

British Economic and Social History 1700-1982

Fourth edition



J. Walker
revised by C.W. Munn

BRITISH ECONOMIC
AND
SOCIAL HISTORY
1700–1982

J. WALKER, M.A., Ph.D.

*(Sometime Ramsay Muir Fellow of Liverpool University
and formerly Head of the Department of Humanities,
Huddersfield College of Technology)*

revised by

C. W. MUNN, B.A., Ph.D.

*(Department of Economic History
University of Glasgow)*

FOURTH EDITION



MACDONALD AND EVANS

MACDONALD AND EVANS LTD
Estover, Plymouth PL6 7PZ

First published 1968
Reprinted (with amendments) 1973
Second edition 1979
Third edition 1981
Fourth edition 1982

© MACDONALD & EVANS LTD 1982

This book is copyright and may not be reproduced in whole or *in part* (except for purposes of review) without the express permission of the publishers in writing.

ISBN: 0 7121 0296 5

Printed in Great Britain by Fletcher & Son Ltd, Norwich

PREFACE TO THE FOURTH EDITION

In revising and updating Dr Walker's book my concern has been to detail the main social and economic changes which have taken place since 1967 when the first edition was published and to integrate the new chapter with the rest of the text. Like Dr Walker, indeed as with any book dealing with current affairs, I am in danger of being overtaken by events, especially in view of the last change of government in 1979.

The changes which have taken place since the Second World War have occurred at a pace far greater than anything ever experienced before. The rate of growth of the economy has been faster than that achieved during the Industrial Revolution yet politicians and businessmen view it with alarm as being too slow. Growth has been exceptionally rapid in some sectors such as transport and communications while other sectors such as shipbuilding and heavy engineering have continued to decline. Membership of the European Economic Community is likely to give further acceleration to the speed of change and to the growing conflict of interests between the developed countries and the Third World.

Economic changes and the associated problems have given rise to greater government involvement in the economy and the attendant social problems have necessitated the extension of the Welfare State. Despite rising living standards for all sectors of society, inequalities of opportunity and achievement persist to a very marked extent.

The extension of welfare and education since 1945 has made people more aware of these inequalities and more determined to do something about them. For this reason the period since the war has seen the growth of a more participative democracy as people have become sensitised to social problems and have sought to have more control over their own destinies. This has been evidenced by the growth of such things as civil rights movements, community councils and consumer protection. Doubtless this trend will continue into the future.

July 1982

C.W.M.

PREFACE TO THE THIRD EDITION

In revising and updating Dr Walker's book my concern has been to detail the main social and economic changes which have taken place since 1967 when the first edition was published and to integrate the new chapter with the rest of the text. Like Dr Walker, indeed as with any book dealing with current affairs, I am in danger of being overtaken by events, especially in view of the last change of government in 1979.

The changes which have taken place since the Second World War have occurred at a pace far greater than anything ever experienced before. The rate of growth of the economy has been faster than that achieved during the Industrial Revolution yet politicians and businessmen view it with alarm as being too slow. Growth has been exceptionally rapid in some sectors such as transport and communications while other sectors such as shipbuilding and heavy engineering have continued to decline. Membership of the European Economic Community is likely to give further acceleration to the speed of change and to the growing conflict of interests between the developed countries and the Third World.

Economic changes and the associated problems have given rise to greater government involvement in the economy and the attendant social problems have necessitated the extension of the Welfare State. Despite rising living standards for all sectors of society, inequalities of opportunity and achievement persist to a very marked extent.

The extension of welfare and education since 1945 has made people more aware of these inequalities and more determined to do something about them. For this reason the period since the war has seen the growth of a more participative democracy as people have become sensitised to social problems and have sought to have more control over their own destinies. This has been evidenced by the growth of such things as civil rights movements, community councils and consumer protection. Doubtless this trend will continue into the future.

December 1980

C.W.M.



