goods exported by the United States to Canada for the eventual use of the United Kingdom are included in the United Kingdom figures. Lend-lease aid has een shown as valued by the United States in dollars and reciprocal aid (in Table 10.10 ) as valued by the United Kingdom in $£$ sterling. Any direc comparison raises the difficult problem of the appropriate relation between the dollar and the $£$ sterling. The official rate of exchange has no relevance to the problem. What is required is either an evaluation of what lend-lease aid to the British Empire would have cost if the goods had been produced and the services rendered in British countries, or an evaluation of what reciprocal aid to the United States would have cost at the United States prices used in the accounting of United States lend-lease aid. For munitions and military stores (excluding food) an item by item comparison of unit costs in the United States and United Kingdom indicates that an appropriate average of conversion is around $\$ 7$ to $£ 1$. For other goods and for services only a fragmentary comparison of the United States and United Kingdom prices used in mutual aid valuations is Kingdom prices used in mutual aid valuations
possible. The appropriate conversion rate, however, would seem to be not far from the official rate of exchange, that is about $\$ 4.03$ to $£ 1$.

## United Kingdom reciprocal aid

The figures have been derived from the White Papers on Mutual Aid (Cmd. 6483, 1943 and Cmd 6570,1944 ) and cumulative data subsequently compiled by the Treasury. Figures of petroleum provided in India are from United States Army records supplied to the F.E.A.

The classification follows closely that for United States lend-lease in the previous table. Military stores include all munitions and other stores for direct use by foreign forces with the exception of petroleum and food. Services are mainly transportation but also include building maintenance. The construction figure represents the cost to the Service departments of the
construction of military installations and includes the whole cost of the Mulberry Harbour.

Aid to the United States in the United Kingdom comprises all transfers of goods and services to United States forces in the United Kingdom, but shipping services and petroleum tankers are on a world-wide basis. Aid in the United States includes both goods transferred in the United States food and materials exported from the United Kingdom and the colonies to United States. Aid in overseas theatres includes transfers and construction in the colonies as well as in various theatres of war.
II. NATIONAL INCOME

Tables $11.3-11.9$ have been prepared as far as possible on the same basis as those contained in National Income and Expenditure of the United Kingdom 1946 to 1949" (Cmd. 7933, 1950). The correspondence, nevertheless, is not exact. While continuity has been preserved for the war years 1939-1945 there remains in certain points of detai an unavoidable break between the figures for this perveriod This applies shiefly to the accounts of public authorities.

It must be strongly emphasised, moreover, that the estimates given here are not based on exact knowledge, but are derived from information collected by government departments and private organisations for needs other than the estimation of national income. In some cases the information is very incomplete. No direct estimates of personal saving or of capital formation have been possible. Personal saving has been obtained by subtracting personal expenditure from persona income, and gross capital formation by subtracting all other components of national expenditure from the total of national income and depreciation.

For detailed definitions of terms reference should be made to Cmd. 7933. For items where the title is not self-explanatory, or to which special qualifications apply, brief notes are added below.
II.3 National income, depreciation and expenditure
The first part of this table presents estimates of the incomes received, in cash and in kind, by factors of production in producing the current output of goods and services of all kinds. The incomes are reckoned before tax, but after the amounts
all owed for maintenance and depreciation in the calculation, for tax purposes, of net rent and profit. The total of these amounts together with the provision for maintenance by public authorities is given separately in this table.

Wages cover only the earnings of manual workers while salaries cover the earnings of administrative, professional, technical, clerical and office staff, including the earnings of shop assistants, commercial travellers, nurses and members of the police force and National Fire Service. In principle untaxed allowances of salary-earners and company directors' fees are also included in salaries.

