

HEALTH AND WEALTH

Derek Heater and Gwyneth Owen



Greenhaven World History Program

GENERAL EDITORS

Malcolm Yapp
Margaret Killingray
Edmund O'Connor

Cover design by Gary Rees

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This booklet is about everyday life. We are all interested in the amount of money we have – for food, shelter, clothes and entertainment; we all want to avoid illness as much as possible and be cured if we fall ill.

What we are going to do here is to take you back in time to the late eighteenth century to see what life was like then in Europe and North America – that is, in those countries (like France, Germany and the USA) which are the rich and advanced countries of the world today. This was a time before the Industrial Revolution had got under way. We shall then see how industrial changes affected people's lives, and generally improved them. We shall have three questions in mind: How was wealth produced and shared out? What was everyday life like? How much disease was there, and what was the level of medical knowledge?

TWO HUNDRED YEARS AGO

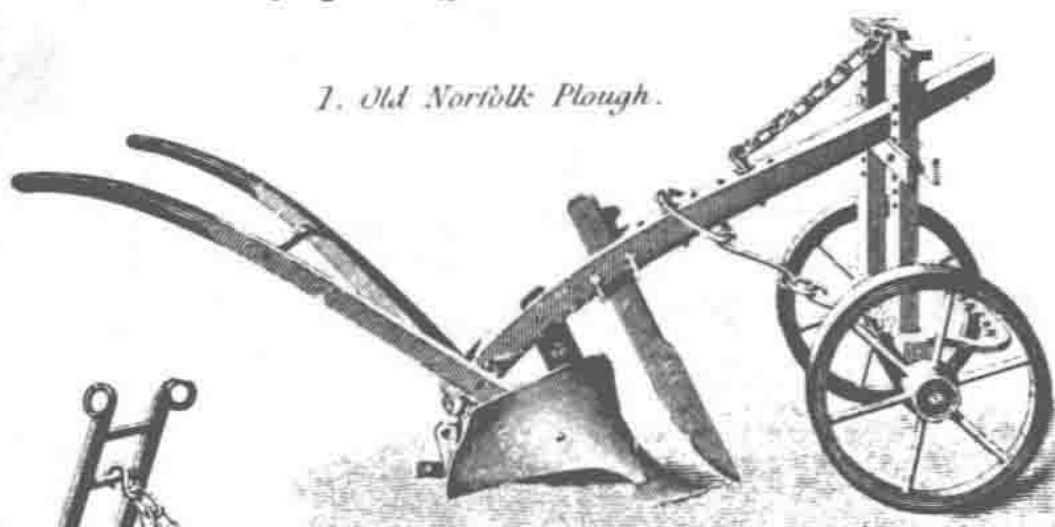
Two hundred years is not an enormous length of time – just three life-spans. Yet two hundred years ago even the most advanced countries (Britain and her North American colonies, the Netherlands and France) were closer in their ways of life to the Middle Ages than to the present day.

How People earned their Living

At least eight out of ten people earned their living by working on the land. The great majority of Europeans were peasants. Except in England, where improvements in farming were already being introduced, agricultural methods were still very primitive. The simple plough and the hoe were the basic tools for millions of peasants. The main crops were wheat, barley and oats. Livestock – sheep, cattle, pigs, poultry – were puny creatures

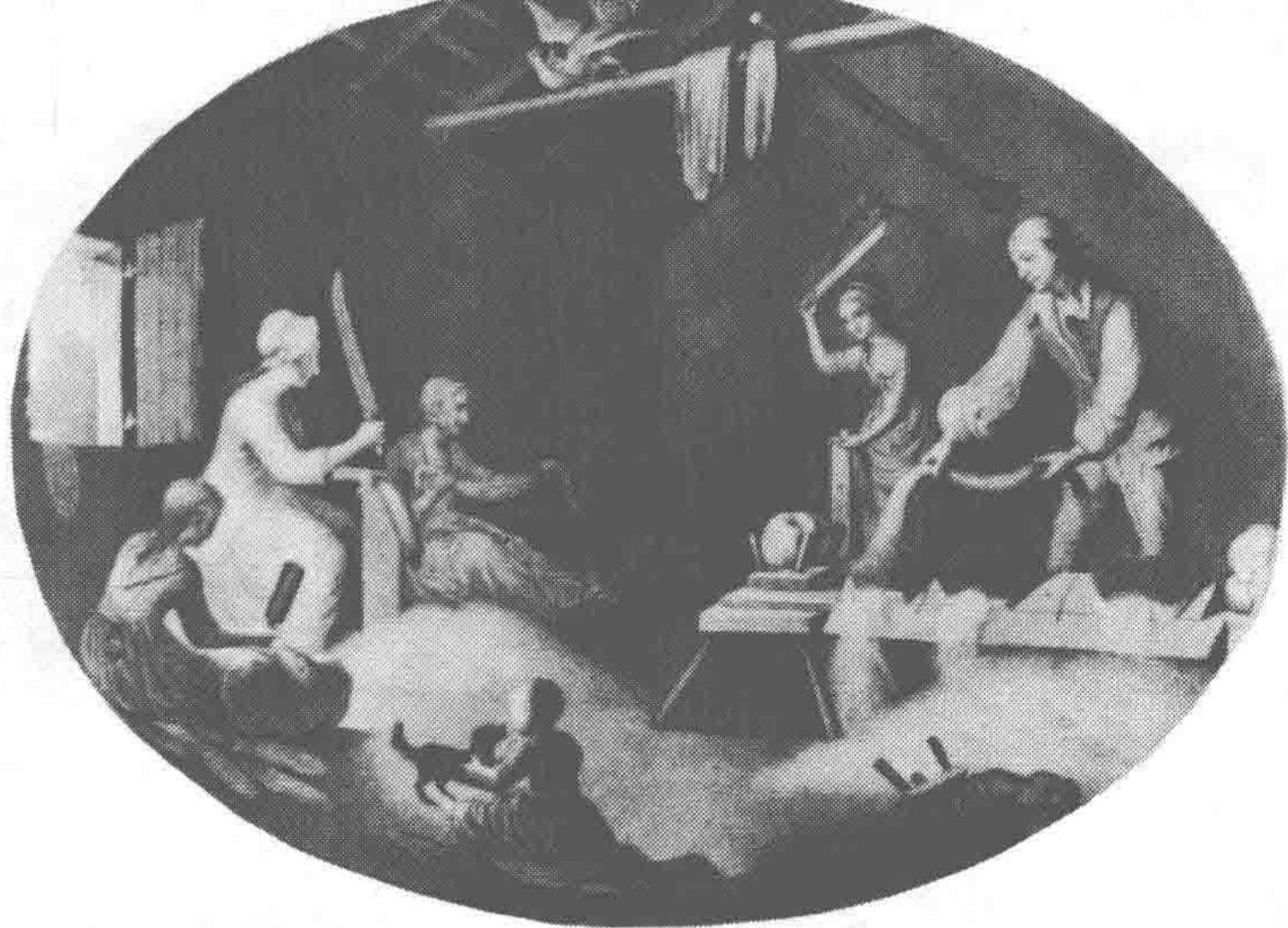
Early nineteenth-century ploughs

1. Old Norfolk Plough.



*2. Improved Norfolk Plough.
(Beginning of Nineteenth Century)*





The manufacture of linen in the eighteenth century

compared with the carefully bred animals of today, and crops gave poor yields. Land was the main source of wealth – in the form of food and rent. (*The Agricultural Revolution*)*