Details of some other Macdonald & Evans publications on related subjects can be found on the following page

For a full list of titles and prices write for the
FREE Macdonald & Evans Educational
catalogue and/or complete M&E Handbook
list, available from Department BA1,
Macdonald & Evans Ltd., Estover Road,
Plymouth PL6 7PZ

British Government and Politics

F. Randall

This HANDBOOK, which replaces F.J. Wright's *British Constitution and Government*, is intended for the use of students preparing for "A" Level examinations in Politics and Government and British Constitution and takes account of recent changes in the syllabuses of the examining boards. It will also be useful to those studying for a certificate or diploma in public administration and for some of the higher level BEC courses. The areas discussed include political theory and types of government, institutions and current political issues.

Illustrated

British Political History 1784–1939

S.T. Miller

This HANDBOOK has been produced for all those who are beginning a study of nineteenth-century British and Imperial history leading to the G.C.E. "O" and "A" Level examinations and their equivalents. Covering most of the developments in government up to the Second World War, it will also be of value to students of British Government and Politics in both schools and colleges.

British Social Services

F.J. Wright, *revised by* F. Randall

This HANDBOOK is designed for students preparing for degree, professional, BEC and other examinations in social science. The author outlines the social and economic background of British social services, traces their historical development, especially the many changes in recent years, and examines their current structure and problems. The book covers all aspects from social workers and personal social services to health, education and income maintenance. For the latest edition, the text has been thoroughly revised and updated.

CONTENTS

PART I

AGRARIAN AND INDUSTRIAL CHANGES, 1700–1850

I. The Nature and Causes of Industrialisation	1
II. Industry and Agriculture before the Machine Age	15
III. The Agrarian Revolution	30
IV. Industrial Changes—Iron, Coal and Steam Power	43
V. Industrial Changes—The Textile Industries	55

PART II

MEANS OF COMMUNICATION IN THE PRE-RAILWAY AGE

VI. Roads	64
VII. Canals	75

PART III

OVERSEAS COMMERCE AND FISCAL POLICIES, 1700–1850

VIII. The Commercial Revolution	86
IX. British Overseas Trade, 1780–1850	103
X. The State and Economic Policy	108
XI. The Genesis of the Free Trade Movement	118
XII. The Achievement of Free Trade	125

PART IV

THE NINETEENTH-CENTURY REVOLUTION IN MEANS OF COMMUNICATION

XIII. Railways	136
XIV. Shipping	150

PART V

FINANCE

XV. Banking and Finance	164
-------------------------	-----

PART VI

SOCIAL REFORM

XVI. The Poor Law	179
XVII. Factory and Mining Legislation	190
XVIII. Public Health and Housing	204
XIX. Education	217

CONTENTS

PART VII

WORKING CLASS MOVEMENTS

XX.	The Chartist and Co-operative Movements	234
XXI.	Trade Unionism to 1876	248

PART VIII

GREAT BRITAIN IN THE ERA OF FREE TRADE, 1850-1919

XXII.	Science and Technological Changes	259
XXIII.	Industry and Trade	271
XXIV.	Agriculture	281
XXV.	The Tariff Reform Movement	291
XXVI.	Trade Unionism after 1876 and the Rise of the Labour Party	302

PART IX

GREAT BRITAIN DURING THE INTER-WAR YEARS, 1919-39

XXVII.	The British Economy after The First World War	315
XXVIII.	The State and Economic Affairs, 1919-29	328
XXIX.	The State and Economic Affairs, 1929-39	335
XXX.	The Genesis of the Welfare State	352

PART X

GREAT BRITAIN AFTER THE OUTBREAK OF THE SECOND WORLD WAR, 1939-82

XXXI.	The War Years, 1939-45	366
XXXII.	Great Britain and the Post-War World 1945-67	372
XXXIII.	Economic Problems	383
XXXIV.	Social Problems	396
XXXV.	British Economy and Society 1967-82	409