Income from farming
This item represents the reward of the manual and managerial labour of farmers and their wives and the return on their capital. The estimates, still subject to revision, were originally calculated for crop years June to May. The figure given in the table for the calendar year 1938 includes fivetwelfths of the income gained in the crop year 1937-38 and seven-twelfths of that for 1938-39; and similarly for other years. For example, the increase shown between 1938 and 1939 reflects in fact the higher profits reaped in the beginning of 1940.

## Professional earnings

This item includes the earnings of doctors, dentists. lawyers, artists, journalists and other professional persons. It excludes the profits of brokers, auctioneers, estate agents and of other businesses where the profits made depend on the making of contracts on behalf of others or in the giving of commercial advice relating to contracts.

Profits of other sole traders and partnerships This item includes the profts of all unincorporated enterprises other than those shown separately in income from farming and professional earnings.

## Trading profits of companies

This item covers the trading profits of companies and mutual societies other than the profts included in "net income from abroad", together with the surpluses, before deduction of interest or dividends on sales, of co-operative societies and public boards.

Operating profits of public enterprises The trading profts of local authorities before charging interest on, or amortisation of, debt plus the profit under the Railway Agreement less the loss incurred by the Exchequer in 1945 as a result
of illicit trading operations abroad by members of the armed forces and other government employees. The definition of this item differs from that in Cmd. 7933 by the exclusion of the trading profits of the Board of Trade and Ministry of Supply and of the interest carried as a national charge in the commercial accounts of government trading branches.

Rent of land and buildings
This item represents the net rental value on a Schedule A basis of lands and personal and business property, together with excess rents assessed under Schedule D.

Net income from abroad
This item is made up of the profits remitted home by British companies operating abroad (other than oil, shipping and insurance companies, all of whose profts are included above) plus interest and dividends received from abroad less profits remitted abroad and interest and dividends paid (after deduction of tax) to non-residents.

## National expenditure

The second part of Table 11.3 presents estimates of expenditure by residents of the United Kingdom on goods and services. The expenditure is recorded at market prices. From this expenditure is derived not only the incomes of the factors of production that produced the current output of goods and services, but also (i) the amounts to be provided for the maintenance, repair and replacement of the capital equipment used by the factors of production as part of the process of current output and (ii) the indirect taxes on outhy collected from producers by public authorities less subsidies paid to producers.

Gross national expenditure at market prices includes the amounts in both (i) and (ii). Gross national expenditure at factor cost excludes the amount in (ii) and is equal to national income plus depreciation.

Personal expenditure on consumers' goods and services
This item is described in the notes to Table 11.9 .
Public authorities' current expenditure on goods and services
The term "public authorities" covers the central government, together with all extra-budgetary funds (in particular the Unemployment Fund and various national heath insurance and pensions funds), and local authorities.

Only direct expenditure on goods and service is included, except that the provision made for maintenance is treated as a current cost and therefore as part of gross national expenditure. This provision is measured, in the case of the central government, by the amount actually spent on the maintenance of roads and buildings and, in the case of local authorities, by the amounts spent on maintenance of highways and bridges plus loan repayments and payments to sinking funds on ratefund account, these being treated as the equivalen of depreciation allowances. Loan repayments or payments to sinking funds by the central government are excluded. Transfer payments (e.g., social security payments or subsicies) are also excluded, together with any transfers between one public authority and another. Expenditure refunded to the government or recovered by direct sales has also been excluded.

Capital expenditure by public authorities is included in the total of gross capital formation given separately below when it has been possible to distinguish it. But the separation is by no means complete. For example, it has not been possible to take full account of changes in government-owned stocks. All defence expenditure has been treated as current.

This item thus attempts to measure the value of the work currently performed on government account and the Exchequers' cash issues have been adjusted as far as possible for changes in department's cash balances and in the Government's liabilities to industry

It is not, however, a consistent measure of the value of resources at the disposal of public authorities since lend-lease assistance has been excluded throughout with the one exception that the 1945 figure includes an amount of $f 161$ million ( $\$ 650$ million) to cover the final settlement with the Government of the United States.

