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**POLITICAL ECONOMY
IN ENGLAND**

A SHORT HISTORY OF
POLITICAL ECONOMY
IN ENGLAND'

FROM ADAM SMITH TO ALFRED MARSHALL

BY

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PREFACE TO THE FOURTEENTH EDITION

ALTHOUGH a generation or more has passed since this book was written, the author has seen no compelling reason for changing substantially the accounts furnished therein of the chief English economists of the past.

In his judgment later developments have not displaced their notable predecessors from positions in the niches of the temple of fame sought to be given here.

Economics is, or should properly be, a living subject, attracting daily, as it does, much attention from the public by reason of pressing need and challenging circumstance. It does not, of course, stand still.

Its study, parted somewhat since these pages were penned into different divisions, has in that sense and to that degree become specialized.

The scrutiny of English economic history, the use of statistical data, and the polishing of old and disclosing of new economic theory have been potent baits.

Of such divers trends description will be found in the survey of more recent writing in the new part added to this issue.

L. L. P.

BRIGHTON

25th March 1931

PREFACE TO THE FIRST EDITION

IN the following pages an attempt is made to give a short account of the History of Political Economy in England from Adam Smith to Arnold Toynbee. The history is not carried back beyond Adam Smith for a reason which is stated in the chapter upon that author, and it ends with Arnold Toynbee, because the work of writers who are still living is, it may be hoped, not yet fully completed. The death of one of the best known of those writers, Professor Thorold Rogers, whose work was so original and comprehensive in conception, and so industriously and exhaustively executed, that it is to be feared that even the labours of the greater part of a lifetime have failed to complete it, occurred during the time when the history was being written.

The method which has been pursued by the writer has been, while endeavouring to mention every author of importance, to select for especial consideration in separate chapters those economists whose writings have marked distinct and recognized stages in the development of economic knowledge ; and, while noticing the main incidents of their lives, the circumstances under which their opinions were formed and expressed, and the character of their economic work generally, to concentrate special attention on that part which is either most usually associated with

their names, or seems to be the most characteristic and important. The accounts of these special contributions to the advancement of economic inquiry are, as far as possible, given in the language of the authors themselves; and they are generally followed by some estimate of their relations to more recent economic thought.

In this critical estimate an attempt is made to express the general drift of subsequent opinion rather than the particular views of the writer of this history, which does not put forward any pretensions to originality. The author has freely used all the sources of information and instruction which he has been able to discover; and, although he has embraced every opportunity, which seemed naturally to present itself without burdening the notes, of acknowledging his special indebtedness to particular authorities on certain points, he is under a general obligation which can only be fittingly discharged in a preface. He is indebted to all who have in any way, by commentary on the great writers of the past or independent development of their theories, helped to elucidate the history of a branch of knowledge of which England may perhaps claim to be the classic home, although she has often, and more especially of recent times, experienced the benefits of suggestion and criticism at the hands of foreign writers.

To Professor Symes, the editor of this series,¹ the author desires to express his thanks for suggestions regarding the general plan of the book.

Oriel College, Oxford

8th December 1890

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PART I

ADAM SMITH TO ARNOLD TOYNBEE

CHAPTER I

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THE first ¹ great name in the history of English Political Economy is that of ADAM SMITH. It is true that much of the argument presented in his *Wealth of Nations* may be

¹ Strong reasons have been brought forward for regarding Richard Cantillon (? 1680-90-1734), who came of an Irish family, as having

traced in faint and broken outline on the pages of previous writers,¹ just as it is true that it would be an egregious mistake to suppose that he pronounced the last word on many of the topics of which he treated. But his work furnishes the most convenient and appropriate starting-point for investigation, backwards or forwards. If we examine closely the thought of those economists who preceded him, we find that he has presented it in such a form that in his hands it may be regarded as new; and, if we look carefully into the writings of those who have come after him, we discover that in many cases he may without unfairness be described as having anticipated the essential points of their teaching. He was, we shall see, the product of his age; and he was therefore not immune from the influence of contemporary or preceding thinkers. But he gave novel interpretation to surrounding facts, and he was an outspoken challenger of views current and popular before. Like many authors, he has been charged with borrowing, but such use is compatible with originality of expression and also of thought. It is significant that notes of lectures delivered by him before he went to France, anticipating ideas developed later, have been discovered.² For stimulus or inspiration he seems to have been indebted largely to the Scotch philosopher Hutcheson.³ Of this instructor of his academic youth he spoke as 'never to be forgotten.' It remains true that, if classification were made of authors whose writings had constituted epochs in the history of economic science, the chief place would

in his *Essai sur la Nature du Commerce en général*, between 1730 and 1734, furnished the 'cradle' of Economics. This, written in English, was translated into French. Jevons (cf. chapter vii) was the discoverer. Cf. edition by Mr. Higgs, and translation, in 1931 for the Royal Economic Society (England).

¹ Such as Sir Dudley North in his *Discourses upon Trade*.

² *On Justice, Police, Revenue, and Arms*, reported by a student in 1763, edited by Edwin Cannan in 1896.

³ Cf. *Francis Hutcheson*, by W. R. Scott.

be given by almost universal consent to Adam Smith ; and, if any economic book could be styled immortal, the *Wealth of Nations* would be the first to earn that title.¹

Within fifteen years of its publication Adam Smith died ; but it had already passed into six editions, and had been translated into the chief European languages. It had been read with such appreciation by Pitt that Adam Smith declared that the statesman understood the book as well as himself ; and a competent observer of the current of opinion ventured on the prediction that the author would , persuade the living generation and govern the next.' Nor was this prophecy shown by the subsequent course of events to be without foundation, although the exact date of its fulfilment may have been postponed for a generation or two. The book exercised an influence in practical affairs which might have filled Adam Smith with astonishment. He remarked that to 'expect' 'that the freedom of trade'—for which he earnestly contended—'should ever be entirely restored in Great Britain,' was 'as absurd as to expect that an Oceana or Utopia should ever be established in it.' And yet, largely through the influence, direct or indirect, of his teaching, that very 'freedom of trade' was 'entirely restored,' on this side at least. The language of an economist of later times, who was also a practical man of the world, was by no means that of mere idle exaggeration. He said² that the *Wealth of Nations* had had a 'wonderful effect.' 'The life of almost every one in England—perhaps of every one—is different and better in consequence of it.' 'No other form of political philosophy has ever had one-thousandth part of the influence on us ; its teachings have settled down into

¹ Cf. *Histoire des Doctrines Economiques*, par C. Gide et C. Rist. It is remarked that the 'true creator of modern political economy' is, 'by universal avowal,' Adam Smith.

² Bagehot, *Economic Studies*, p. 1.

the common sense of the nation, and have become irreversible.'

What, then, was the secret of this unique and almost magical influence? We may perhaps find some answer to our question in the circumstances surrounding the life of Adam Smith. At first sight, indeed, it might seem as if that life were uneventful. He was born at Kirkcaldy, in Fifeshire, in 1723, and was brought up by his mother, who had lost her husband—a comptroller of Customs—before his birth. He was educated, first at the grammar school of his native town, and then at the University of Glasgow, where he studied mathematics and natural philosophy, and from whence he proceeded, as Snell Exhibitioner, to Balliol College, Oxford. Here he continued to reside for six or more years, devoting himself especially to the study of moral and political science, and serving his term of 'apprenticeship' to the mastership of arts; and then he returned to Kirkcaldy, and, after some two years had passed, began to lecture on rhetoric and *belles-lettres* in Edinburgh. He formed an enduring friendship, then or later, with the philosopher David Hume, or perhaps was at this time only brought into contact or communication with him.¹ And he won such repute that in 1751 he was appointed Professor of Logic, and, in the succeeding year, Professor of Moral Philosophy in the University of Glasgow. The substance of part of the lectures he delivered from the latter chair was afterwards embodied in the *Wealth of Nations*; and he himself describes his tenure of the professorship as 'by far the most useful, and therefore by far the happiest and most honourable, period of 'his' life.' In

¹ Cf. *Life of Adam Smith*, by J. Rae. Hume devoted some essays to the treatment of economic subjects such as Interest, Money, and the Balance of Trade, and he may have influenced Adam Smith. E. Cannan in his edition of the *Wealth of Nations* mentions as a possibility Adam Smith's indebtedness to Mandeville, the author of the *Fable of the Bees; or, Private Vices Public Benefits*.

1759 he published a treatise on the *Theory of Moral Sentiments*, and in 1763 he received an invitation to accompany the young Duke of Buccleuch on his foreign travels. He accepted the invitation and resigned his professorship; and he remained abroad until 1766, when he returned to Kirkcaldy, and devoted himself to the composition of his great work. This was published in 1776, and he spent most of the two following years in London, in the enjoyment of the best society. In 1778 he was appointed a Commissioner of Customs for Scotland, and took up his residence in Edinburgh. In 1787 he was elected Lord Rector of his old University of Glasgow, and in 1790 he died at the age of sixty-seven.