INDEX OF ACTS	441
---------------	-----

GENERAL INDEX	444
---------------	-----

PART I

AGRARIAN AND INDUSTRIAL CHANGES, 1700-1850

CHAPTER I

THE NATURE AND CAUSES OF INDUSTRIALISATION

Human beings, in order to survive, need food, clothing, warmth and shelter. The satisfaction of these physical wants is as compelling to twentieth-century man as it was to his Old Stone Age ancestors. But twentieth-century man lives less precariously than his predecessors because he has a greater command over the forces of nature. Throughout the greater part of his existence man has earned a livelihood using simple tools, operated by hand, supplemented to a limited extent by animal, wind and water power. Hence living standards, for all but a privileged few, were very low and uncertain. Man lived in an age of scarcity, with famine a constant threat, obtaining at the best of times little more than a bare subsistence. Under such circumstances the safe gathering in of the harvest was a cause for rejoicing. Failure to do so was a major catastrophe. Millions of men and women in Latin America, Africa and in the densely peopled monsoon lands of Asia are still living in the age of scarcity. But for the aid of charitable societies, such as for example, Oxfam, countless thousands would starve to death. In contrast much higher standards of living are enjoyed by people living in Western Europe, North America, Australia and New Zealand. In these favoured lands the age of plenty has succeeded the age of scarcity. This development, a relatively recent one, may be said to have begun with the use of steam power in eighteenth-century Britain.

Before the age of steam power man earned a precarious living by hard toil. Yet despite the inadequacies of their capital equipment our forefathers performed amazing feats. Modern tourists can do no other than contemplate with awe the astonishingly large stones at Stonehenge and Avebury, wondering how the pre-historic inhabitants of Wessex with levers and muscular power shaped, transported and erected them. Nearby at Silbury Hill is the largest artificial mound in Europe. Equally impressive are the stupendous hill fortifications at Maiden Castle near Dorchester and the pre-historic flint mines at Grime's Graves in Norfolk, dug by miners using deer horn picks and shovels made from animal shoulder blades in the dim, smoky light

given off by chalk lamps filled with animal fat and moss wicks. Such massive earth-moving feats inevitably invite comparison with those of Irish navvies who, with iron picks and shovels, constructed the massive embankments and tunnels designed by nineteenth-century railway engineers.

There is much that we would like to know, but do not, about the peoples who inhabited our island in the remote past, but we do know with certainty that their economy was primarily a rural one. The growing of cereals and the care of domestic animals were the customary occupation of the majority of the early inhabitants of Great Britain. This continued to be the case until the eighteenth century. Since then significant changes have taken place in the British economy. Power-driven machinery has superseded handicraft industry, multiplying enormously the rate at which commodities can be produced. At the same time means of transport were revolutionised and the techniques of cultivating the soil and rearing domestic animals fundamentally improved. The substitution of mechanical for muscular power has brought about a decrease in the proportion of people employed on the land, and an increase in the proportion of producers of manufactured articles and of workers employed in commercial and service occupations. The rise and expansion of industrialisation, pioneered in Great Britain, later became a feature of the economic development of many other countries.

To this change in world economy the name "Industrial Revolution" has been given. The change is one that has profoundly affected the whole of human society, with considerable effects on the ways people live and think. Knowledge of this revolutionary upheaval in human affairs is essential for an understanding of current social and economic problems. Besides, the society we live in did not come into existence in a single moment of time. Rather it has evolved gradually, nearly all that we see around us being an inheritance from the past. Hence the unique importance of historical studies.

The changes taking place in the social and economic environment were not accepted readily. People's habits do not easily alter. Only gradually and with reluctance does the custom of the past yield to that of the present. New ways of doing things tend to be bitterly opposed by those whose traditional way of life is threatened. This is as characteristic of ourselves as of our forefathers. The Luddites and machine breakers of the early nineteenth century have their modern counterparts in trade unionists taking part in demarcation disputes, and in members of craft trades who impose restrictive conditions on recruitment long after industrial changes have outdated ancient skills. This understandable human reaction to change helps to explain why industrial changes in the eighteenth and nineteenth

centuries were less sudden than the term "Industrial Revolution" would seem to imply. Popular acceptance of the term dates from 1884 when Arnold Toynbee's *Lectures on the Industrial Revolution of the Eighteenth Century in England* were published.