## Gross domestic capital formation

This item is composed of gross expenditure, both public and private, on fixed capital and its upkeep (i.e., new additions, replacements and repairs) plus the increase in value of stocks and work in progress. It has been impossible to estimate this item directly for the war years and the figures given here have been obtained as a residual. They are therefore dependent on the accuracy of the estimates of each of the other items of nationa income and expenditure. Moreover, as explained above, part of capital formation may be included in
public authorities' expenditure. The figures given here should therefore be treated with great reserve.

Net lending abroad and purchase of assets and financial claims from overseas
This item is an estimate of the net change in the external assets of the United Kingdom. It is equal to the surslus (or deficit) of the balance of payments on current account, i.e., to the difference tween the country's current receipts from abroad and its current payments to foreigners. lend-lease has entered into this item in only one year: the 1945 figure includes the liability of $f 161$ year: the 1945 figure includes the liabiity of $\not \backslash|6|$
million to the Government of the United States mentioned above.

### 11.4 Revenue account of persons

 Personal income is made up of (i) incomes from employment for pay or gain (i.e., the first six items of Table 11.3); (ii) receipts by persons (treating harities, life insurance funds and other non-profitmaking bodies, as persons) of net rent, dividends and interest paid by companies and public enterprises, debt interest paid by public authorities and income from abroad; and (iii) transfer income - social security benefits, war gratuities, etc. In all cases the income is reckoned before deduction of tax or insurance contributions.Net saving is the amount left out of personal income after decucting current expenditure on consumers' goods and services, the tax liable on current income (whether paid currently or in the future) and taxes paid on capital (e.g., death duties).
11.5 Revenue account of public authorities This table summarises the income and expenditure of public authorities after eliminating transfers between one public authority and another, such as Exchequer grants to local authorities and Exchequer contributions to insurance funds.

Miscellaneous income from property This is made up of the profts of public enterprises and receipts of dividends, interest and rent (including national debt interest paid to the Unemployment Fund and national health insurance unds and debt interest paid by local authorities to the central government). Total national debt interest plus the total interest on local authorities debt is treated as negative income from property.

### 11.6 Combined capital account <br> This table shows the sources from which gross

DEFINITIONS AND NOTES
public authorities (the same as transfers to capital accounts shown in Table 11.5 ) consist of payments accounts shown in Table 1.5 ) consist of payments
in respect of war damage claims and capital grants in respect of war da
to local authorities.

### 11.7 Central government revenue

 Tax revenue represents the net receipts by the Board of Inland Revenue and H.M. Customs and Excise as distinct from payments into the Exchequer.11.8 The finance of the central government deficit on current account
deficit on cur
Small savings
The increase in investments from the net deposits The increase in investments from the net depost
in the Post Office and Trustee Savings Banks in the Post Office and Trustee Savings Banks
together with receipts less repayments of Nationa together with receipts less repayments
Saving Certificates and Defence Bonds.

## Other public issues (net)

Receipts less redemptions, but excluding purchase of government securities by public departments.

## Floating debt

Treasury bills, treasury deposit receipts and Ways and Means advances.

Lending and net capital formation
Includes loans to local authorities, Post Office loan expenditure, and Road Fund expenditure on
improvement and new construction of roads.
II.9 Personal expenditure on consumers' goods and services
The totals shown in the table relate to expenditure out of personal income, i.e., the income of individuals and of charities and other non-profit making bodies. The estimates for the different groups of expenditure include purchases by visitor to the United Kingdom and exclude purchases abroad by British troops and tourists. Rough adjustments for these factors are made at the end of the table.

Expenditure on consumers' goods and services by business firms and public authorities is as far as possible excluded except in certain cases where the object purchased is resold to persons as part of a composite product or service. Thus personal expenditure on meals in restaurants and hotels is spread over several categories. The cost to the establishment of the food used appears in the item "Food"; the rent of the building in the item "Rent, rates and water charges"; the chinaware and
cooking utensils in the item "Durable household goods", and the allowance for the purely service and managerial element of expenditure in the item "Other services".