Such a life as this might at first sight seem to be but a tranquil and uneventful career; and yet it is not difficult to gather from it many hints of the influences which moulded the character of his writing, and contributed to secure for it such remarkable success.

In the first place, he lived at the close of an old industrial era, and before the full commencement of a new. He lived at a time when the rules and regulations, by which in very many cases the prosecution of industry was directed, had lost the reason they had formerly possessed in the circumstances of the times, and were becoming the useless and vexatious relics of a bygone age. During the greater part of his life the agricultural industry of the country was still carried on in many places under nearly the same system as that which had prevailed in the Middle Ages. In many places there were still open, unenclosed fields, with holdings made up of small scattered parcels, and common rights of pasture over the stubble of the arable and the grass of the meadow land. 'A very great part of the country,' writes Adam Smith himself, 'still remains uncultivated'; and the general system of cultivation was of a wretched description. There was no proper

order of rotation of crops, no scientific breeding of cattle, no turnips or artificial grasses, except in particular districts like Norfolk, where Townshend was already earning the complimentary nickname of 'Turnip Townshend,' and Leicestershire, where Bakewell was beginning to attract visitors from all parts of the world to learn the true principles of the grazier's art. But these modern improvements were confined for the most part to the counties where they originated; and throughout the rest of the country the primitive unscientific methods still prevailed, while quarrels were often arising on questions of boundaries and rights of pasture.

Nor was the state of affairs different in manufacturing industry; for here too there were vexatious regulations and coercive routine. The very word 'manufacturer' had not yet lost its original meaning of one who worked with his hands, for industrial occupations were pursued for the most part under what is known as the 'domestic system' by craftsmen working with their own hands in their own houses. There were already, indeed, at this time some instances of capitalist employers, or, as Adam Smith calls them, 'undertakers,' even of a modern pattern; but he almost invariably uses the term 'manufacturer' in its original sense. In many cases a workman was unable to practise a handicraft unless he had served a regular apprenticeship, and received the license of a trade-corporation. The number of apprentices a craftsman could have was, together with the term of their service, regulated in many towns and trades expressly by statute, and in others by custom which was as binding as law; and a workman, who moved from one district to another, exposed himself to the risk of being sent back to his original parish, under the provisions of the Law of Settlement, for fear that he might eventually come upon the rates in his new abode. The woollen industry was now, as it had for some time been, the staple industry of the country; but Adam Smith

observes¹ that only three mechanical inventions of importance had been introduced since the reign of Edward IV. The iron industry, which was largely carried on in Sussex, where it was still possible to see the iron smelted by charcoal in small furnaces blown by leathern bellows worked by oxen, was dying out; and the cotton industry was so insignificant as to be mentioned seldom, and then incidentally, in the *Wealth of Nations*.

Apart, however, from the serious restrictions imposed on labour by the 'exclusive' trade-corporations, the 'ill-contrived' law of settlement, and the statute and custom of apprenticeship, the 'inland trade' of the country was, in Adam Smith's words, 'almost perfectly free,' although the want of adequate means of communication formed a serious hindrance to its development. But, in contrast with the 'inland trade,' the external commerce was hampered by a number of vexatious restrictions. It was regulated with a view to securing what was known as a 'favourable balance' of trade, by making the exports of goods greater than the imports, and by endeavouring to procure the amount due for this excess in actual bullion. 'High duties,' and in some instances 'absolute prohibitions,' were employed as 'restraints upon the importation of foreign goods,' and 'exportation was encouraged, sometimes by drawbacks, sometimes by bounties, sometimes by advantageous treaties of commerce with foreign states, and sometimes by the establishment of colonies in distant countries.' For these colonies were regarded as a sphere for the commercial 'monopoly' of the mother-country, and of the chartered companies to which in some instances their government had been entrusted.

On all sides, then, there were regulations and restrictions, when the season for restriction and regulation, which had once existed, was passing away. There is perhaps no more

¹ Toynbee (*Industrial Revolution*, p. 51) says that he 'forgot to mention' a fourth.

suggestive illustration of this than the story told of James Watt, the inventor of the steam-engine, who betook himself to Glasgow, and, after the local corporation of 'hammer-men' had refused to give him permission to practise his trade, was admitted within the walls of the University, and allowed to set up his workshop.

The consideration, which was specially impressed upon Adam Smith's mind by these circumstances, was the paramount need of freedom. It has been said¹—not perhaps without exaggeration—that this was the 'first and the last word of his political and industrial philosophy'; and it is true that 'every page of' his 'writings is illumined' by the 'passion for freedom.' 'Break down,' he exclaims, 'the exclusive privilege of corporations, and repeal the statute of apprenticeship, both which are real encroachments upon natural liberty, and add to these the repeal of the law of settlement.'

But what does he mean by 'natural liberty'? Here we come upon another of the great moulding influences of his life. His 'passion for freedom' was not merely the practical outcome of a reaction against restrictive routine, but it had also a basis in theoretical speculation. He had, as we have seen, accepted at one period of his life what we may perhaps call a 'travelling tutorship,' and a considerable part of the time he spent abroad had been passed in Paris. At that date there was a group of philosophers and reformers in France, 'a few men,' as Adam Smith called them, 'of great learning and ingenuity,' who are known by the name of the Physiocrats, or adherents of the rule of nature. They, like him, were impatient with the vexatious regulations which hampered trade, to a greater extent in their own country than in England, and like him they felt an ardent sympathy for the common people, who were robbed of the 'free disposal' of their 'most sacred and inviolable' property, the labour of their hands, by these

¹ Toynbee, *Industrial Revolution*, p. 14.

restrictions. They held that, if they could once remove this overgrowth of artificial regulation, they would find beneath it the simplicity of nature. They believed in the current philosophy, which maintained that there had once been a state of nature, and that, when society was established, men had entered into an engagement—a 'social contract,' as it was sometimes called—to surrender some of the individual rights they then enjoyed, which might conflict with the rights of their fellow-men. And they argued that existing human institutions should be made to conform, as far as was possible, to the original simplicity of nature, when all men were equal and free. This was what was meant by 'natural liberty.' 'All systems,' writes Adam Smith, who in this was their disciple, although he was careful to point out the 'capital error' of their 'system' of political economy, which represented agriculture 'as the sole source of the revenue and wealth of every country,'—'all systems, either of preference or of restraint, therefore, being thus completely taken away, the obvious and simple system of natural liberty establishes itself of its own accord.' It is scarcely an unmeaning coincidence that the same year which saw the publication of the *Wealth of Nations* witnessed the Declaration of American Independence, in which it was formally affirmed that all men were 'by nature equal and free.'

The belief, which was thus felt by Adam Smith in the supreme value and need of 'natural liberty,' was strengthened by his moral and theological opinions. It is as impossible with him, as it is with any man, to separate entirely one part of his nature from another; and his 'passion for freedom' was undoubtedly strengthened by the conviction, to which he gave emphatic expression in his moral treatise, that the benevolent government of the world by God would, in most cases, lead the individual who was freely seeking his own interests, to advance the interests of the common weal. He would be 'led by an

invisible hand to promote an end which was no part of his intention.'

Again, he was a Scotchman, and he may be said to have possessed a full measure of a Scotchman's hard-headedness. He could see through the specious and fallacious arguments which were frequently employed in support of the restrictive regulations of the times. And the national characteristics betrayed themselves in other ways; for it has been said with considerable truth that he 'seemed to think that there was a Scotchman inside every man.' If, indeed, every one who took part in industry possessed a Scotchman's canny acuteness and pertinacity, if they were all as fully and constantly alive to their interests, and as determined to seek them, as the proverbial Scotchman is, then we might with more complacency leave them to fight out a struggle for industrial existence in perfect freedom. Competition might be entirely free, for the competitors would be equal in power and intelligence. But it is because individuals sometimes allow the consideration of their immediate interests, or the passing influence of passion, to blind them to their true permanent interests, and it is because there are men, and at any rate there are women and children, engaged in industry, who start with a disadvantage, which no purely economic forces seem likely to remove, in strength of body or mind, or pecuniary resources—it is for these reasons that later experience has tended to enforce the conclusion that competition cannot, consistently with due regard to the real and lasting prosperity of a whole nation, be entirely unrestricted and free. It is precisely because there is not a 'Scotchman inside every man' that 'natural liberty' has been regulated in practice by Factory Legislation, by Co-operation, and by Trade Unions.

But these considerations hardly impair the value of Adam Smith's work. Like his predecessors, the Physiocrats, he recognized exceptions to the rule of 'natural liberty,' though, like them, he did not lay much stress on

those exceptions. The very phrase in which the principles of 'natural liberty' have since been so often summed up, '*Laissez faire, laissez aller* (or *passer*),' seems to have had originally a meaning different from that which was afterwards given to it. It meant that every one should be permitted to engage in what occupation he pleased, and to produce his wares according to the fashion he himself selected, and not that which a government dictated; and it also meant that individuals and their wares should be allowed to pass through the length and breadth of a country without being subject to tolls and restrictions. It meant, in a wider interpretation, 'let everything alone which is injurious neither to good morals, nor to liberty, nor to property, nor to personal security.'