Toynbee's view that an industrial revolution took place between 1760 and 1830 still has currency. The year 1760, memorable as the one in which George III came to the throne, has no significance whatever as the starting point of a process of quickening economic development in Great Britain. Rather, to quote from Prof. John U. Nef's *War and Human Progress* (1950):

"An unprecedented acceleration of industrial progress began, not in 1750 or 1760, but in the 1780s. It was then also that the movement of industrial labour from domestic to factory manufacture became unprecedentedly rapid. . . . After 1785 the powerful steam-driven machinery and the new methods of making iron with the help of coal came into extensive use for the first time. In Great Britain the critical turning point which differentiates British from continental progress . . . was in the middle eighties. For example, the island was producing little more than a third as much iron as France in 1780. Between 1785 and 1797 the output in Great Britain approximately doubled. During the next eight years, it approximately doubled again, reaching about 250,000 tons in 1805."

Actually, however, one cannot truthfully assign specific dates to economic and social change. The basic factors of modern industrialisation, capitalism, the aggregation of workers on one site, the use of power, wind and water to drive machinery, were known long before 1760. Even steam power, familiar to Hero of Alexandria in the century preceding the birth of Christ, had been used since the end of the seventeenth century to pump water from mines.

Neither can we assign a specific date to the completion of a movement which is still proceeding at an ever quickening pace. Certainly not 1830. No British industry can be described as fully technologically transformed by 1830. Industrial capitalism had made considerable progress in some branches of the iron and textile industries by 1830, but their modernisation was far from complete. In the weaving sections of the cotton and woollen textile industries there were in 1830 more hand-loom workers than factory operatives. Only gradually did power-driven machinery displace handworkers, much more quickly in the cotton than in the woollen industries. In other contemporary industries the use of mechanical steam power had not even commenced. Most consumable commodities long continued to be produced in domestic workshops. This was the case for instance

in the various metal manufactures such as nail manufactures in Staffordshire and in the Sheffield cutlery trades. The persistence well into the twentieth century of a domestic system of industry was well illustrated by Dr J. R. Harris in a useful television "Industrial Archaeology" lecture. In it Dr Harris drew attention to the watch industry at Prescot and elsewhere in Lancashire, the separate parts such as cases, hands and balance wheels being made by individual craftsmen and sold to merchant factors for assembly elsewhere.

As the introduction of the new industrial techniques was a slow process modern historians have been reluctant to describe it as a "revolution." Nevertheless although it has become generally accepted that the change was evolutionary rather than revolutionary in character, it still remains true that the extended use of steam power in late eighteenth- and early nineteenth-century Britain brought into existence an industrial society very different in character from that known in earlier centuries. But why, we may ask, did this expansion of industrialisation take place, and why was it pioneered in Great Britain? No wholly convincing answers can be given to these questions. Great Britain of course possessed natural resources and advantages that made industrial expansion possible. She had possessed since 1689 a stable political system. Cut off from Europe by the sea, she was not, unlike her continental neighbours, exposed to the hazards of foreign invasion. An ample rainfall and many fast-flowing Pennine streams endowed her with water-power resources put to good use before the steam-power era. The geographical discoveries of the late fifteenth and sixteenth centuries had placed her astride the leading world trade routes. She had considerable coal and iron resources, located in some areas in close proximity to one another, and near the sea, making the export of manufactured goods relatively easy through the estuaries of the Thames, Severn, Trent, Mersey and Clyde which providentially penetrated far inland. In contrast the coal and iron resources of European countries and the U.S.A., being geographically separated and located far from the sea, could not be fully exploited until the railway age.

A catalogue of the natural resources of Great Britain cannot by itself provide a complete explanation of that acceleration of technology that has been described as the Industrial Revolution. The eighteenth century is memorable because, during it, ingenious men devised machines which increased industrial production many times. It would be naïve, however, to imagine that a steam engine, for example, could not have been invented earlier because James Watt was not born until 1736. Such a theory pre-supposes that genius is the only element in scientific and technological discoveries, and