The figures represent the expenditure of consumers in the above sense on goods and services of all kinds whether these are provided out of new production or from stock. Secondhand goods are not included but an allowance is made for the costs, inclucing proft, of handling and reconditioning them. For private motor vehicles this allowance is made in the item "Private motoring"; for other goods it is included in "Other services'
The figures in the second part of the table have been obtained by revaluing at the appropriate 1938 prices the quantities bought in any year of as many individual items as possible within each group of goods and services. The resulting products have then been added to arrive at a total for each group.

As it has been impossible either to allow for restrictions on consumers' choice due to rationing or to take full account of changes in quality, the resulting series must not be regarded as giving a reliable measure of changes in the standard of living.

Defintions of the miscellaneous categories of expenditure are given below.

## Durable household goods

Furniture, soft furnishings, floor coverings, musical instruments, radio sets, pottery, glassware, electrical goods and all hardware.

## Other household goods

Matches, soap, candles and miscellaneous cleaning materials.

## Other services

Medical services not provided under national health insurance, domestic service, undertaking laundry, hairdressing, hotel and restaurant services, repairs and other miscellaneous services not included elsewhere.

## Other goods

Stationery, fancy goods, bicycles, sports and trave goods, chemists' wares and other miscellaneous goods not included elsewhere.

## 12. WAGES AND PRICES

2.3. Average weekly earnings and hours worked 12.5 in manufacturing and certain other industries
The figures relate to all wage earmers other than office staff, shop assistants and outworkers; managers, commercial travellers, clerks, typists and salaried persons generally are excluded.

The industries covered are those for which separate figures are given together with mining and quarrying (excluding coal mining), treatment of non metalliferous mine and quarry products, leather, fur etc., woodworking, paper, printing, stationery, etc., miscellaneous manufacturing industries, Government industrial establishments, local authorities' non-trading services, gas, electricity and water supply services. The figures are based on returns from employers showing for a particular week in the month indicated, the number of wage earners actually at work, their aggregate earnings and the total number of manhours worked. The returns received at each enquiry covered five to six milion workers, but in calculating the general averages and those for each of the groups of ndustries shown separately the averages for the ndividual industries have been "weighted" on the basis of the total number of wage-earners employed in each industry. In the case of women two part-time workers were, from July 1942 counted as one full-time worker

The percentage increases in average earnings since October 1938 represent the combined effect of a number of factors, including (a) increases in rates of wages; (b) increases or decreases in the number of ours worked and in the proportion of hours paid for at overtime, week-end and night shift, etc., rates (c) extensions of systems of payment by results in some industries, and increased output by the workers affected; (d) changes in the proportions of men, boys, women and girls employed in different occupations and (e) changes in the proportions of workers employed in different industries.
12.6 Wage rates and cost of living Weekly wage rates
The figures are based on wage records in 69 industries, which include most of the principa
D. industries and a proportion of the smaller industries. The principal industries or services which are not covered are the distributive trades, domestic service, the catering trades, National Government service and entertainment, sports, etc.

The series shows the estimated percentage increase in all industries since the beginning of September 1939. Estimates are made monthly by the Ministry of Labour and National Service of the average percentage increase in rates of wages, for a full week's work, in industries, occupations and localities in which changes in the general levels of wage rates are regulated by collective agreements between organisations of employers and work people, arbitration awards or statutory orders. The percentages of increase since September 1939 vary considerably in different cases and in combining these percentages into a general average the Ministry of Labour has taken account of the approximate total pre-war wages bill in the various industries. The figures do not, however, take account of the effects on the general level of wages of the changes which have occurred since 1939 in the proportions of work people employed in different industries, nor of increases in wage rates granted by employers to individual workers. In the absence of comprehensive information as to the rates of wages actually paid by employers generally to their work people, the average percentages shown should not be regarded as more than rough approximations.