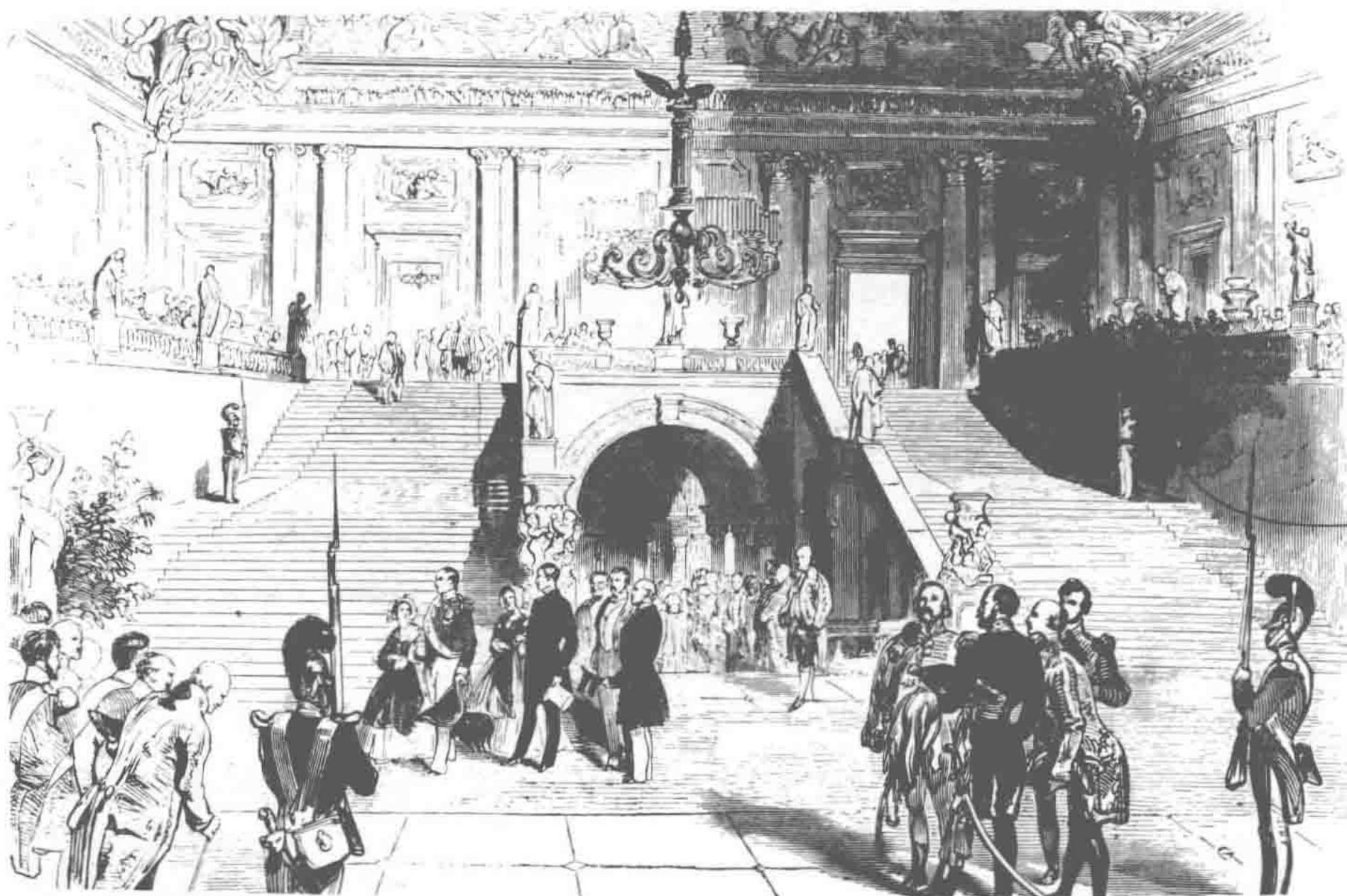
Many ordinary families tried to earn a little extra money by spinning, weaving and similar work. There were few factories; important industries like the production of cloth were carried on in country areas just as much as in towns. Industry in towns – for example, the various crafts needed for building – was organized in a very simple way. A young man would be apprenticed to a master to learn the necessary skills. Master, men and apprentices would labour and often live together in a small workshop (D1)**. Twenty per cent of town-dwellers were domestic servants who lived in the houses of their employers. Most people, whether they lived in the countryside or in towns, had to be satisfied with the bare necessities of life, and had little or no money to spend on luxuries.

In the eighteenth century there were big differences in wealth between classes of people. In fact the differences between the classes were more obvious than were the differences between countries. The wealthiest people were the nobles who owned land, and who lived off the peasants who worked on their lands (D2). About one in every hundred persons belonged to this class, which ruled throughout Europe. In North America there was no landed aristocracy, although the rich plantation-owners in the southern states, who worked their lands with slave labour, were similar in some ways to the noble families of Europe.

After the landed aristocracy came the important merchants who became rich through international trade and banking. (*A World Economy*) Such merchants were especially important in Britain and the Netherlands. Below the merchants came the middle classes of professional people, such as lawyers and businessmen. Below these came small shopkeepers, artisans and unskilled workers in

*Titles in brackets refer to other booklets in the Program

**The reference (D) indicates the numbered documents at the end of this book.



Wealth in property: the Palace at Würzburg

the towns, and small farmers, farmworkers and peasants in the countryside (D3). Most of the people in this last group were poor.

How People spent their Wealth

The very rough division of people into rich and poor is a useful guide when examining the ways of life in the eighteenth century. Keeping this division in mind, let us now look at the way people used their leisure-time, and what kind of education they were given.

For most people life centred on the basic needs: a simple home — for the poorest, a hovel shared with animals; simple clothes — for the poorest, tattered rags; a simple diet — for the poorest, not enough to keep them properly nourished. For ordinary working people it was necessary for the whole family to work to prevent starvation. Almost the whole of

a family's income was spent on food (D4). But how did the rich spend their money? Broadly speaking, they spent it on gracious living: building or improving their mansions and decorating and furnishing them ornately, and laying out fine gardens. Much money was spent on splendid clothes and jewellery; and, of



