THE MAKING OF THE MODERN WORLD

MALAYA

IN

WORLD HISTORY

BOOK THREE

by

JOGINDER SINGH JESSY

Edited by

W. WILLIAMS

PERDANA
LEADERSHIP
FOUNDATION
YAYASAN
KEPIMPINAN
PERDANA

MALAYA IN WORLD HISTORY

BOOK THREE

THE MAKING OF THE MODERN WORLD

by

JOGINDER SINGH JESSY
B.A. Hons. Diploma-in-Education (Malaya)
(MALAYAN EDUCATION SERVICE)

Edited by

W. Williams, m.a.(cantab),
Former Lecturer in History, Malayan Teachers' College, Penang.

Published by
PENINSULAR PUBLICATIONS
PENANG

Price $3.50

PENINSULAR PUBLICATIONS,

P.O. BOX 57,

PENANG.

First Published *1960*
Reprinted *1961*
Reprinted *1962*
Revised Edition *1963*

Printed by
Printcraft Limited,
Jalan Dua, Jalan Sungai Besi,
Kuala Lumpur.

TO THE TEACHERS OF HISTORY

in

MALAYAN SCHOOLS

PREFACE

The present volume is the last of a series of three books which together cover the approved syllabus in History for Forms 1, 2 and 3 in Malayan lower secondary schools. The object in this book, as in the other two of the series, has been to present the topics in the syllabus in as interesting and as comprehensive a way as possible. It is sincerely hoped that it may prove useful to teachers of History in Malayan schools.

Carefully selected comprehensive questions are included at the end of each chapter to enable teachers to assess the knowledge of their pupils. Teachers are also requested to formulate their own questions to supplement those given here.

The photographs and maps have been chosen with care to add realism and further interest to the narrative so as to enable pupils to better visualise the people and events that they read about.

Last but not least, my grateful thanks as due, firstly to Mr. W. Williams, former Lecturer in History at the Malayan Teachers' College, Penang, for going through the manuscript and making valuable suggestions and secondly to the authors of the many books which I have consulted, for factual contents.

JOGINDER SINGH JESSY.

Alor Star,

1st July, 1963.

CONTENTS

PART THREE

THE EAST

PART FOUR

SOUTH-EAST ASIA

ACKNOWLEDGEMENTS

We are indebted to the undermentioned for permission to reproduce illustrations:

Exclusive News Agency:
pp. 121, 122, 125, 127, 129, 132, 134, 137, 143, 182, 186, 189, 200.

Radio Times Hulton Picture Library:
pp. 25, 40, 41, 43, 44, 45, 47, 50, 53, 59, 61, 63, 64, 65, 66, 69, 88, 106, 107, 110, 118, 119, 120, 145, 147, 162, 174, 176, 198, 199, 204.

Science Museum London:
pp. 9, 11, 12, 13, 15, 20, 33.

National Portrait Gallery London:
pp. 28, 35, 49, 80, 155, 156, 212.

United States Information Service:
pp. 92, 93, 100, 102, 103.

Keeper of Public Records, Federation of Malaya:
pp. 228, 239.

Director of Information Services, Federation of Malaya:
pp. 252, 253.

Trustees of The National Maritime Museum, Greenwich:
pp. 31, 71, 77, 78.

Press Information Bureau, Government of India:
pp. 165, 167, 168.

High Commission of Pakistan:
p. 169.

Dr. Ooi Jin Bee, University of Singapore:
p. 237.


PERDANA
LEADERSHIP
FOUNDATION
YAYASAN
KEPIMPINAN
PERDANA

Part One

The Age of Inventors

CHAPTER ONE

ABOUT THE INDUSTRIAL REVOLUTION

INTRODUCTION :

If you visit Kedah during May or June, a familiar sight that will greet you is the padi planter at work with his wooden plough and buffalo. The Machine Age has not had much influence on him for he uses practically no machinery at all. The padi he produces is the result of muscular labour — of the farmer himself and his helpers — both animal and human.

When his methods are compared with those of the farmers of Australia or Europe, they appear primitive. Right from the time the Australian or European farmer begins to work in his field, to the time his crops are harvested, he is helped by machinery. The common use in Western countries today of the machine instead of human power for farming and manufacturing goods, is a result of the changes which were brought about by what has come to be known as the Industrial Revolution.

DEFINITION :

The Industrial Revolution was a slow movement which was brought about by the introduction of machinery to replace human labour as a source of power. The increase in scientific knowledge that followed, resulted in a number of changes. These

affected not only the social and economic life of the people but also brought important changes in agriculture, transport and industries such as the manufacture of iron and textiles.

THE BEGINNINGS OF THE INDUSTRIAL REVOLUTION.