Working-class cost-of-living index The figures are derived from the changes since Ist September 1939 shown by the Ministry of labour cost-of-living index. This index measured the average percentage increase in the cost of maintaining unchanged the standard of living prevaling in working-class families before August $19 \mid 4$. The percentage changes since July 1914 in the prices of the various commodities and services included in the index were combined by means of weights representing the estimated relative expenditure on these commodities and services by working-class families at that date. The 1914 weights for each of the main expenditure groups were: Food $7 / 1 / 2$, rent (including rates) 2 , clothing $1 / 2$, fuel and light 1 , other items included in the index $1 / 2$.
12.7 Agricultural price indice

The prices used were the controlled prices or, where the product was uncontrolled, quotations made weekly by the Ministry's market reporters; Government payments such as acreage payments are taken into account. Thus so far as is possible the prices used are those relating to the point of first sale by the producer. In the case of fruit, vegetables and glasshouse produce, however, the prices are, for the most part, based not on prices
realised by growers but on the prices realised by primary and secondary wholesalers at certain representative urban markets. Exceptional prices at the beginning and end of the season are excluded.
The index number for all products is the weighted arithmetic mean of the percentage price changes of 24 main items compared with prices in the base years.

The weight assigned to each commodity is proportional to the average value of the output of the five most recent crop years, re-valued at the prices of the base period 1927-29. Thus for the year 1945 the weights will be derived from the average quantities of output during the crop years 1939/40 to 1943/44 re-valued at the prices for 1927-29. As the system of moving weights involves a change in the weights used from year to year the following table allows a comparison to be made between weights in 1938 and 1945.

Moving weights used in the index of agricultural prices
$1938 \quad 1945$
Total
$200 \quad 200$
Wheat
Barley
Oats
Potatoes
Hay
Fat cattle
Fat cows
Fat sheep
Fat ewes
Pork pigs
Bacon pigs
fat sows
Milk
Butter
Cheese
Poultry (fowls and ducks, and, in
annual index, geese)
Eggs
Sugar
at lambs
Wool
Fruit
Vegetables
Glasshouse produce

Both the wheat and potato indices include an allowance for acreage payments; for wheat the addition is based on the estimated quantity sold, addition is based on the estimated quantity sold,
for potatoes on the estimated total production. for potatoes on the estimated total production. January to June and September to December, and January to June and September to December, and
are based on the average of these months in the are based o
base years.

Index numbers calculated on the base 1927$29=100$ have been multiplied by appropriate factors to convert them to the base $1936-38=100$.

### 12.8 Stock and fertilizer prices indices

Prices for certain breeds quoted by the Ministry's market reporters are used in calculating the price store pigs.

The index of fertilizer prices is calculated from quotations for basic slag, sulphate of ammonia, ground rock phosphate, nitrate of soda, nitro-chalk and superphosphate.
follows:
Total
Ground rock phosphate
Nitrate of soda
Nitro-chalk
Sulphate of ammonia
Superphosphate
Basic slag
The method used is similar to that for agricultural
The method used is similar to that for agricultura prices but the weights applied to the different commodities are fixed and are proportional to th estimated average annual consumption of thes

### 12.9 Wholesale prices

The index is computed as a geometric average of 200 price changes. The number of varieties of each commodity chosen is as nearly as possible the same proportion of 200 as the value of the imports and production of the commodity (including any further stages of manufacture not separately represented in the index) is of the total for all articles in 1930. In a few cases (for example, other chemicals) in order to improve the representation, prices of several items are averaged to form a single series with a weight of one.

Thus while the index is computed as a simple average, a system of weighting is in reality achieved.