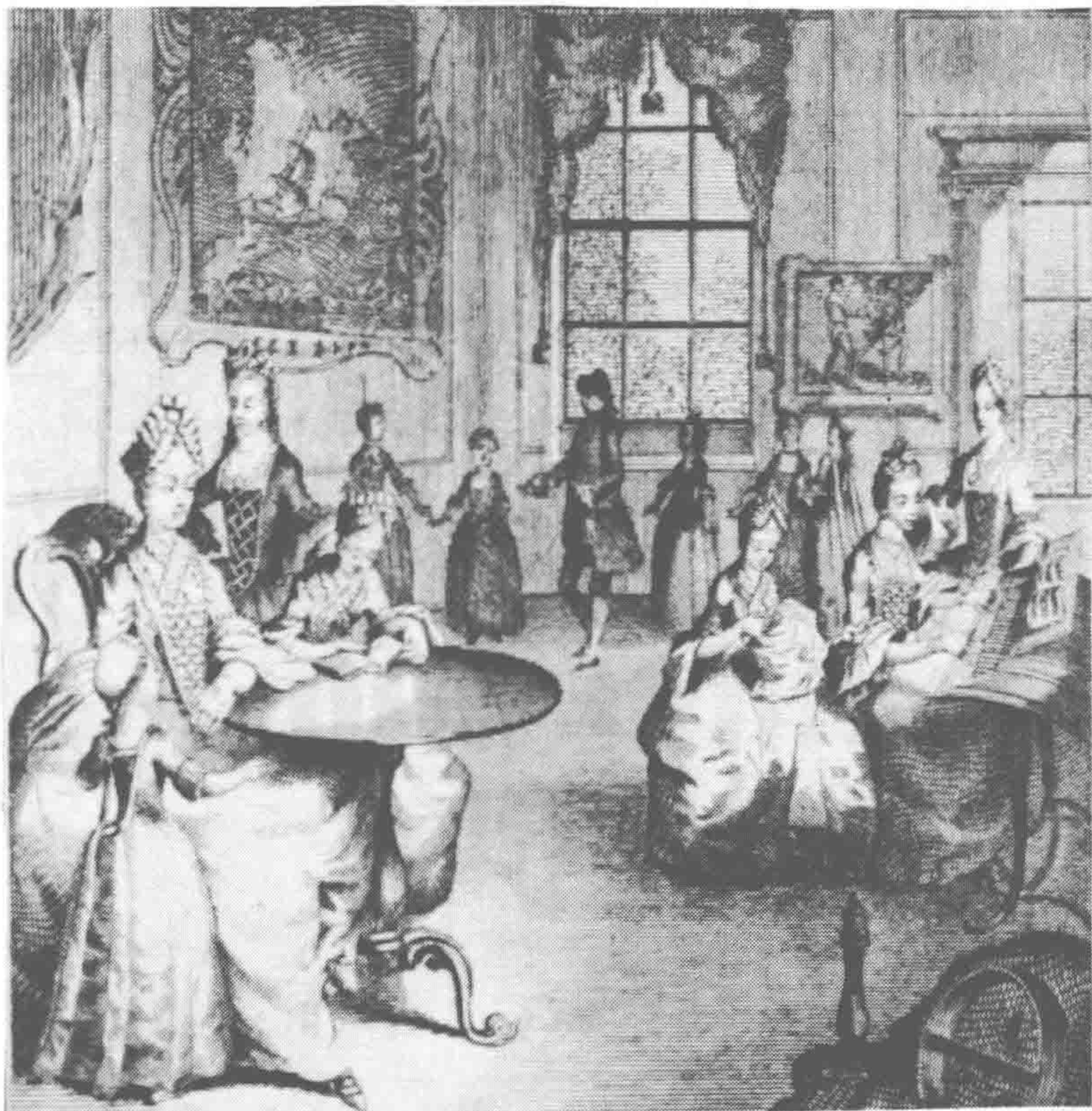
Suffering for elegance: lacing a corset

course, all rich people had servants (D5). Many rich people had two homes – one in the town and another in the country. In England many merchants sought to buy land and live like the aristocratic families.

The poor people had little opportunity for leisure, though it must be remembered that the working day in winter-time was shorter because there was no artificial light. Gossiping about everyday events and telling stories filled what leisure hours there were. Also there were many holy-days and festivals which provided opportunities for singing, dancing and sport (D6). In contrast, the rich had plenty of time for pleasure: the social life of conver-

sation and dances filled much of their time. Hunting was the most popular sport. Many rich people were also interested in the arts – in music, painting and architecture – and spent both money and time in encouraging artists in their work.

Poor people were mostly illiterate, which means they could neither read nor write. Charity schools existed for some children, and the parish priest provided some basic learning. Rich children were taught by private tutors, and some boys went to schools and universities. The content of this education was mainly good manners and behaviour (etiquette), music and painting, Latin and Greek.
(Education)



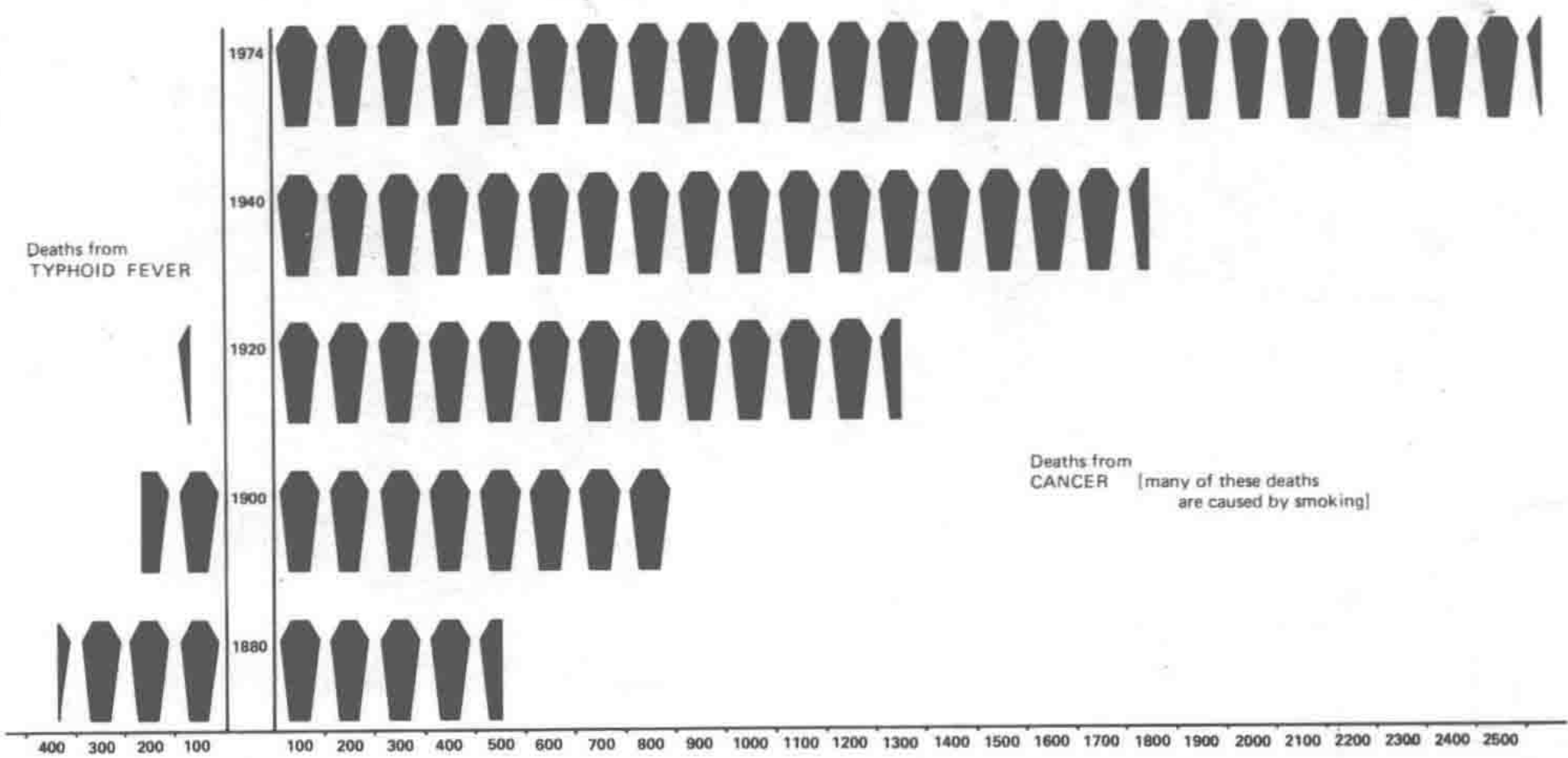
A NATURAL WORLD

Eighteenth-century Europe and North America had a very different environment from today. There were far fewer people in far fewer towns, and the towns that did exist were much smaller. For example, the population of Greater London in 1976 was much the same as the population of the whole of Britain in the eighteenth century. (*Population*) Towns were centres of government, but also places for trade – with harbours, markets and shops. There were no great manufacturing towns like modern Detroit or Dusseldorf. Most people lived in small villages. And, apart from the cultivated fields, the land bore few marks of man’s activities. There were pathways and tracks, but few roads in the modern sense of the word, and, of course, no railways (D7). Everywhere, from America to Russia, it was a natural environment, dotted with clusters of primitive cottages and houses and a few mansions.