And so Adam Smith will not leave education or banking entirely to the play of individual liberty, but will call in the regulating authority of the State. 'Those exertions,' he expressly says, when dealing with the subject of banking, 'of the natural liberty of a few individuals, which might endanger the security of the whole society are, and ought to be, restrained by the laws of all governments, of the most free, as well as of the most despotical.' And his condemnation of the Mercantile System, and of the disadvantages it endeavoured to impose upon foreign as contrasted with home industry, is qualified by his exception of the Act of Navigation as a measure of national defence, which 'is of much more importance than opulence,' and by his recognition that in some cases, where industries have been encouraged by prohibitions on foreign goods to employ a 'multitude of hands,' 'humanity' may 'require that the freedom of trade should be restored only by slow gradations and with a good deal of reserve and circumspection.'

And, again, when he says that, if the 'wealth of a country' 'has been long stationary,' the 'hands' would 'naturally multiply beyond their employment,' it would be a gratuitous misrepresentation of his meaning to

suppose that in this passage he understands by 'naturally' anything more than what would happen if there were no interference with individual liberty, and not necessarily what should, or ought to, happen. The sense in which he uses the terms 'natural' and 'naturally' is, however, fluctuating, and it is not free from confusing ambiguity; and his own confident belief in the beneficent government of the world by Divine Providence led him to think that, in the long run, and for the most part, that which would as a matter of fact result from the free action of the individual would be also that which ought to take place consistently with moral requirements.

More recent economists substituted the expression 'normal' for 'natural,' to avoid the associations of this particular ethical doctrine, and to emphasize the conception of economics as a science, which Adam Smith himself did not clearly distinguish from the idea of it as an art. It is only after we had gone through the difficult scientific task of working out the consequences of free competition between competitors, who were continually alive to their true permanent interests, that we could discover where that competition should in practice be modified, when we dealt with the world of actual life, with all its inequalities, and ignorance, and poverty. The science of economics, like other sciences, investigates the relations between cause and effect, and states what is the case; and the art of philanthropy or statesmanship discovers how the knowledge furnished by science should be used as a guide in practice. It has indeed been said¹ that the chief work of Adam Smith himself was, not his forcible advocacy of the practical doctrine of Free Trade, but his 'careful and scientific inquiry into the manner in which value measures human motive.'

Later economists thus brought into prominence the distinction between a science and an art, which only

¹ Cf. Marshall's *Principles of Economics*.

existed, if it existed at all, in Adam Smith's time, in a latent form, and they tended to make that clear which in his writing is liable to produce confusion in the mind of the reader, though it may not have originated in that of the writer. But most of them allowed that it was only in exceptional cases, to be justified on their individual merits, that competition should be regulated, and 'natural liberty' restricted, and they recognized the pertinent wisdom of Adam Smith's observation, that 'what is the species of domestic industry which his capital can employ, and of which the produce is likely to be of the greatest value, every individual, it is evident, can, in his local situation, judge much better than any statesman or law-giver can do for him.' Nor should we to-day be inclined to deny that the crying need of the age in which he lived was the removal of artificial obstruction.

For the persuasive enforcement of this he had peculiar qualifications. He was distinguished in boyhood by a remarkable memory, and his Glasgow lectures were rendered attractive by his fertility of illustration. We are told that he would often begin these lectures with some hesitation, as though he were not quite master of his subject, but that as he went on 'the matter seemed to crowd upon him,' and, 'by the fulness and variety of his illustrations, the subject gradually swelled in his hands.' He had, too, the great advantage of the instruction derived from foreign travel, and he had seen with his own eyes the state of affairs in France. He had, no doubt, frequently conversed with the Glasgow merchants, many of whom, then as now, must have been shrewd practical men of the world; and he was able to verify his theories by appeals to fact. From his boyhood he had felt a passion for books which resulted, we are told, in a library of some five thousand volumes;¹ and on this abundant material

¹ Cf. *A. Catalogue of the Library of Adam Smith*, edited by Dr. J. Bonar.

his excellent memory enabled him to draw with such facility that we rarely find a note or reference on the numerous pages of the *Wealth of Nations*. It is this copiousness of felicitous illustration—a copiousness which is perhaps best shown in such a chapter as that¹ on the causes of differences of wages and profits in different employments, and it is his wide acquaintance with actual fact, and his constant reference to it, which have given his work so much of its attractive and enduring interest for practical men, and have made theoretical writers dispute whether he constructed his theories from his facts or used his facts to illustrate and verify his theories.

The *Inquiry into the Nature and Causes of the Wealth of Nations* consists of a brief Introduction, in which the 'plan of the work' is explained, and five Books. Of these the first two deal mainly with those branches of the subject which would now be especially comprehended under the term 'economic theory.' In the former the 'causes' of 'improvement' in the 'productive powers of labour,' and the 'order according to which its produce is naturally distributed among the different ranks and conditions of men,' are 'the subject' of inquiry; and in the latter Adam Smith examines the 'nature of capital stock' and the 'manner in which it is gradually accumulated,' and 'employed' in putting 'different quantities of labour' 'into motion.' Translated into the economic terminology of the present day, the contents of these two books form Adam Smith's theory of the production and distribution of wealth. The third is historical, and traces the 'different progress of opulence in different nations.' The 'policy of some nations has,' he observes, 'given extraordinary encouragement to the industry of the country, that of others to the industry of towns.' These different policies, again, 'have given occasion to very different theories of

¹ Bk. i. ch. x.

political economy,' and these mistaken theories he examines in his fourth book. He investigates and exposes in detail the 'mean and malignant expedients' of that Mercantile System, which 'magnified the importance of that industry which was carried on in towns,' and he explains more briefly the 'capital error' of that agricultural system of the French Physiocrats which, 'with all its imperfections,' was 'perhaps the nearest approximation to the truth that' had 'yet been published upon the subject of Political Economy.' In his fifth and concluding book he treats of the 'revenue of the sovereign or commonwealth' as distinct from the 'revenue of the great body of the people,' which had been brought under consideration in all the preceding books.

It is in the course of this book that he states and explains those four maxims of taxation which have since been associated with his name. The maxim of *equality* enjoins that the 'subjects of every state ought to contribute towards the support of the government, as nearly as possible, in proportion to their respective abilities; that is, in proportion to the revenue which they respectively enjoy under the protection of the state.' The second maxim is that of *certainty*. 'The tax which each individual is bound to pay ought to be certain, and not arbitrary. The time of payment, the manner of payment, the quantity to be paid, ought all to be clear and plain to the contributor, and to every other person.' According to the third maxim, which is that of *convenience*, 'every tax ought to be levied at the time or in the manner in which it is most likely to be convenient for the contributor to pay it.' The fourth and last maxim may be called that of *economy*; for, according to it, 'every tax ought to be so contrived as both to take out and to keep out of the pockets of the people as little as possible, over and above what it brings into the public treasury of the state.' These maxims have been criticized in detail by subsequent writers; but they

have been generally accepted in English theory, and have been often applied to English practice.¹

In the opening sentences of his treatise Adam Smith traces the wealth of nations to its original source in labour. The 'annual labour of every nation is,' he remarks, 'the fund which originally supplies it with all the necessaries and conveniences of life which it annually consumes,' and the produce of this labour depends in the main 'on the skill, dexterity, and judgment with which' it is 'generally applied.' Thus he is led to discuss in the first chapter of Book I. the 'Division of Labour'; for the 'greater part' of this skill, dexterity, and judgment seem to 'have been the effects' of its systematic application. His treatment of the subject was described² by a critical writer as an 'unrivalled exposition,' and it has always occupied a prominent place in the history of economic science. We may therefore examine it with some minuteness as supplying a typical illustration of his method; and we shall find that it will form a convenient introduction to some of the more important and notable parts of the rest of his work.

With that appreciation of the value of actual fact which characterizes his writing throughout, he explains the nature of the division of labour 'by considering in what manner it operates in some particular manufactures'; and he selects an example, which has since become 'classical,' from the 'trade of the pin-maker.' He shows how 'one man draws out the wire, another straightens it, a third cuts it, a fourth points it, a fifth grinds it at the top for receiving the head,' how 'to make the head requires two or three distinct operations,' how 'to put it on is a peculiar business,' and 'to whiten the pins is another,' how 'it is even a trade by itself to put them into the paper,' and how 'the important business of making a pin is, in this manner, divided into about eighteen distinct operations,

¹ Cf. below, p. 294.