It is difficult to study the continent of Europe as a whole. This is because there are so many countries in it. It would be better to take one country and study it in detail. For two reasons, England is the ideal country for this detailed study. Firstly, the Agricultural and Industrial Revolutions began there and it was from England that most of the ideas spread to Europe. Secondly, we have more information about England than about any other country in Europe to help us in this study.

WHY THE INDUSTRIAL REVOLUTION BEGAN IN ENGLAND.

It was not a matter of chance that the Industrial Revolution began in England. There were many good reasons why the use of the machine instead of human power first began there. Among the most important of these reasons were :

(a) England's expanding trade during the 18th century.

(b) The wealth of the country.

(c) The advance of scientific knowledge, and

(d) The natural advantages and resources of England.

(a) England's Expanding Trade.

It is not very hard to see why trade is such an important condition for industrial progress. Trade brings raw materials into a country, and these raw materials are necessary to produce manufactured goods. Moreover, when manufactured goods are produced, they have to be taken to markets for sale. This is only possible if there is trade between various countries.

Portugal and Spain were the first European countries to take part in the new Age of Discovery. The discovery by the Portuguese of the all-sea route round Africa to Asia in the fifteenth century had a great effect on the trade which passed by the overland route through the Middle East. Lisbon replaced

Venice as the main trading centre of Europe. As for the Spaniards, though their discoveries were not so spectacular as those of the Portuguese, their ships carried on a vast trade with the countries that came under them.

England, Holland and later France, had a late start compared with the Portuguese and the Spaniards, as they began their voyages to the East about a century later. However, in a few years, they not only caught up with their rivals but left them far behind. Trade grew in volume and covered a greater area than it had ever done before. Prices of commodities such as tea, sugar, spices and tobacco fell. These were not luxuries any more because they were within the reach of the poor.

(b) The Wealth of England.

Before a factory can start producing goods, a lot of money is needed. In the first place, the buldings have to be constructed and machines bought. To keep the machines working, there must be a constant supply of raw materials. These raw materials have to be bought and transported to the factories. In addition, workmen have to be paid. Then, it might take months before the goods are sold on the market. Thus money (capital) is needed to keep the factories going. It was England's trade that brought untold wealth into the country and provided the capital for industrial development.

The first English colonists began to arrive in America in the beginning of the 17th century. As the population grew, trade began to develop between England and her colonies. In the absence of a native population which could provide the labour for the tobacco, sugar and cotton plantations that were established in America, there grew a demand for labour. This problem was solved by importing slaves from Africa. In time, apart from the Eastern trade that passed through it, the Atlantic Ocean saw the development of trade between England, Africa and America.

From England cheap cloth and other manufactured goods, such as guns, were taken to Africa and exchanged for slaves. The latter were sold to the planters in America for tobacco, cotton and sugar which were brought to England. The result of all this trade was that England grew into a very rich country. Her rich merchants began to invest more money outside the country. This expanded English trade still further.

(c) The Advance in Scientific Knowledge.

As more of England's traders and travellers made contacts with Europe and the countries of the East, so they brought back with them much new knowledge. This stimulated the country which since the days of the Renaissance had been enriched by the knowledge of the Greeks and other European learned men. The result was an increase in scientific knowledge which in turn led to a great number of inventions.

(d) The Natural Advantages & Resources of England.

England is an island, and she possesses many harbours. No part of England is very far away from the sea which means that all towns are close to ports. Parts of France and Spain, for example, are so far away from the sea that they have no connection with the ports. In England, such a connection enabled easy communication with other parts of the world.

In addition to the above, the fact that England was an island, helped her to remain in peace whilst the rest of Europe was torn by the Napoleonic wars. This peace was necessary for economic development. England also had huge deposits of coal and iron, which were essential materials to run her factories.

Since England had all these advantages over the other countries of Europe, it is not surprising that the Industrial Revolution started within her shores.

QUESTIONS:

1. What do you understand by the Industrial Revolution?
2. In what ways are the methods and equipment of a Malayan farmer different from those used by an Australian or Western farmer?
3. Why did the Industrial Revolution first begin in England?

★

CHAPTER TWO

DEVELOPMENTS IN AGRICULTURE AND THE TEXTILE INDUSTRY

DEVELOPMENTS IN AGRICULTURE.

As England was an agricultural country, it was only natural that agriculture, her oldest industry, was the first to be affected by the new spirit of scientific learning.

Till the 18th century, the agricultural methods had been the same as those used a few hundred years before. Nothing much had changed since the Middle Ages. However, two factors were to change this state of affairs during the 18th century. The first of these was the rapid increase in population. The second was the rapid growth of towns. Both these factors meant an increase in the demand for food. It was to meet this demand that farmers improved their methods of agriculture.

ROTATION OF CROPS

Since the Middle Ages, English farmers used the following method to restore the fertility of their fields. They sowed a field for two years and then left it fallow (or unsown) for a year. The rest that it got, enabled the field to regain its fertility.