Health

Poor people suffered from lack of food and from disease. When harvests failed because of bad weather conditions many people died. Babies often did not survive the first year of their lives. The great scourges of smallpox, typhoid and plague killed people of all ages – and of all classes, too (D8). Disease spread in towns because of the lack of proper sanitation. Medical knowledge at the time was very elementary, and the need for cleanliness was not always understood. No one was aware of the part played by viruses and bacteria in the spreading of disease. When yellow fever killed nearly 5000 people in Philadelphia in 1793 the cause was thought to be ‘noxious exhalations’ [nasty smells] from rubbish. A favourite ‘cure’ for disease was bleeding – leeches were attached to the patient’s body to suck away blood. This often so weakened the patient that he died, when he might have survived without the help of a doctor! Anaesthetics were

Deaths per million in England and Wales (1880-1974) from typhoid fever and cancer



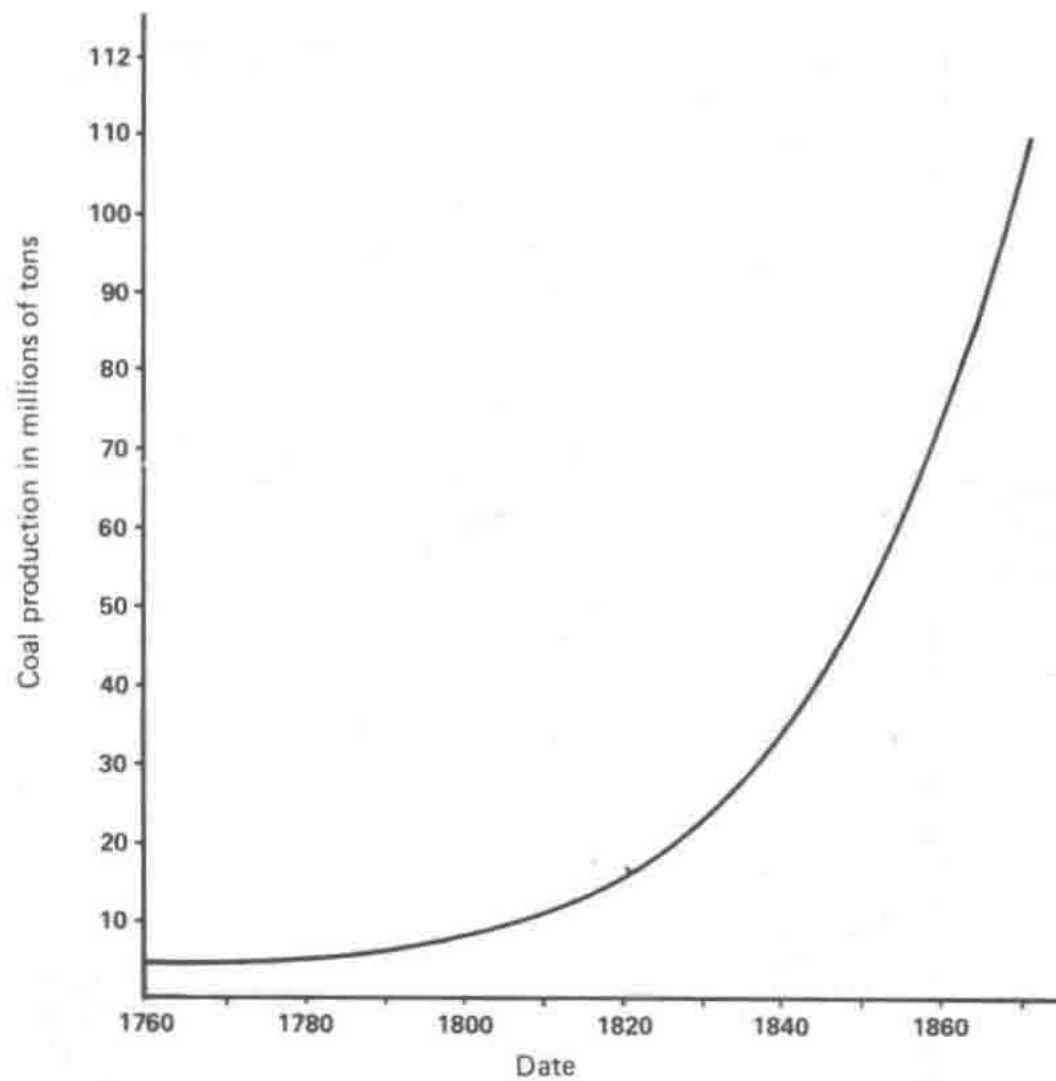
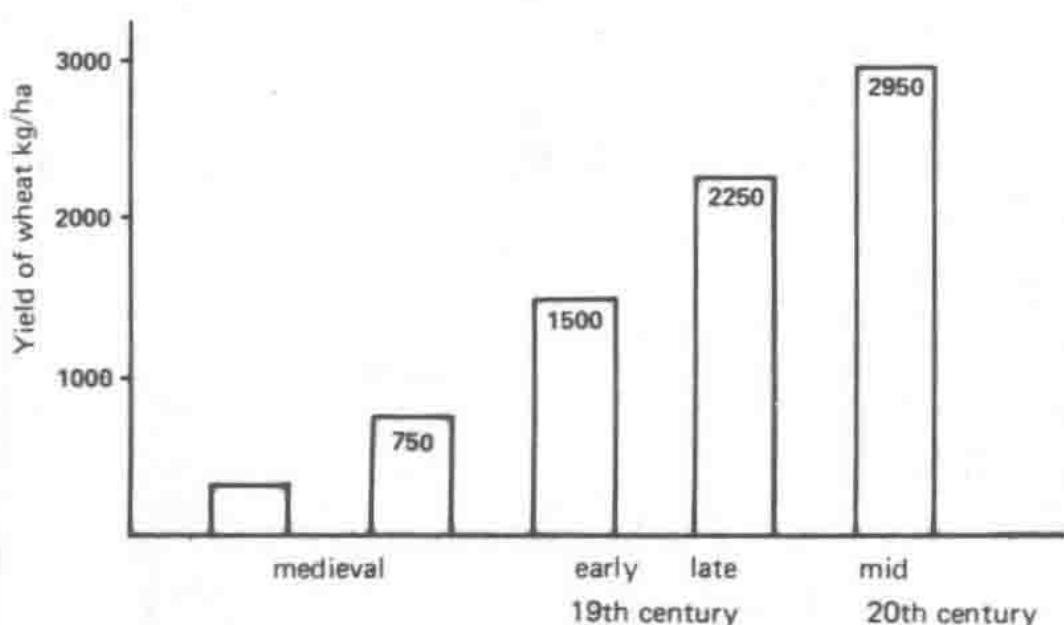
unknown, so even minor surgery, like having a bad tooth pulled out, was a most painful ordeal. However it was an age of scientific curiosity. A particularly notable development was the start of inoculation against smallpox, one of the most widespread diseases of the time (D9). But medical care as a service hardly existed. The rich were looked after by ignorant doctors; the poor nursed each other with prescriptions handed down from generation to generation; the homeless poor, when seriously ill, were herded into hospitals run by the churches.