² Ingram's *History of Political Economy*, p. 92.

which, in some manufactories, are all performed by distinct hands, though in others the same man will sometimes perform two or three of them.' He points out the various forms of recognition which the principle of the division of labour has found in the history of man. The 'separation of different trades and employments from one another,' which is not made in a 'rude state of society,' but is 'carried furthest in those countries which enjoy the highest degree of industry and improvement,' is one method of applying the principle. Another is the division 'among a great number of hands' of the labour which is 'necessary to produce any one complete manufacture,' such, for example, as that of linen or cloth, from the 'growers of the flax' in the one case to the 'bleachers and smoothers of the linen,' and in the other from the growers of the wool to the 'dyers and dressers of the cloth.' In fact, he observes, 'without the assistance and *co-operation*¹ of many thousands, the very meanest person in a civilized country could not be provided, even according to, what we very falsely imagine, the easy and simple manner in which he is commonly accommodated.'

Later economic inquiry has not added much to Adam Smith's description. A connexion and distinction have indeed been established, which he did not render explicit; and economists have used the term '*simple co-operation*' to denote what happens when several persons help each other in the same occupation, working together 'at the same time, in the same place, and in the same way,' as, for instance, in the felling of trees, or the rowing of boats, and '*complex co-operation*' to express what happens when several persons help each other in different occupations. It is this latter form of 'co-operation' which is more especially known as division of labour; and it has been carried to a further point in the modern system of industry than that which it had reached in Adam Smith's day.

¹ The italics are my own; cf. below, p. 198.

The organization, for instance, prevailing within a single factory is more complete than it could be under a domestic system of industry. From the employer down to the errand-boy the principle of the division of labour is systematically applied. The separation, again, of trades and occupations is pushed further, and one branch of a trade is now as distinct from another as the trades themselves were in former times. These different trades, once more, tend to settle in distinct localities, and the mutual dependence of individuals, and districts, on one another, and their mutual 'assistance and co-operation,' become continually greater.

But, notwithstanding these changes and developments, Adam Smith's account of the advantages of the principle remains substantially true; and, subject to some additions, it may still be considered adequate. These advantages are three in number. The first is the 'increase of dexterity in every particular workman.' 'The division of labour,' he observes, 'by reducing every man's business to some one simple operation, and by making this operation the sole employment of his life, necessarily increases very much the dexterity of the workman.' He had, he states, seen a small pin manufactory, where ten men only, and not the full number of eighteen, were employed. And yet, 'very poor' though they were, and 'indifferently' as they were 'accommodated with the necessary machinery,' they could, by applying the principle of the division of labour, make 'about twelve pounds,' or upwards of forty-eight thousand pins, in a day. Each of them, therefore, might be said to have made upwards of four thousand eight hundred; but, had they 'all wrought separately and independently,' 'they certainly could not each of them have made twenty, perhaps not one, pin in a day.'

This advantage of the division of labour has been curiously confirmed by later investigation.¹ Use, it is

¹ Cf. Marshall's *Principles of Economics*, bk. iv. ch. ix.

sometimes said, is 'second nature'; and physiologists state that, when an act has to be done for the first time, the 'sensory' or feeling nerves of the eye and the hand 'send up messages' to the brain, to inform it of the position of affairs. The brain sets to work, and sends down instructions by the 'efferent' nerves of the hand. But, when the act has been repeatedly done, an automatic connexion springs up between the 'sensory' and the 'efferent' nerves, and the act is performed without the brain being consciously called into operation at all. 'Use is second nature,' and the brain may either employ itself on other matters, or rest quiet, ready to come forth in its full vigour when the work of the day is over. In a sense it is even possible to do two things at the same time.

The division of labour, then, *increases* the skill of the workman. But it also—and this point, unnoticed by Adam Smith, was brought into prominence by CHARLES BABBAGE¹—effects a *saving* of skill. If the whole of the operations required in the production of an article of manufacture had to be executed by a single individual, he 'must possess sufficient skill to perform the most difficult, and sufficient strength to execute the most laborious, of the operations into which the work is divided.' But, by applying the principle of the division of labour, each different kind of skill and strength can be continuously and exclusively employed on the highest kind of work for which it is fitted.

It is true that this exclusive devotion of a man to some special occupation may entail certain disadvantages, and Adam Smith was not careful to notice these; for they had scarcely come into prominence at the time when he wrote. The division, and subdivision, of labour may possibly render it harder for a man to obtain employment at other work, should his own fail; for he cannot turn specialized skill to general account. But, on the other hand, they

¹ Babbage wrote a book, published in 1832, *On the Economy of Machinery and Manufactures*. Cf. sec. 168.

may enable him to pass with greater ease from one of the many branches into which a trade is now subdivided to the kindred branches in another trade than he could in times past have gone from trade to trade. It has been stated, as a matter of fact, that, at the close of the American Civil War, a rifle factory was transformed into a factory for the production of sewing machines.¹

Again it has been alleged—and Adam Smith notices this objection in another part of his book—that the division of labour renders a man's work monotonous. But he also states that if, in civilized times, an individual's occupation be monotonous, there is 'an almost infinite variety in the occupations of the whole society.' If, indeed, a man's work be purely muscular, monotony seems unquestionably to be a serious evil; but if the work is comparatively light and intellectual, the evil is by no means so great. And the division of labour does undoubtedly tend to diminish the amount of work which is merely muscular, for it permits of the more advantageous substitution of machinery.

Adam Smith declares that 'the invention of all those machines, by which labour is so much facilitated and abridged, seems to have been originally owing to the division of labour.' The constant observation and practice of one peculiar kind of labour would, he thought, lead men to 'discover easier and readier methods of attaining' their object. 'In the first fire-engines, a boy was constantly employed to open and shut alternately the communication between the boiler and the cylinder, according as the piston either ascended or descended. One of those boys, who loved to play with his companions, observed that, by tying a string from the handle of the valve which

¹ Cf. Marshall's *Economics of Industry*, bk. iv. ch. ix. Marshall also points out in his *Principles of Economics* that the use of machinery tends to increase the demand for the *general* qualities of judgment and intelligence. The war (1914-18) has given fresh examples.

opened this communication to another part of the machine, the valve would open and shut without his assistance, and leave him at liberty to divert himself with his play-fellows.' From this simple device 'one of the greatest improvements' in the machine resulted; and, in some such way as this, we may believe that many inventions have been effected, which, considered individually, may seem but trifling, and yet, taken together, may amount to a transformation of a machine. 'Many improvements' have also, it is true, been 'made by the ingenuity of the makers of the machines'; and 'some,' Adam Smith observes, 'by that of those who are called philosophers, or men of speculation, whose trade it is not to do anything, but to observe everything.' But in both these cases, as in that which was mentioned before, the result may be ascribed to the division of labour; for, in accordance with that application of the principle which is found in the separation of employments, to make machines becomes the 'business of a peculiar trade,' and similarly, 'in the progress of society, philosophy or speculation becomes, like every other employment, the principal or sole trade and occupation of a limited class of citizens.'

The introduction of improved machinery may be ascribed to the division of labour on another ground. Adam Smith enumerates as one of the advantages of the principle the 'saving' of the 'time which is commonly lost' 'in passing from one sort of work to another.' 'It is,' he observes, 'impossible to pass very quickly from one kind of work to another, that is carried on in a different place, and with quite different tools'; and even 'when the two trades can be carried on in the same workhouse,' the loss of time, though 'no doubt much less,' is 'very considerable,' for a 'man commonly saunters a little in turning his hand from one sort of employment to another.' Later writers have indeed shown that there are considerations to be urged on the other side. 'A change of occupation,'

Mill argued, 'will often afford relief,' and the 'habit of passing rapidly from one occupation to another may be acquired.' But on the whole we may say that here, as on other points, the subsequent course of economic inquiry has tended to confirm and to amplify Adam Smith's observations.

To the saving of time, which may be lost in passing from one occupation to another, we have now to add the saving of time spent in learning a trade, when a knowledge of a single branch only, instead of the whole, is acquired. This may, perhaps, seem a doubtful advantage, but there can be no doubt about that implied in the saving of time spent in spreading the knowledge of inventions and improvements, when industries are localized in particular districts. Nor can there, again, be any question that the division of labour conduces to a saving of time, which would be lost if a machine were to stand idle; and that the introduction and use of machinery are to a very large degree dependent on the extension of the principle. They are so, because it is only in the performance of uniform operations, which are frequently repeated, that machinery is advantageous, as each special machine can execute only special work. They are so, again, because the use of machinery depends, like the division of labour, on the extent of the market.¹

The division of labour, as Adam Smith saw, implied certain conditions. It implied freedom of labour and freedom of exchange. A man must be able, without the vexatious hindrance of a law of settlement, of a statute or custom of apprenticeship, or of the 'exclusive privileges of corporations, to engage in the work for which he was

¹ Senior points out (*Political Economy*, p. 74) the saving which results from the fact 'that the same exertions which are necessary to produce a single given result are often sufficient to produce many hundred or many thousand similar results'; and he quotes the 'forwarding of letters' through the Post Office as an illustration.

best fitted ; and he must also be able to procure from other men the goods he might require by the free exchange of the goods he had produced, if he were not to starve for want of the necessaries of life. The further this freedom of exchange was extended, the more likely it was that there would be a sufficient demand for the goods produced by the labour of each individual to render his exclusive devotion to his special occupation both advantageous and safe. The division of labour, therefore, was 'limited by the extent of the market.' 'In the lone houses and very small villages' of the Highlands of Scotland 'every farmer must,' Adam Smith observes, 'be butcher, baker, and brewer for his own family' ; and the history of trade shows that 'it is upon the seacoast, and along the banks of navigable rivers,' which in early times afford ampler and better means of communication than are provided by land, 'that industry of every kind naturally begins to subdivide and improve itself.'