As far as possible, duplication between the various trades comprised within a group has been eliminated as has also the duplication betwee groups resulting from the inclusion in one group of groups resuting from the inclusion in one group
a commodity which clearly forms a dominant material in another group. In this way the overweighting of certain commodities has been avoided. Thus coal, which is largely used in industry as a fuel or a raw material is to that extent already embodied in industrial output, and accordingly only embodied in industrial output, and accordingly only receives representation in the index number in relation to its importance for other purposes
including the production of gas and electricity for including the produc

The index is divided into two major groups, food The incex is divided into two major groups, food
and tobacco ( 68 items) and industrial materials and manufactures including fuel ( 132 items). Excluding fuel, the items in the latter are regrouped to form index numbers of basic materials ( 33 items) intermediate products ( 38 items) and manufactured articles ( 48 items). The latter relates to goods which are mainly manufactured rather than goods which are complete and ready for consumption for which it is difficult to get satisfactory price quotations. A further index number for building materials is also compiled; in this, the weight assigned to each commodity is based on its importance as a building material

The price quotations used are for the most part weekly. For dutiable goods they include the appropriate amount of duty and for subsidised goods, the lower price (after deduction of the subsidy) is used. The weekly quotations are combined into monthly averages so that the index combined into monthly averages so that the ind Annual indices are obtained by taking the geometric mean of the monthly indices.

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Widows' and orphans' pensions beneficiaries, 2.9
numbers insured, 2.9
Wire and wire netting manufacture: employment, 3.18

Wireless sets:
military production, 7.20
Women's Auxiliary Air Force: casualties, 3.8
strength, 3.4
Women's Auxiliary Services age distribution, 3.5
casualties, 3.8
asualties, 3.8
intake and outflow, 3.6
prisoners of war 3.8
prisoners of war,
releasest 3.6,
strengh, 3.4
Women's Royal Naval Service: casualties, 3.8 strength,3.4

Woodpulp:
Consumption and stocks, 6.17
Woodworking industry:
employment, 3.3, 3.2
Woollen and worsted industry: employment, 3.19

Wool, raw: exports, 9.6, 9.12
imports, 9.10 imports, 9.10
prices, 12.7
prices, 12.7
production, consumption and stocks, 6.21
retained imports, 9.5
Wool tops:
exports, 9.12
production, 6.21
Worsted yarn: exports, $9.6,9.12$ expoduction, 6.21

Woven cotton and rayon fabrics: home supplies, 7.32
production, 6.20

Woven wool fabrics: home supplies, 7.32 production,

Wrought iron: production, 6.6

Y
Yarn, cotton:
exports, 9.6, 9.12
production, allocation and consumption, 6.19
retained imports, 9.5, 9.11
spindles running 6.19
spindles running, 6.19
Yarn, knitting:
home supplies, 7.32
Yarn, rayon
looms running, 6.20
production and consumption, 6.20
Yarn, worsted:
exports, $9.6,9.12$
production, 6.21

Z
Zinc:
imports, 9.11
production, consumption and stocks, 6.8

## FIGHTING FIGURES

"Fighting with Figures", first published as "Statistical Digest of the War" (1951) is an informative and historical book which gives a unique insight into how Britain and its economy coped during the Second World War.

In addition to recording activity on the Home Front in the major areas of crime, production, health and welfare, the book also gives figures on how agriculture responded to the demands to produce more food and how the aircraft industry produced the planes that played so vital a part in the victory. The book also measures the volumes of trade brought to war-torn Britain from overseas.

Divided into twelve chapters, each with a separate commentary by Dr Peter

- Howlett, Lecturer in Economic History at the London School of Economics, "Fighting with Figures"



[^0]:    Civians only for England and Wales and Scotland from 3 September 1939 and for Northerm

[^1]:    1. Cases from the services are included Included in the total of all cases.
[^2]:    1. Including offences against war legisiation.
    2. Including offences in connection with bankruptay
    3. Including offences in connection with bankrupty.
    4. Including embezzlement.
    5. Including cases of furious and reckless driving
[^3]:    Output of firms in the twelve main trades of the builing and civil engineering
    industries, excluding the output of firms consisting solely of worling principals.