HOW CHANGES CAME ABOUT

This simple way of life was completely changed by the social and economic revolutions which took place after the eighteenth century. These revolutions are described in detail in other booklets; here we need only sum up their main points.

The Agricultural Revolution led to a great increase in food-production, which meant that a country could support a much larger population. *The Communications Revolution* linked the world together much more closely, and so made it possible in various parts of the

Rising yields of wheat in Britain as methods have improved

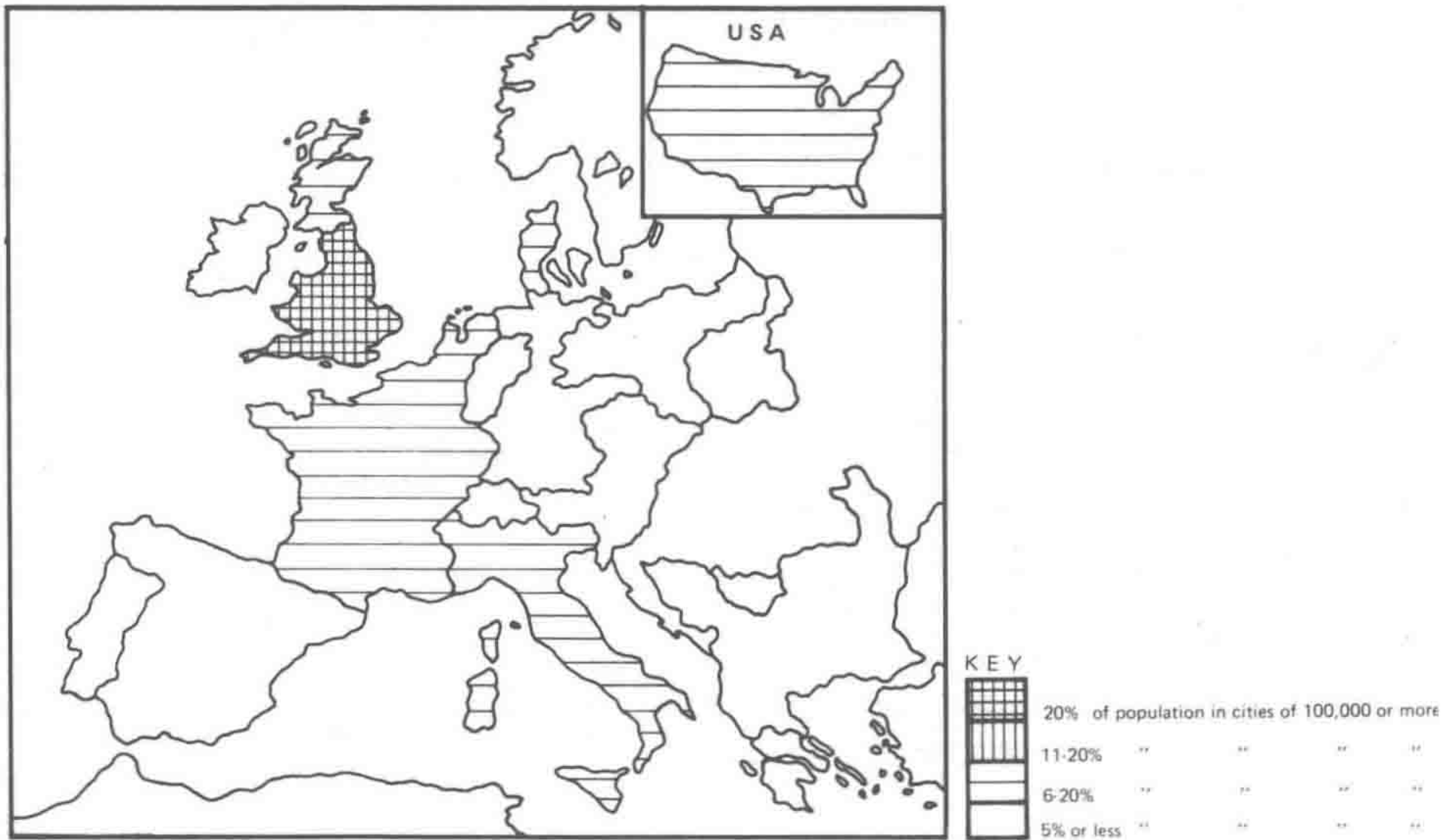


The increase in coal production as a result of the Industrial Revolution in Britain

world to concentrate on doing the things they could do best. This specialization made it possible for people to produce much more. (*A World Economy*)

The Scientific Revolution led to a big growth in scientific knowledge, which was applied to ordinary life and made that life much easier. In this booklet (*Health and Wealth*) we shall look particularly at the growth of medical knowledge which helped to make people's lives longer and healthier.

The Industrial Revolution came about when men learned how to use new sources of energy to drive machines. This discovery changed the whole basis of manufacturing goods. Machines could make goods in far greater quantities than had been possible before. The new machines also altered people's places of work — they were no longer in their own homes, but in new factories (D10).