This method had one great disadvantage. It meant that no crops could be produced in one field for one year. Thus the farmer was unable to produce the total amount of crops that his land was capable of yielding.

Lord George Townshend, who was a minister to King George I, was not satisfied with this state of affairs. On his estate he carried out a number of experiments. He began to develop crops on a four year rotation. He never grew two crops of the same kind one after the other on the same plot of land. In between wheat and barley, he planted root crops or grasses. His system became known as the "Rotation of Crops."

This new discovery had three advantages :—

(a) It was possible to revive the fertility of a field without leaving it fallow for one year.

(b) The new root crops and grasses were valuable for feeding animals — especially during winter. This is important when we realise that before this, many animals were killed in winter because there was no food to feed them with.

(c) During winter, the herds increased the supply of manure by their droppings. This supply was used to fertilise the fields. The increase in fertility and the continuous use of their fields increased the amount of food produced by English farmers.

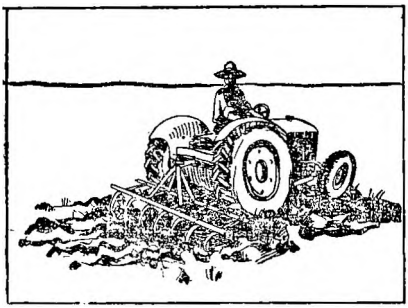
LIVE STOCK BREEDING:

In addition to agriculture, sheep and cattle breeding also experienced many changes. When we compare some of our Malayan cows and bulls to those in Australia, for example, it is not very difficult to see the difference between them. The foreign cows and bulls are better than our own stock in almost every way. Apart from the climate, this is a result of scientific breeding of live-stock.

Robert Bakewell and the Colling brothers, Robert and Charles, made great contributions in the scientific breeding of livestock. Bakewell experimented with the breeding of sheep. By his experiments he was able to develop the famous Leicester-shire breed. The Colling brothers were also successful with their experiments in the breeding of cattle. As a result of the work of Bakewell and the Colling brothers, the average weight of sheep and cattle was increased three and two-fold respectively. The English government took great interest in the developments that were taking place and a new government department, the Board of Agriculture, was set up.

ENCLOSURES :

Soon it was found that these developments could not be put into operation because of the old system of common fields. The peasants were entitled by custom to allow their cattle and sheep to graze on the common fields. The defect in this system was that it could not prevent the spread of disease among the animals. A divi-sion of fields was necessary. This would, in addition, allow a farmer to carry out experi-ments in his fields. It was only natural that farmers began to build fences, called enclosures, around their properties. As a result of enclosures, much land that had not been cultivated, was brought under the plough.



INTRODUCTION OF MACHINERY :

A great step was taken when machinery was introduced in agriculture. This was first done by Jethro Tull. He invented

a drill for the sowing of seeds. He also put forward a new method of planting seeds in furrows. Tull did not keep the results of his experiments to himself. He published a magazine in which he wrote about his experiments. This meant that Tull's discoveries could be widely used by English farmers.

RESULTS OF THE AGRICULTURAL REVOLUTION.

The changes in agriculture described above brought three important results:—

(a) Increase in Food Production :

With the introduction of the new scientific methods of food cultivation, farmers were able to obtain a better yield from their lands. Food became cheaper as the cost of labour fell. England became one of the foremost agricultural countries of the world. She was lucky to have increased her food supply because when the Napoleonic wars came, England was able to feed her growing population.

(b) The Disappearance of the Small Farmer:

There were many reasons why the small farmer was affected so greatly. Firstly, he could not afford to enclose his fields. Some farmers were not even able to give proof that their farms belonged to them. Thus many were forced to leave their properties. Secondly, the new machinery was expensive and the small farmer was unable to buy it. Unable to compete with the modern methods, he was forced to sell his land.

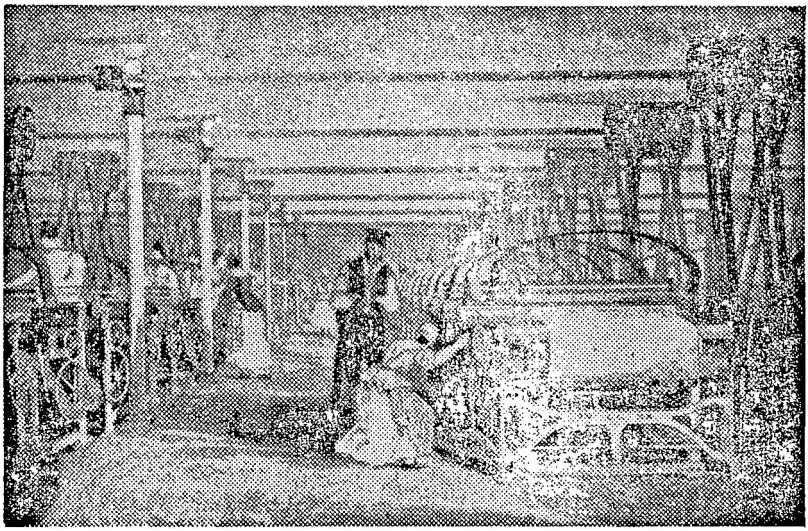
(c) The Growth of Towns :

Many small farmers became unemployed because the new farmers, using new methods, needed less labour. This and the sale of their lands, forced them to move to the towns. The latter began to grow especially after the factories were established.