These considerations led him to examine the mechanism of markets, and the different methods of exchange practised in primitive and more advanced states of society. In early times the only method was that of direct barter, or exchange of goods for goods ; but, as the division of labour extended, and men no longer themselves consumed all that they produced, or themselves produced all that they consumed, a system of direct barter must, he remarks, 'frequently have been very much clogged and embarrassed in its operations.'

In the first place, there was the great inconvenience of a 'want of coincidence,' to use the technical language of later economic manuals. 'The butcher,' for example, Adam Smith writes, 'has more meat in his shop than he can himself consume, and the brewer and the baker would each of them be willing to purchase a part of it ; but they have nothing to offer in exchange, except the different productions of their respective trades, and the butcher

is already provided with all the bread and beer which he has immediate occasion for. No exchange can, in this case, be made between them. He cannot be their merchant, nor they his customers.' To 'avoid,' therefore, the 'inconveniency of such situations, every prudent man, in every period of society, after the first establishment of the division of labour, must naturally have endeavoured to manage his affairs in such a manner as to have at all times by him, besides the peculiar produce of his own industry, a certain quantity of some one commodity or other, such as he imagined few people would be likely to refuse in exchange for the produce of their industry.'

'Many different commodities,' he proceeds to remark, have at different times been employed for this purpose, in the 'rude ages' cattle 'are said to have been the common instrument of commerce,' though, he adds, 'they must have been a most inconvenient one.' In his own days salt was said to be thus used in Abyssinia; 'a species of shells in some parts of the coast of India; dried cod in Newfoundland; tobacco in Virginia; sugar in some of our West India colonies; hides or dressed leather in some other countries.' But 'in all countries' 'men seem at last to have been determined by irresistible reasons to give the preference' to 'metals.' They are not only more durable than most other commodities, but they also admit more easily of division into 'any number of parts'; and this, 'more than any other quality, renders them fit to be the instruments of commerce' and exchange. Different metals have been thus employed in different countries—iron in Sparta, copper among the ancient Romans, and 'gold and silver among all rich and commercial nations,' for the important reason that, owing to their 'utility, beauty, and scarcity,' they contain a great amount of value in a small bulk. Originally, however, the metals seem to have been used in the shape of 'rude bars, without any stamp or coinage'; but afterwards a 'public stamp' was

affixed, to attest, in the first instance, the 'goodness or fineness,' and, in the next place, the weight, of the metal contained in the coin.

Such is a brief outline of the account given by him of the 'origin and use of money,' and in this way he shows how it has become 'in all civilized nations the universal instrument of commerce, by the intervention of which goods of all kinds are bought and sold, or exchanged for one another.' It is, to use again the technical language of economic manuals, a 'medium of exchange.'

But in these manuals we find a second function assigned. This he deems a consequence of the first, meeting a second inconvenience of the system of barter. 'When barter ceases,' Adam Smith writes, 'and money has become the common instrument of commerce, every particular commodity is more frequently exchanged for money than for any other commodity.' And 'hence it comes to pass, that the exchangeable value of every commodity is more frequently estimated by the quantity of money than by the quantity either of labour or of any other commodity which can be had in exchange for it.' Money is thus 'a measure of value' as well as a 'medium of exchange'; and its use limits the inconvenience, which is incident to a system of barter, of 'determining at what rate an exchange shall be effected.'

In both these important respects the employment of money greatly facilitates the exchange of commodities, and Adam Smith was careful to show this. But he was no less careful to point out the real nature of the work performed, and his fame rests in an especial degree on his exposure of the fallacies to which erroneous opinion on the subject had led. He saw that money was a very convenient 'instrument of commerce,' and that wealth was generally measured by it. 'We say of a rich man,' he remarks, 'that he is worth a great deal, and of a poor man that he is worth very little money.' But he did not on

that account fall into what he regarded as the mischievous errors of the Mercantile System; and his strenuous vindication of Free Trade may be said to be based on the one hand on the conclusions he had drawn from the consideration of the division of labour, and, on the other, on the conception he had formed of the functions of money.

The difference between a system of exchanging by means of direct barter, and by means of money, was nothing more than this. Under the first system goods were exchanged directly for goods; the second implied the 'intervention of another commodity,' and goods were first exchanged for money, and then money for goods. The convenience of the transaction was immensely increased; for every one would be willing to take money for goods, knowing that he could always obtain goods for money, and it was far easier for him to make the necessary calculations, when he could compare the prices of different commodities, instead of comparing on each occasion the different commodities themselves with one another. But the essence of the matter was unaltered. It was still an exchange of commodities for commodities. Many different commodities had in times past been used for the purpose which the metals now discharged, and gold and silver were themselves commodities. They varied in their 'value,' they were 'sometimes cheaper and sometimes dearer,' 'sometimes of easier and sometimes of more difficult purchase,' and they shared, in common with other commodities, a 'natural tendency' to 'fly from the worse to the better market.'

In some respects they might even be considered inferior to other commodities. 'The gold and silver money in a country,' he observed in a striking image, 'may be very properly compared to a highway which, while it circulates and carries to market all the grass and corn of the country, produces itself not a single pile of either.' It was, he

remarked, useful as a 'great but expensive instrument of commerce,' but, while it was thus employed, it could not be put to other uses, and it was only by parting with it that men could obtain the real means of livelihood. 'The sole use of money is to circulate consumable goods.' 'Money necessarily runs after goods, but goods do not always or necessarily run after money. The man who buys, does not always mean to sell again, but frequently to use or to consume; whereas he who sells, always means to buy again. The one may frequently have done the whole, but the other can never have done more than the one-half of his business. It is not for its own sake that men desire money, but for the sake of what they can purchase with it.' 'The great wheel of circulation is altogether different from the goods which are circulated by means of it.'

Adam Smith's vindication of Free Trade rests on this conception of the functions of money, combined, as we remarked before, with his belief in the advantages of the division of labour. Through all the many chapters of his fourth book, in which with unwearying persistence he traces to their origin the varieties of fallacious reasoning used to support the 'mean and malignant expedients' of the Mercantile System, the argument may be said to be based on this dual foundation. He has been reproached by later writers for his 'cosmopolitan' attitude; and there can be no question that he held firmly the belief, and that he was instant in pressing it, that the advantages of the division of labour did not cease to be real when nations took the place of individuals as the figures in the industrial world, and that the fact that money was no more and no less than a convenient instrument of commerce, was not less but perhaps even more true an account of the matter, when the exchanging parties belonged, not to the same, but to different nations. 'Were all nations,' he writes, 'to follow the liberal system of free exportation and free

importation, the different states into which a great continent was divided would so far resemble the different provinces of a great empire.'

The advantages of the division of labour, then, did not, in his opinion, cease with the geographical boundaries of a nation. Nations, like individuals, possessed different advantages, whether natural or acquired, whether derived from circumstances of situation, or soil, or climate, or based upon long practice or inherited aptitude, which fitted them to produce particular commodities. The division of labour between individual workmen, and trades, and districts, resulted in an increase of skill, and a saving of time ; and similar results would follow the division of labour between nations. Both parties would benefit by the free exchange of the commodities which they were respectively better fitted to produce.

The argument for Free Trade may be said still to rest in part on a similar foundation to that on which Adam Smith may be held to have thus implicitly, if not explicitly, based his pleading. It might indeed be urged that the analogy between nations and individuals was open to improvement and correction. It might be argued, and Adam Smith himself, it would seem, recognized some force in the argument, that, so far as long practice or inherited aptitude was the source of advantage, a policy which protected struggling industries might enable a young country to attain more surely the free independence of industrial maturity, were the protection given removed at the proper moment. And, on the other hand, it might be contended that the possible drawbacks, which may attend the division of labour between individuals, did not attach, at any rate in the same manner or degree, to that between nations. The mere fact of distance affords a kind of 'natural protection' to the home producers of commodities which do not admit of easy and cheap transportation from foreign countries ; and a nation can hardly be one-sided,

or its work monotonous, in the same way as an individual can.