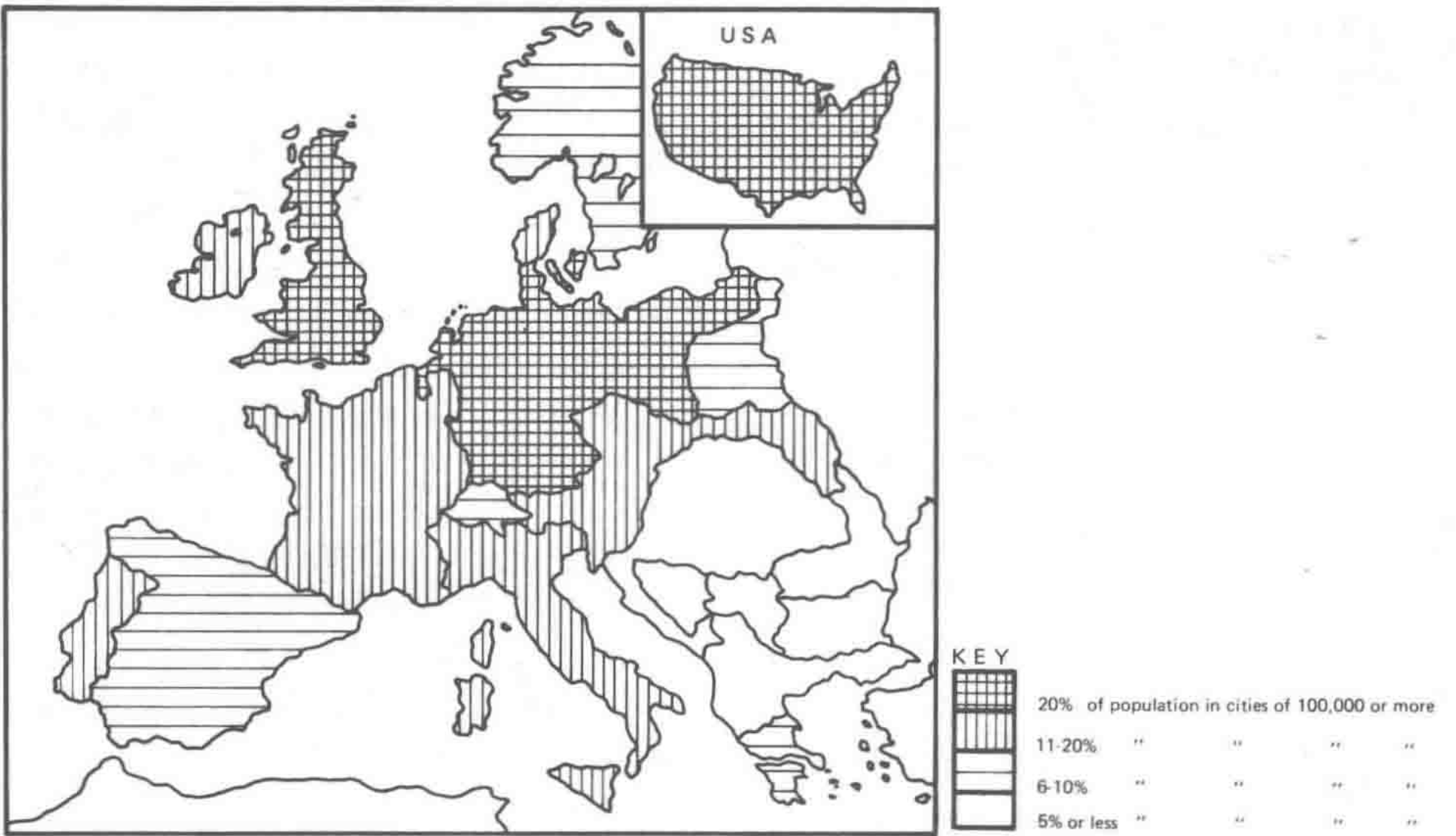


The industrialization of Europe in 1850

The movement into factories encouraged the urban revolution. (*Cities*) Many people left the countryside to work in the new factory towns. In the eighteenth century four out of five people lived and worked in the country-

side; in the second half of the twentieth century less than one person in every ten does so. In two hundred years the average person's environment changed completely.

The industrialization of Europe in 1910



These changes add up to an economic revolution which produced great social changes. But there was also a political revolution; a change in people's ideas about how society should be run; (*The Enlightenment*) and a great political upheaval which tore Europe apart. (*The French Revolution*) In this political revolution men questioned the right of nobles and aristocrats to rule. The new classes of industrial workers and middle-class merchants and businessmen which the social and economic revolutions had created began their rise to power.

NEW WEALTH

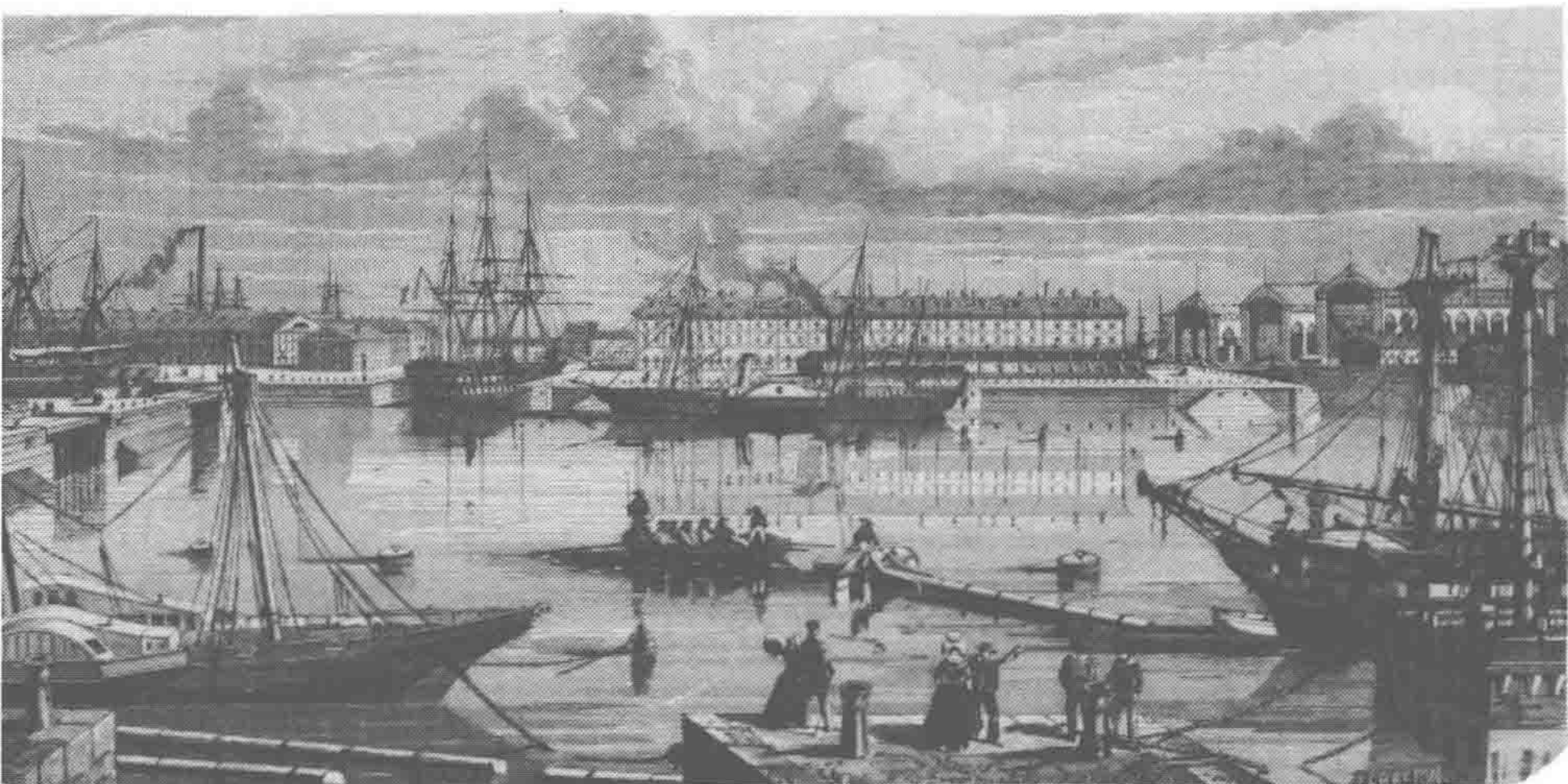
The amount of wealth available for sharing out in Europe and North America increased enormously during the nineteenth and twentieth centuries. Between 1840 and 1950 the total amount of wealth produced by the United States of America increased at the rate of 42 per cent every ten years – probably the biggest increase in wealth over such a long period by any country at any time. Because the population

increased so much during the same time, income per head increased at the rate of only 16 per cent every ten years. But this still meant that the average citizen of the United States was five times as well off in 1950 as he had been in 1840.