[^4]:    The differences between the total figures given in this table and in Table 3.3 are explained as
    follows. The figures for the Royal Nayy in this table exclude Roval Marine Police mers
    Flows. The figures for the Royal Nayy in this table exclude Royal Marine Police, merchant
    seamen on T. 124 agreements, and prisoners-of-war:t those for the Army include personnel
    locally enlisted abroad: and those for the Women's Auxiliary Services exclude the Nursing Services.

[^5]:    Including mares kept for breeding.
    on agricutural holdings exceeding one acre in
    Great Britain, or one quarter of an acre in Northerl Ireland regardless of the use

[^6]:    1. Great Britain.
    2. The opencast prod

    The opencast production figures have not been adjusted to allow for subsequent losse
    in stocking no
    later periods
    3. Including shipments to Northern Ireland. Up to December 1942, computed from figures
    for calendar months
    4. Computed from figures for calendar months. The figures include bunkers for fishing vessels
    roceedingoutside territorial waters, but exclude coastwise bunkers
    A. Alarge proportion of the coal which was held by collieries in these years was of very inferior quality

    Average of five weeks.

[^7]:    2. Up to and including 1942 , the figures are obtained from returns collected by the Joint Accountants to the industry for the purpose of wages ascertainment.
    3. The introduction of a revised form of return in November 1942 resulted in a net increase
    of about 1,250 in the total wage-eamers.
    Owing to the introduction of a revised form of return the figures are not comparable with
    shits possible, 5.96 ; abssenteeism percentage, 12.06 ; average output. 2.86 w perced. 5.24 ;
    Av shifts at the coal face, 3
[^8]:    Authorised electricity undertakings only.
    Authorised electriaty undertakings only.
    The figures, which are estirnates only, are based on representative samples of
    the retums made to the Electricity Commissioners.

[^9]:    Transfers, blending, etc and are therefore not fully comparabble with the annual figures

[^10]:    The analysis of deliveries by consumer categories is based on total
    coupon issues

[^11]:    Ethyl alcohol as 68 O.P. spirit.

[^12]:    For agricultura June, except for phosphate rock, ammonia and molasses

[^13]:    1. Up to December 1943 , weekly averages: from January 1944 , number running at end
[^14]:    . Series for wool tops relate to period of 52 weeks.

[^15]:    . Production by the ralway companies and by private makers.
    2. Including shunters for docks.
    3. Goods vehicles of 15 cwt and over and passenger cars of
    3. Goods vehicles of 15 cWt and over and passenger cars of over 16 horse-powe
    4. For Government Departments and other essential users.
    6. Estimated.

[^16]:    1. Total for 11 months converted to yearly rate.
    2. Total for 5 months converted to yearly rate.
    3. Total for 5 months converted to yearly rate.
    4. Including cot size.
    5. Approximate
    6. Stockings only
    7. Including women's and maids
    8. Excluding rubber footwear.
[^17]:    1. Vessels under the British flag and those under foreign flags on time-charter to the United
    2. Kingdom. sustantial number of vessels carrying military cargoes on outward voyages returned to
    the United Kingdom with civil cargoes. Such vessels are shown according to their ac
    employment on the dates to which the figures relate.
    3. Of United Kingdom and Eire.
    4. War developments made changes in classification necessary after September 1942.

    For the period covered by this part of the table the figures for vessels under British control
    exclude foreign flag vessels on time-charter and allocated for use by the United States of
    excluce foreign lag vessels on time-charter and allocated or use by the United States of
    America, but include foreign vessels on time-charter to the United States of America and
    allocated
    allocated for use by the United Kingdom. For this reason the figures vary slightly from those
    alocated for use by the United Kngdom.
    for the corresponding period in Table 153 .