But, whatever conclusion we may now form on the merits of this part of Adam Smith's argument, which he may be said to have himself urged implicitly rather than explicitly,¹ there can be no question of the pertinency of the other part to the controversies of our own time. The fact that trade is essentially an exchange of goods for goods cannot, when once it is grasped, be seriously questioned; and the conclusion which Adam Smith drew is inevitable, that a nation must pay for its imports by its exports. The method of payment might, he admitted, be obscure and indirect, and the time of payment might be postponed. But in the long run the goods which a nation imported from foreign countries must be given and taken in exchange for the goods which it exported. Part of those exports, as part of those imports, might, it was true, take the form of money or bullion; but, if a nation were like Great Britain, and did not itself produce the precious metals in any appreciable degree, it must have procured this money by the previous export of other goods, and, in any event, the movement of bullion was small compared with the transport of goods, and did not take place whenever it could be conveniently avoided. A merchant 'naturally' 'exerts his invention to find out a way of paying his foreign debts rather by the exportation of commodities than by that of gold and silver.'

The Mercantile System, which Adam Smith assailed as representative of the erroneous views which were then current on money and foreign trade, has, it is true, been somewhat misrepresented; and this misrepresentation is partly due to his unsparing onslaught. Later inquiry has

¹ Colonel Torrens (1780-1864), who wrote several essays and pamphlets on economic subjects, described international commerce as the 'territorial division of labour.'

shown that the system possessed more justification in the circumstances amongst which it originated, and that it was held in a more extravagant form by some of its irresponsible supporters than its authors¹ would have sanctioned.

'Some' of the arguments advanced by its advocates were, Adam Smith himself admits, 'partly solid,' though they were also 'partly sophistical.' Those advocates, for example, did not approve of positive restrictions on the export of gold and silver: they turned their attention rather to 'balance of trade.' Nor did the Mercantilists aim at the amassing of treasure alone, as Adam Smith's language might suggest. They wanted to build up a strong navy, and therefore encouraged a mercantile marine, and were anxious to stimulate and 'safeguard' shipping. As we saw, they obtained here his sympathy and active support. They wished, too, to secure a numerous and healthy population, and therefore they favoured agriculture, and especially tillage, as that provided more employment for labour. Their general object was the growth of the power of their country; and in the best days of their regime they fulfilled that governing design. Henry VII, first of the Tudor rulers, 'bowed,' it was pithily said, 'the policy of the realm from consideration of plenty to consideration of power.' 'Defence,' Adam Smith acknowledged, was of 'much more importance than opulence.'

But they and he differed on the most likely means of getting 'plenty' or 'opulence'; and, by his day, the Mercantile System, no longer in its prime, was tending towards breakdown. It does appear throughout to have encouraged the notion that money was the main form of wealth, and that national riches consisted in the abundance of gold and silver; and it certainly countenanced the

¹ Such as Thomas Mun and Sir Josiah Child, who wrote in the seventeenth century.

idea that a nation was not really prospering unless there was on the whole 'balance of trade' a greater flow of the precious metals into than out of it, that to secure this 'favourable' balance the exports of goods must be larger than the imports, and that therefore the former must be encouraged by bounties, and the latter discouraged by duties, though these must not be imposed on the raw materials needed in manufactures.

Adam Smith met these arguments by an appeal to the true functions of money, and the real nature of exchange. Money was a commodity, which, like every other commodity, would go where it was chiefly wanted, and all encouragement of its importation was as unnecessary as restrictions on its exportation would in the long run be futile. 'A country that has wherewithal to buy gold and silver will never be in want of those metals,' and, 'on account of' their 'small bulk and great value,' 'no commodities can be more easily transported from one place to another.' The Mercantile System really defeated its own object; for, were a 'favourable' balance of trade secured for the time, and the exports rendered larger than the imports, the influx of bullion would tend to decrease its value, and to raise the prices of goods. This would tend to bring goods from abroad rather than money, to fetch the high prices, and to send money abroad rather than goods to the places where it was comparatively scarce, and therefore more valuable. Nor was money the most desirable form of wealth. 'It would be too ridiculous to go about seriously to prove that wealth does not consist in money, or in gold or silver, but in what money purchases, and is valuable only for purchasing.' 'Gold and silver, whether in the shape of coin or of plate, are utensils, it must be remembered, as much as the furniture of the kitchen,' and 'to attempt to increase the wealth of any country, either by introducing or by detaining in it an unnecessary quantity of gold and silver, is as absurd as it

would be to attempt to increase the good cheer of private families by obliging them to keep an unnecessary number of kitchen utensils.'

On these points such reasoning is almost as pertinent as it was when it was first advanced. Protectionist arguments of the present day are sometimes tainted with the erroneous conception of money and trade which infected the Mercantile System, though they may hide the taint more successfully. There is similar reluctance to admit that trade is essentially an exchange of goods for goods, that buying implies selling, that, if money be used, the man who sells goods for money really buys money with goods, and the man who buys goods with money really sells money for goods, that a nation must in the long run pay for its imports with its exports, that money forms, as a rule, an 'insignificant' part of these, and flows 'naturally' where it is wanted, and that a country which does not produce the precious metals must have procured them by the previous export of other commodities.

The facts are now, it is true, more obscure and complicated; and they need therefore more careful, close interpretation. England, for example, has a vast carrying trade,¹ and her shipping industry really constitutes a valuable export of capital and labour. But it does not appear among ordinary exports, and yet a return for it must be made in the imports. And, again, England has made, and may withdraw, advances of capital to foreign countries. This capital swelled the exports when it went out, and the interest paid for it year by year will swell imports. And, once more, the progress of manufacturing industry, the improvement of means of transport, and the development of financial organization, have contributed to bring England into commercial relations with all quarters of the world; and it may be

¹ Cf. below, p. 248.

the case that, as in Adam Smith's time, she pays for the imports from one country by her exports to another, or there may now be many more links in the chain of connexion. Such circumstances as these tend to obscure the facts; but they do not affect the substantial validity of Adam Smith's arguments, or the pertinency of application to the controversies of the present day.

Nevertheless the truism, for such it is, that imports are paid for by exports, while it should correct vulgar error, countenanced in more informed quarters, does not carry the merits and demerits of different fiscal policies beyond the start of controversy. It can properly be treated as, so to say, the 'ABC' of a vexed debate.

For those who do not rest content with what might be considered, by comparison, superficial 'functional' comfort and probe deeper, like conscientious physicians, into 'organic' healthiness or the reverse, press such comments as these. Dealings in international trade, they urge, comprise in actual fact securities and all sorts of services as well as raw materials and manufactured articles of every kind. Their export or import may, according to varying circumstance, bring benefit or harm in the present or the future to one or other of the countries. The point needs further investigation. For on the face of it the withdrawal of investment is no good omen; and imported raw material would seem likely to be beneficial and necessary while imported manufactures are of less indubitable advantage. These advisers, in their more searching diagnosis, bring out the significant fact that equivalence, and not, as is sometimes carelessly assumed, equality of exchange must be contemplated as achieved, and as consciously or unconsciously sought, by international dealing. Thus a door is opened for more or less favourable bargaining, and it cannot safely be taken for granted that a transaction is *ipso facto* satisfactory and unimpeachable. Finally they suggest that conceivably immediate trading advantages

or gain to the world regarded as a whole, may clash with, or diverge from, more permanent, or overruling, national interests. It is the former two and not the last for which Free Trade ensures or promises trustworthy guarantee.

Nor, it must also be remembered, is a policy or practice of free imports, whatever be urged for or against it, identical with, or tantamount to, general or universal freedom of trade. This, it should be borne in mind, was Adam Smith's cherished conception and high ideal, and reasoning applicable to it does not necessarily extend to anything less. Were it realized, the interests of one or more of the participants might, we have just hinted, be sacrificed through subordination to the common weal. They might have some grievance, or they might not feel content with the division of work and the distribution of its outcome. In any case, whatever were thought about the larger issue, while Cobden and Peel in their day and generation honestly held and boldly preached that England could successfully fight the hostile tariffs of foreign countries with the advantages she could then get by the fiscal plan of free imports, these critics contend that circumstances have since so changed as to invalidate former argument or to make it irrelevant to present conditions.¹

¹ Cf. below, p. 212 etc.

CHAPTER II

THOMAS ROBERT MALTHUS. 1766-1834

THE PRINCIPLE OF POPULATION

Malthus' Life—Origin of his *Essay*—Changes in the Second Edition—His General Economic Opinions—The Distress of the Times—The Poor Law—The Circumstances of English Agriculture—Argument of the *Essay*—The Increase of Food—And of Men—The Three Propositions—The Checks to Population, Positive and Preventive: Vice, Misery, and Moral Restraint—The Character of Malthus' Work—Relation of the *Essay* to Present Facts—The Law of Diminishing Returns—Subsequent Changes—Malthus' own Position contrasted with that of Recent Writers—The Checks to Population—Malthus' Account of Moral Restraint—Bagehot's Criticism—Malthus' own Position—Elasticity of the Standard of Comfort—Physiological Considerations—The Optimum Theory of Population—Present Questions—The Problem of 'Over-Population'

MALTHUS, who occupies the second place in historical order among English economists, has been described as the 'best-abused man of the age.' He has certainly suffered, more than most men, from the misrepresentations of enemies and friends; and both alike have often been content to suppose rather than ascertain what he himself said. The controversy which raged during his life has not since been closed; and now, as then, it is conducted with little reference to the language of the author whose views furnish the ostensible subject of dispute. And yet the consultation of Malthus' own writings would in many instances convict a supporter of exaggeration and a critic of misunderstanding, while a due regard to the circumstances of his life, and the conditions under which his views were formed and expressed, might impose a salutary check

on their indiscriminate adoption, at the same time as it prevented their wholesale condemnation.