ignores the truth that in general inventors are men concerned to find solutions to contemporary problems. Leonardo da Vinci (1452–1519), one of the most versatile geniuses of all time, and his contemporary Leon Battista Alberti (1404–72) were exceptionally gifted men in the realm of applied science. But their ingenuity did not trigger off an industrial revolution in fifteenth-century Florence. In eighteenth-century Britain in contrast, where an efficient means of pumping water out of mines was urgently needed, James Watt and his contemporaries invented the steam engine, one of the principal factors in the subsequent transformation of industrial processes. It is not too fanciful to imagine that if fifteenth-century Florentines had prospected for minerals in deep mines da Vinci and Alberti would have sought a solution to the problem of underground drainage. Italians in their day, however, were faced with the problems of controlling spring floods of rivers, hence da Vinci designed machines for excavating earth and suggested brushwood matting to protect dykes. It is also worth noting that in fifteenth-century Italy, where, as in our day, war stimulated inventive activity in weapons of destruction, da Vinci attempted to design a steam-propelled gun and submarine weapons.

Inventors search for means of improving existing practices, but their creative minds can only operate within the limitations imposed by the knowledge, technology and intellectual concepts of their day and age. For instance da Vinci had no steel plates for his submarines. Inventors in the early eighteenth century could not have given to mankind efficient dynamos and electric motors, or have solved the problems of transmitting electric signals and power over long distances, because the scientific discoveries which have enabled electricity to become a common form of energy had not then been made. They were capable, however, of inventing the steam engine, which made waterwheels and windmills obsolete, because advances had been made in the scientific study of heat and mechanics. In the seventeenth century the researches of Galileo, Huygens and Newton had made mechanics the leading natural science. In the eighteenth century, experiments in utilising the expansive force of steam were successful, following scientific research into the essential nature of heat. The Scottish universities, Edinburgh and Glasgow, were in the forefront of this scientific progress. Not the least important of those to whom Watt was indebted for his subsequent fame as a pioneer in the evolution of the steam engine was Professor Joseph Black (1728–99) who made many important discoveries in physics and chemistry during his tenure of Chairs at Glasgow and Edinburgh Universities.

We are not concerned to explain the change in the seventeenth

century from a medieval, religious and teleological outlook to a modern, scientific and mechanistic one, and the widespread use of the experimental method, but merely to note that from that time onwards there was considerable interest in scientific and technological studies. Francis Bacon (1561–1626) suggested that scientific study should be encouraged because new knowledge meant new opportunities for invention. Members of the Royal Society in the seventeenth century did not consider that scientific research should be carried on merely to satisfy human curiosity about the laws of nature. By the Charter given to them by Charles II in 1662 they were directed not only to study “all things mathematical, philosophical and mechanical” but also to direct their minds to the “improvement of all useful arts, manufactures, mechanical practices, engines and inventions.” In the eighteenth century collaboration between scientists and technologists was continued in national and local learned societies whose members included scientists, business men, engineers and inventors, and by the publication of technical journals and dictionaries of arts and sciences. Among the societies founded to promote investigation in both science and industrial problems were the Society of Arts (1754), the Lunar Society in Birmingham whose members attended monthly dinners at the time of the full moon, the Royal Society of Edinburgh and the Literary and Philosophical Society in Manchester. Watt, Boulton, Wedgwood and Priestley were members of the Lunar Society. John Dalton (1766–1844), whose *Atomic Theory* (1808) was one of the many scientific contributions which made possible the development of modern industrial chemistry, was introduced in 1794 to the Manchester Literary and Philosophical Society by Robert Owen, becoming its Secretary in 1800. The latter part of the eighteenth century is memorable as the period in which the foundations of modern chemistry were laid by Antoine Laurent Lavoisier (1743–94) in France, and in England by the Unitarian clergyman Joseph Priestley (1733–1894) and the aristocratic Henry Cavendish (1731–1810).

The advancements achieved during the seventeenth and eighteenth centuries in scientific and technological knowledge were not confined to Great Britain. It was a Western European achievement. In contemporary France, Holland, Germany and Italy much progress was made in the pursuit of scientific knowledge and in its application to trade and industry. Members of the French “Académie des Sciences,” founded in the reign of Louis XIV, were required by the monarch to carry out scientific and technological investigations in order to find solutions to industrial problems. Between these scientific societies in Britain and Europe there was considerable correspondence and exchange of ideas. The development of a form

of society in Western Europe in which a scientific and technological attitude of mind was widespread partially accounts for subsequent economic trends in Europe, but not why they were pioneered in Great Britain. That industrial expansion took place earlier in Great Britain than elsewhere suggests that in the eighteenth century only in Great Britain were present all the conditions necessary for rapid technological change.