New sources of wealth were discovered and developed – in many cases through the invention of new technology. For example, electricity and oil were developed as vitally important sources of power. Imagine your world without electricity, petrol or diesel fuel. Indeed, the development and use of sources of power, instead of relying on human and animal muscles, is the most important explanation of the increase of wealth. New sources of food were opened up: the massive grain-producing prairies of North America and the meat-producing ranches of America, Australia and New Zealand. Metal-ore mines were sunk in almost all countries of the area we are studying. But all these riches of the earth could increase man's wealth only through the invention of machinery – for example, the combine-harvester which reaped the American prairies and refrigerator-

Producing food today: a combine harvester





Cherbourg: an Atlantic port in the nineteenth century

ships which transported New Zealand mutton.

CHANGING CLASSES

As land lost its importance as the main source of wealth, so those people who made money from industry and trade became a new, wealthy group. People from these backgrounds became increasingly important in the government of many countries.

The class which gained most during the nineteenth century was that made up of important businessmen and what we call the upper middle class – those people who lived off money invested in industry or government bonds.

The industrial workers replaced the peasants as the largest class. Although the workers did not do as well as the middle classes out of industrialization they did become better off. Between 1850 and 1900 real wages in Britain almost doubled. In other countries the standard of living of workers rose from the beginning of industriali-

zation, rising more rapidly at the end of the nineteenth century. Between 1870 and 1900 real wages in France and Germany rose by one third and in Sweden by three quarters.

When we read about some of the bad conditions of workers during the early stages of industrialization – slums, bad food, disease – we should not forget how bad life in towns and the countryside had been for most people before the Industrial Revolution. After 1847 there were no more mass deaths from starvation in western Europe; famine was a thing of the past. And the number of very poor people steadily went down. In 1800 two out of every three people in Britain lived at or near subsistence level – that is, where they could afford only enough to keep themselves alive. By 1900 only one in three was in this position; by 1949 less than one in five; and in the 1960s less than one in eight.

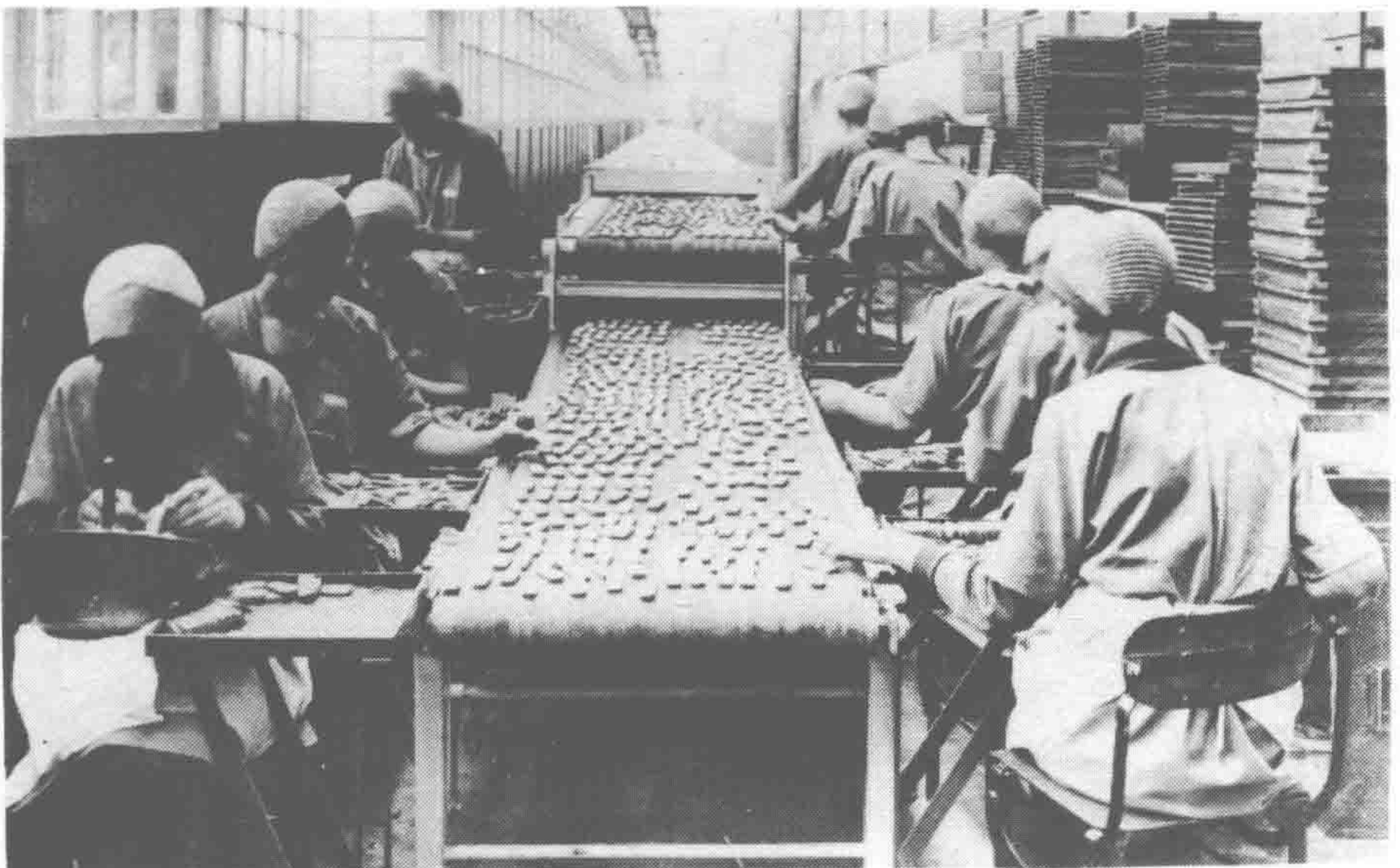


Poverty in nineteenth-century London: a soup kitchen in the East End

As the process of industrialization went on the working class began to change. In the early days the need had been for unskilled workers — miners, transport workers, people to look after

machines. As industries became more organized with more complicated machines, so there was a greater need for skilled workers, and especially for white-collar (office) workers. For

The mass production of biscuits in the 1920s



example, in the United States in 1910 one in three workers was unskilled; by 1950 only one in five. In the same period the proportion of skilled, white-collar, managerial and professional workers went up from one in two to more than two in three. The white-collar workers came to form the core of what was called the lower middle class.

SHARING THE NEW WEALTH

During the nineteenth century almost all classes in Europe and North America improved their standards of living. Important businessmen and the upper middle class, however, became much better off than any other group, and the gap between the incomes of these and the other groups actually became greater. During the twentieth century, on the other hand, the gaps in wealth between classes have closed up; the numbers who were very rich or very poor became smaller, and those in the middle grew larger.

One reason for this change is that workers began to organize themselves in trade unions, and went on strike for better pay and conditions. Also workers began to organize politically. In the late nineteenth century and early twentieth centuries the right to vote was given, first to all men and then to all women in most European countries. Workers formed their own political parties to put forward their demands. Governments began to do more for workers, passing laws to improve conditions in mines and factories, fixing hours



A doctor examining a school boy at one of the first British medical centres in 1911

of work, and giving help to the sick, the old and unemployed (D11).