Like Adam Smith, he was a product of his age and surroundings. His father, Daniel Malthus, was a friend, correspondent, and executor of Rousseau, and shared the French writer's belief in the perfectibility of man in a reformed state of society. He conducted the education of his sons on somewhat the same lines as those laid down in Rousseau's *Emile*, and he attempted to give free scope for the independent development of character. But we may believe that he also familiarized his children with the ideas which he had himself embraced, and that the future economist was bred in an atmosphere charged with visionary enthusiasm and fanciful hope. After an education, which was somewhat desultory, and was apparently imparted in his father's house until he reached the age of nine or ten, when he was sent, first to a small private school at Bath, and then to a larger one at Warrington kept by a clergyman who was, like his father, imbued with the educational theories of Rousseau, he proceeded to Jesus College, Cambridge, graduated as ninth wrangler in 1788, and in 1797 obtained a Fellowship. He then stayed for some time at his father's house at Albury in Surrey, and they discussed together the questions of the day.

But they approached the discussion from different standpoints, for Malthus had by this time shaken off the influence of his early training, and felt a decided reaction against it. He now assailed those French revolutionary doctrines which his father continued to advocate; and, in particular, he directed his assault against the new form of presentation into which they had been thrown that very year in William Godwin's *Enquirer*. The discussion led to the expression of his thoughts upon paper, and this to the publication in 1798 of an anonymous *Essay on the Principle of Population as it affects the Future Improvement of Society*.

This was the origin of his famous essay. It was, as a critic has observed,¹ 'an anonymous pamphlet in a political controversy'; and it had the faults of a controversial pamphlet. 'Its main fault,' as the same critic has said, 'was not incompleteness but wrongness of emphasis.' As Malthus himself remarked at a later time, 'having found the bow bent too much one way,' he was perhaps 'induced to bend it too much the other in order to make it straight.' And so the second edition of the essay, which was published in 1803, differed considerably from the first. He states in the preface that he had 'endeavoured to soften some of the harshest conclusions of the first essay,' and that 'in its present shape it may be considered as a new work.' In the interval he had travelled abroad. In 1799 he had visited Germany, Sweden, Norway, Finland, and Russia, and on his return he had written a pamphlet on the *High Price of Provisions*, in which he had spoken of a second edition of his essay. But, before he fulfilled his promise, he had seized the opportunity, which was afforded by the temporary interruption of war consequent on the Peace of Amiens, to visit France and Switzerland; and the second edition of the essay comprised a great mass of detailed evidence, much of which had been obtained, or at any rate tested, by his own personal observation and inquiry. The title was altered, and it now ran: *An Essay on the Principle of Population, or a View of its Past and Present Effects on Human Happiness*. Before it had been mainly controversial, and intended to refute those visions of a future state of ideal perfection which had been entertained by writers like Godwin in England, and Condorcet in France, who either did not notice at all the principle of population, or else treated it 'very lightly,' and represented the 'difficulties arising from it as at a great and almost immeasurable distance.' Now it was chiefly statistical, and consisted for the most part of a review

¹ Dr. Bonar in his *Malthus and his Work*, p. 5.

of the history of the past and the conditions of the present.

From this time onwards Malthus devoted his studies and energies especially to the repeated examination and amended expression of what he held to be the truth on the question of population, and, in a subordinate degree, to the investigation of the other branches of political economy. He issued six editions of the essay during his life, and he was continually making additions and corrections. The general result of these changes is that his attitude on the whole matter is far from being so extreme as his supporters and opponents have often imagined; and here, as in his other contributions to economic inquiry, he inclines to a middle view. He opposed the abstract reasoning on economic subjects of his contemporary Ricardo; and that economist states, in one of his letters¹ to Malthus, that, if he himself was 'too theoretical' (which he 'really' believed 'was the case'), Malthus, on the other hand, was, he thought, 'too practical.' Hence it was that in his writings on general economics Malthus appears to have anticipated many of the charges, which were brought later by adherents of the 'historical' against the 'abstract deductive' method of inquiry;² and that his 'unorthodox' views on some points, such as the advisability of a moderate amount of protection and the danger of a general glut of goods, indicate at once his steady resolve to allow weight to practical exigencies, and his inclination to adopt the view which seemed the more moderate and humane.

His general economic writings consist of the tract on *The High Price of Provisions*, which was published in 1800, his *Observations on the Corn Laws*, which were published in 1814, his *Grounds of an Opinion on the Policy of Restricting Importation*, of the following year, his *Nature and Progress of*

¹ Cf. also Ricardo's *Notes on Malthus' Principles of Political Economy*, edited by J. H. Hollander and T. E. Gregory.

² See Chapter V. below.

Rent, of the same date, his *Principles of Political Economy*, published in 1820, his *Measure of Value*, published in 1823, and his *Definitions in Political Economy*, published in 1827. But it is not by these writings, but by his *Essay on Population*, that he is now remembered ; and it was that which originally made him famous. In 1805 he was appointed Professor of History and Political Economy in the East India College at Haileybury, and he continued to hold this post until his death. In 1819 he was elected a Fellow of the Royal Society, in 1821 he joined in founding the London Political Economy Club, and, in 1834, the London Statistical Society. At the end of this year he died suddenly of disease of the heart ; and he is buried in Bath Abbey, where his epitaph states that he was ‘ one of the best men and truest philosophers of any age or country, raised by native dignity of mind above the misrepresentations of the ignorant and the neglect of the great.’ This description seems to be something more than the natural, but exaggerated, eulogy of mourning relatives and friends ; for Mackintosh, who was his colleague at Haileybury, is reported to have said : ‘ I have known Adam Smith slightly, Ricardo well, Malthus intimately. Is it not something to say for a science that its three great masters were about the three best men I ever knew ? ’

The character of the *Essay on Population* was, as we have seen, partly due to the immediate personal surroundings of the author. Malthus was brought up in the midst of what he thought were delusions, and he made a vigorous attempt to disprove them by showing that there was a ‘ cause intimately united with the very nature of man,’ the effects of which would be fatal to the continuance of a society based, as Godwin had urged, on equality. But the conditions of the times in which he lived also exercised an influence on his writings. His father’s dreams of the universal prevalence of happiness in an ideal society had been originally formed before the French Revolution, and

his life closed with the century. But Malthus himself wrote at a time when the practical illustration of revolutionary ideas furnished in France was filling men's minds with consternation and abhorrence. In England the political outlook was gloomy, and the economic position distressing. The reaction caused by the cruel and violent excesses of the French Revolution combined with the absorbing interest of the War to arrest the progress of legislative reform, and the oppressive burden of taxation entailed by military expenditure was increased by the sufferings attendant on a succession of bad harvests. The average earning received by the labourer was as much below what it became as the prices of the ordinary and necessary articles of his consumption were above their later level. The financial ways and means of the war were provided, in a very considerable degree, by England alone ; and it is estimated that the yearly interest on the debt which was, to a large extent, incurred in consequence, amounted in the end to as much as a tenth of the income of the nation, and the total taxes to a fifth. The bad harvests sent up the price of wheat to very high figures, and on one occasion, in 1801, to a hundred and fifty shillings a quarter. Starvation was not merely threatened, but occurred ; and it was accompanied, or preceded, by disease. In 1795, three years before the publication of Malthus' essay, the Government had recourse to Coercion Acts to restrain the distressed 'lower orders' from rising, and a mob crying out for 'bread' stopped the king's carriage in the streets.

The distress was real and urgent ; but one remedy which was proposed was calculated to effect a temporary and delusive amelioration at the cost of permanent and increasing mischief. The Poor Law was to be modified in the direction of greater laxity, though the lax administration of that law was already producing evil results. It tended to benefit the idle at the expense of the industrious

by the indiscriminate manner in which relief was given. The evils thus occasioned by the administration of the law reached their climax before its reform in 1834; but the whole period extending from about 1780 to that date was a period of increasing laxity and mischief. By its close the growth of the rates had become nothing less than appalling. The independence of the labourer had sustained serious and abiding injury. Farmers were compelled to dismiss the thrifty and industrious to make room for the lazy and thriftless, whom the parish forced them to employ; and they were enabled to reduce the wages which they paid directly, and to supply the deficiencies by parish 'allowances' from the pockets of the ratepayers. The Royal Commission, which was appointed to inquire into the working of the unreformed Poor Law, found that in one place the weekly wages of a pauper were higher than those of independent labourers; in another that women complained of the refusal of their husbands to improve their position by seeking the status of paupers; and in a third that the owners of the land offered the whole of it to the assembled paupers for the simple reason that the rates exceeded the rents. It was mainly in the south of England that this indiscriminate method of relief was carried to excess, and it was there that the recovery from its mischievous consequences was the most difficult and gradual.