Considerable increases in the production of commodities can only take place where the market, capital, transport and labour needs of producers are adequate. In eighteenth-century Britain there were ample opportunities to make increased and cheaper production worth while. Since Tudor times the enterprise of chartered trading companies and the foundation of overseas colonies had created markets the demands of which could not be satisfied by traditional methods of production. Hence ingenious men were stimulated to devise machines powered first by water and later by steam. Such a technological advance, however, could not have taken place unless capital had been available at low rates of interest to finance the new and still untried methods of production. Britain was in this respect fortunate: wealthy merchants, who had accumulated capital from the profits of overseas trade, and large landowners, were willing to take the considerable risks of investing money in the new enterprise. Much of this capital was accumulated by business men, reared in Puritan, Methodist and Quaker traditions of frugality and thrift to whom "Heaven is not the dumping ground for the failures of Earth." Further, during the eighteenth century banking facilities became more readily available. Far different was the situation in such countries as Russia and Prussia, where in the absence of an enterprising well-to-do middle class, industrial development had to be stimulated by such monarchs as Peter the Great and Frederick the Great.

The transport needs of an expanding industry were met by improved means of inland communication, roads and canals, and to overseas markets by the provision of better dock facilities and state encouragement by navigation laws for merchant shipping. The contemporary exodus from rural to urban areas following the enclosures of open fields and commons increased the industrial labour force. In addition, an increasing population, both a partial cause and effect of industrialisation, not only made more labour available but also increased the number of purchasers of the commodities produced.

The eighteenth-century population expansion was a major factor in contemporary economic growth. Of all the problems facing mankind nowadays the most serious is the rate at which world population

is expanding. Can the resources of our planet, it is being anxiously asked, be extended indefinitely to meet the increasing demand for food? Rapid population growth in Britain led to the same question being asked by the Rev. Thomas Robert Malthus in his *Essay on Population*, the first edition of which was published in 1798. We have only vague and imperfect knowledge of the number of people inhabiting Great Britain before the first official census in 1801. From the seventeenth century, when the value of such knowledge began to be realised, attempts were made to estimate the size of the population. The data used, however, was unreliable. The eighteenth-century philosopher and theologian, Dr Richard Price, basing his estimates on the window tax returns, actually concluded that the population had declined between 1690 and 1777. Such evidence as we possess today indicates that before the eighteenth century population increased slowly, expansion being temporarily halted by outbursts of disease, notably by the Black Death in the mid-fourteenth century. It has been estimated that the population of England and Wales, about 2 million in 1066, had risen to 5·8 million by 1700. During this period, although there was a high birth rate, there was also a high death rate due to scanty medical knowledge, bad social conditions, precarious harvests and relatively low yields of food per acre. From about the mid-eighteenth century, however, an unprecedented demographic change took place. The population of England and Wales began to expand from approximately 6 million in 1740 to 8,890,000 in 1801. The rate of population growth continued to be considerable after 1801, the population of England and Wales being 17,928,000 in 1851 and 32,528,000 in 1901.

The commencement of rapid population growth in Great Britain during the second half of the eighteenth century cannot be attributed to one primary cause. Historians at one time considered that it was due to the fall in the death rate, particularly in the infant mortality rate, following advances in medical knowledge and scientific discoveries such as vaccination. Nowadays we understand that the motivating forces of the population expansion were complex. A notable feature of the British and European demographic revolution was that it was associated with a marked rise in living standards. In this respect it differed from the population expansion which simultaneously took place in Ireland and is today taking place in Asiatic, African and Latin American countries inhabited by rural populations living in a state of chronic malnutrition. In contrast population expansion in Britain and Europe occurred at a time when there was, firstly, a great increase in resources available for the maintenance of life and, secondly, when scientific and technological