Many ex-farmers became factory workers. The number of country people moving to the towns was swelled by a great number of farm labourers who also became unemployed as new scientific methods of farming were introduced.

SCIENTIFIC RESEARCH.

In conclusion, we must mention the advance that agriculture has made because of scientific research. One of the most important results of this research was the introduction of Chemical Fertilizers. The credit for this goes to a German, Fritz Haber. This meant that farmers would not have to depend on animals for manure in future. The fertilizers were not only cleaner but were produced more quickly and in greater quantities.



Power Loom Weaving.

In addition to the above, Insecticides were produced to fight plant diseases and pests. As far as machinery is concerned, its contribution to agriculture has been tremendous. New farming machines included tractors for ploughing and harvesting machines. These machines have made it possible for one man to do work that the 18th century farmer would have thought impossible.

Meanwhile, as the face of agriculture changed, equally important changes were taking place in England's textile industry.

GROWTH OF THE COTTON TEXTILE INDUSTRY.

Woollen cloth was the chief commodity which English traders exported in exchange for the goods that they brought into England. They soon found that woollen cloth was unsuitable in tropical countries because the climate is too hot. The demand in tropical countries was for cotton cloth. Thus the traders decided to import raw cotton from abroad and produce cotton cloth for export. The centre of the cotton industry in England grew at Lancashire, as the damp climate of the area was suitable for cotton spinning.

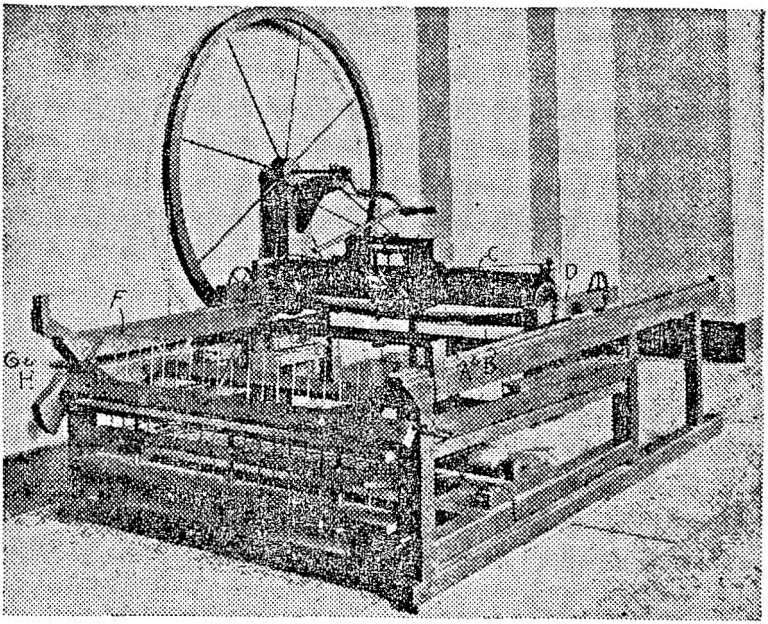
After some time, England was unable to meet the demand for cotton cloth. This was because spinning and weaving were done by hand. There was not enough labour to produce enough cloth to meet the demand. It was for this reason that labour-saving devices came into use. The owners of the factories encouraged the invention of these devices because of the profits these would bring them. Soon a number of inventions appeared involving nearly all the different processes in the manufacture of cloth. At the same time, chemists were busy improving their old methods of bleaching, dyeing and colour painting.

DEVELOPMENTS :

To obtain a clear understanding of the development that the textile industry experienced, it is necessary to have a look at the main processes in the manufacture of cotton cloth.

The first task is to separate the cotton from the seeds by a process known as ginning. The fibres are then straightened by a combing process (carding). Next comes spinning when fibres are twisted together and yarn is produced. The yarn is of two types, — warp and weft. The warp is the thread which extends throughout the length of a piece of cloth whilst the weft runs across the width.

The third step is weaving. This begins when the warps and the wefts are interlaced to produce cloth. The finishing touches are then put by dyeing, bleaching or printing patterns on the cloth. These four processess all experienced great changes as a result of the Industrial Revolution.



Replica of Hargreave's Spinning Jenny.