All these gains by workers cost money. The money came from insurance or taxation. In practice what happened was that some money was taken from the rich and paid to those less well off. Taxation tended to even out some of the differences in wealth. Governments provided many other valuable services for people. Education, medical and public health services, houses and flats, even sports grounds, were provided by the government. (*The Growth of the State*)

NEW WAYS OF SPENDING WEALTH

These changes in the amount of wealth and in its sharing out had an effect, of course, on the way people used their money. Ordinary

people were able to raise themselves above the level of mere existence. The extra funds were used to buy more nourishing food. For example, the average German bought 27 kilos of meat in 1873 but 47 kilos in 1912; in 1870 he bought 5½ kilos of sugar, but in 1907 he bought 15 kilos. Although people ate better, they spent a smaller part of their income on bread. In 1850 half of the average French worker's income went on bread. By 1900, 60 per cent of his income covered his entire food bill. The extra money was used to buy better clothes and better furnishings for the home. Later the amount spent on food fell much further. Money was increasingly found for pleasure and entertainment — cinema and theatre visits, radios and television sets, for example.

HOLIDAYS

As the distribution of wealth changed and styles of life altered, so the working people gradually had more time off work. In the early days of the Industrial Revolution people worked six long days a week. In Britain in the years 1847-53, new laws established a ten-hour day and a half-day on Saturday. Working hours were gradually reduced, and after the Second World War the five-day, forty-hour week became general. Annual holidays with pay also became usual.

People used their new leisure time in reading, gardening, going to cinemas or dances, listening to the radio, watching television, or watching sport — baseball in the United States, football in Britain, and cycling in France. People were

A British seaside resort in the late nineteenth century



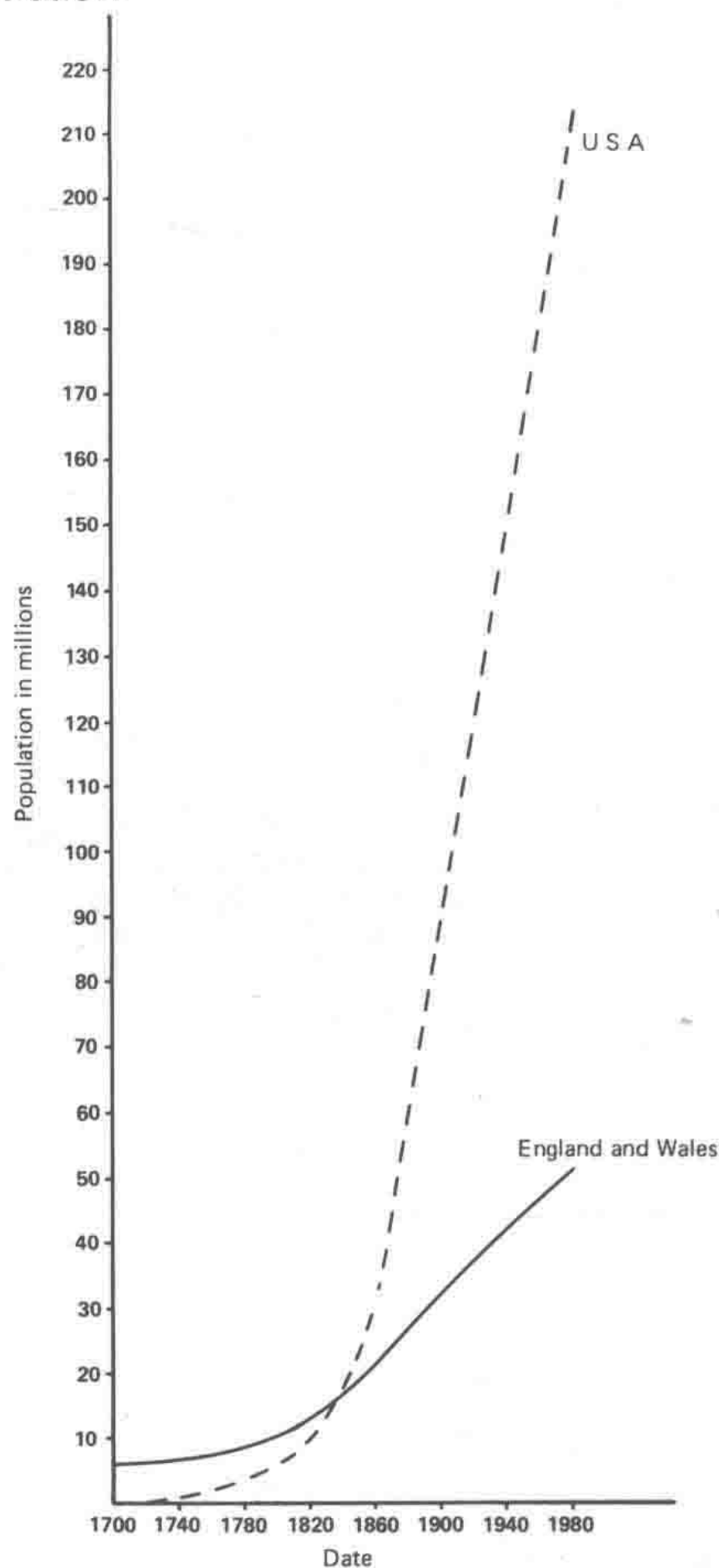


A modern holiday scene: a Spanish beach

able to travel to places far away from their homes for holidays. The idea of going to the seaside started in the eighteenth century with the rich who hoped to improve their health. One hundred years later railways were transporting thousands of working-class families for seaside holidays. Even flying to the Mediterranean for a holiday became quite common by the latter part of the twentieth century.

POPULATION GROWTH

One of the most remarkable changes which has taken place throughout the world during the past two hundred years has been the immense increase in population. During the nineteenth century the rate of increase was greatest in Europe and North America. (*Population*) The causes of this



Population of England and Wales and the United States from 1700 (in millions)

increase are many — better food, better housing, better clothing, better conditions: in fact better health, so that people lived longer. For example, the average French baby in 1800 could expect to live to be 28; in 1900 to be 48; in 1930 to be 58; and in 1955 to be 66.

THE HEALTH OF CHILDREN

During the nineteenth century the main advance was made by reducing the number of deaths of babies and small children. In 1800 one child in every three died in infancy; by 1900 this had been reduced to one in ten in some countries of western Europe; and by 1950 to less than one in twenty. In the early nineteenth century many infants died at an early age from cholera, typhoid and dysentery. But by this time doctors were beginning to understand the link between dirty drinking water and certain diseases (D12). So greater emphasis was laid on town planning and better drains and sewage

systems (D13). In these cleaner conditions fewer children died. Also diseases like smallpox were prevented by vaccination.

THE HEALTH OF ADULTS

The health of adults did not improve as much as that of children in the nineteenth century. A man aged twenty in 1900 could not expect to live much longer than a man of twenty had expected to live in 1800. The real change in adult health came in the twentieth century, when the food they ate improved both in quantity and quality. Scientists began to realize the importance of a well-balanced diet; it was in 1912 that the term vitamin was invented.

Another reason for better health was the increase in medical knowledge. In the 1860s a French scientist, Louis Pasteur, discovered how diseases were passed on by germs (D14). Once scientists knew what to look for they soon tracked down the causes of many diseases

Life expectancy at birth (females) in France