The administration of the Poor Law had undergone some relaxation a little while before Malthus wrote, for in 1782 Gilbert's Act had abolished the workhouse test of destitution, and prohibited the guardians from sending to the workhouse any but the 'impotent,' and in 1795 the demoralizing system of 'allowances' in aid of wages had been introduced at a meeting of Berkshire magistrates at Speenhamland.

This relaxation of the old stringency had apparently begun to produce some of those effects which by 1834 had

attained their climax. The first half of the century had been marked by a rise in wages, and by scarcely any increase in population. The domestic system of industry had combined with the unwillingness of landlords to build cottages on their estates, for fear that the occupants might establish a 'settlement,' and eventually become chargeable upon the rates, to postpone the age at which a man would leave his father or master, and take a wife to keep house for himself. But the middle of the century had coincided with the commencement of a series of important inventions, which produced a 'revolution' in the character and methods of industry. Adam Smith had lived on the eve of that revolution; or at any rate he had seen little more than the first faint streaks of light which indicate the approach of day. But Malthus saw its development. Trade began to leave the small domestic establishments of the country villages, and to pass to the large new factories of the growing towns. Many fresh openings of gaining a living appeared, and men hastened the time of their marriage, and were more disposed to trust to fortune to provide the means of livelihood. The war with France gave an added intensity to the demand for men which the new factories had started, and the policy of the landlords and the ruling classes was reversed. The interests of the nation, and the duty of the individual, were held to lie in the encouragement of population, and the erection of cottages proceeded side by side with growing laxity in the administration of the Poor Law. The more children a man had, the greater was considered to be his claim to parish allowance, and relief was to be made 'a matter of right and honour, instead of a ground for opprobrium and contempt.'

But there was not too much food for the new mouths which were to be brought into existence. Bread was growing dearer, apart, it seemed, from poor harvests, and wheat was being raised from land which yielded no more

than eight bushels to the acre. Nor could it then be freely imported from abroad owing to the restrictions of the Corn Laws; and the opinion of Adam Smith that the restoration of the entire freedom of trade in Great Britain was as visionary as the realization of an Utopia did not as yet appear likely to be proved mistaken. Malthus himself declared that a 'perfect freedom of trade' was 'a vision which it' was 'to be feared' could 'never be realized.'

Whatever hopes might, then, be formed by imaginative enthusiasts of the happiness of the future, it was impossible to ignore the actual misery of the present; and, so far as the views of Malthus are extravagant or erroneous, the error and extravagance may be largely ascribed to the liability, from which few men are free, to generalize unduly from the circumstances of his own times. The niggardliness of nature and the fecundity of man were two most obvious facts of the times; and it is little wonder that, in his eagerness to controvert the Utopian position of Godwin, Malthus should give exaggerated expression to those facts.

In his statement of the first he at any rate suggests an important economic notion. He must have noticed that in England cultivation was advancing from the richer land to the poorer land, which only yielded eight bushels an acre; and he would conclude that this was due to the fact that, while the demand for food required an increased production, farmers found that the richer land did not continue to yield the same or increased returns to each successive application of capital and labour to its cultivation, and that, if more food were wanted, it must be obtained with greater expenditure of capital and labour from the richer land, or they must turn to the poorer land. The law of *diminishing returns*, to use the technical language of economic science, was in operation, and the bounty of nature was limited. Malthus did not state this law in any very exact form, and his grasp of it has been impugned,

but he seems to have possessed some conception of its working. He says that, 'when acre has been added to acre till all the fertile land is occupied, the yearly increase of food must depend upon the melioration of the land already in possession. This is a fund which, from the nature of all soils, instead of increasing, must be gradually diminishing.'¹

From the consideration of the rule determining the increase of food he turned to look at the growth in the numbers of man. He examined the 'effects of one great cause intimately united with the very nature of man,' which had 'been constantly and powerfully operating since the commencement of society.' This was the 'constant tendency in all animated life to increase beyond the nourishment prepared for it.' If the 'germs of existence contained in this earth,' he remarks, 'could freely develop themselves,' they 'would fill millions of worlds in the course of a few thousand years.' But the tendency was, in the last resource, held in check by 'necessity, that imperious, all-pervading law of nature,' and, in the case of man, necessity was reinforced by reason. 'In no state that we have yet known,' he observes, 'has the power of population been left to exert itself with perfect freedom.' But 'in the northern states of America, where the means of subsistence have been more ample, the manners of the people more pure, and the checks to early marriages fewer, than in any of the modern states of Europe, the population has been found to double itself, for above a century and a half successively, in less than twenty-five years,' and in 'the back settlements' in fifteen years. Euler had calculated the period of doubling at twelve years and four-fifths, and Sir William Petty at ten years. But, 'to be perfectly sure' that he is 'far within the truth,' Malthus himself takes 'the slowest of these rates of increase'; and, with a fondness for mathematics which might have

¹ The quotations are made from the sixth edition of the essay.

been pardoned in a Cambridge wrangler, he contrasts the increase of population, 'when unchecked,' with the 'supposed' increase of the productions of the earth, which, he admits, is 'not so easy to determine,' by comparing the former to an increase in a 'geometrical,' and the latter to one in an 'arithmetical ratio.'

He was more fully aware than some of his critics have imagined that the analogy did not admit of exact application; and he regarded it rather as indicating the extreme limits set on either side by the minimum rate of increase of population and the maximum rate of increase of food. It was, he thought, conceivable that the supply of food in England might be increased in the next and each succeeding twenty-five years, 'by a quantity equal to what it at present' produced, and 'the most enthusiastic speculator' could not 'suppose a greater increase than this.' But on the other hand it might 'safely be pronounced'—and this calculation would be based on the 'slowest' of the 'rates of increase'—'that population, when unchecked,' would go 'on doubling itself every twenty-five years.'

Nor, again, did he fail to anticipate some of the objections of the critics, who have in his own day, and since his death, attacked his essay, by the distinction he is always careful to draw between the possible and the actual increase of population. There were, in fact, three propositions which he 'intended' to prove. The first was that 'population' was 'necessarily limited by the means of subsistence.' The second that 'population invariably increases where the means of subsistence increase, unless prevented by some very powerful and obvious checks.' And the third and last that 'these checks, and the checks which repress the superior power of population, and keep its effects on a level with the means of subsistence, are all resolvable into moral restraint, vice, and misery.' 'The first of these propositions,' he states, 'scarcely needs

illustration.' The 'second and third' were to be 'sufficiently established by a review of the immediate checks to population in the past and present state of society.'

It is this review which occupies by far the larger part of the essay. It contains a great abundance of facts extracted from the records of travellers, or based upon personal investigation. Beginning with the 'lowest stage of human society,' he examines the conditions of the American Indians, the South Sea Islanders, the inhabitants of different parts of Africa, Siberia, the Turkish dominions and Persia, Indostan and Tibet, China and Japan, ancient Greece, Rome, and Northern Europe. He then passes in his second book to more modern times, and more civilized nations; and here he has the assistance of 'registers of births, deaths, and marriages,' and makes abundant use of statistical calculations. He reviews successively the checks to population in Norway, Sweden, Russia, the middle parts of Europe, Switzerland, France, England, Scotland, and Ireland. The third book is devoted to an examination of the 'different systems or expedients which have been proposed or have prevailed in society, as they affect the evils arising from the principle of population'; and, amongst these, he considers those schemes of social equality propounded by Godwin and Condorcet which had originally furnished the occasion for writing the essay, and emigration and the poor laws. In his fourth and final book he investigates the 'prospects of the future' 'respecting the removal or mitigation of the evils arising from the principle of population.'

The checks to population are classified by him under two heads, of which the 'positive' checks cut off an existing population, and the 'preventive' hinder a population from coming into existence. A triple cross-division is also made, and the checks 'are all resolvable into moral restraint, vice, and misery.' As we pass from lower to higher stages of life and degrees of civilization, the positive

checks give place in prominence to the preventive ; and the same process is marked by an increasing predominance of moral restraint over vice and misery. Of the positive checks some, like famine and disease, are due to 'laws of nature,' and 'may be called exclusively misery,' and some 'we obviously bring upon ourselves, such as wars, excesses, and many others which it would be in our power to avoid.' 'They are brought upon us by vice, and their consequences are misery.' 'The preventive check,' on the other hand, 'as far as it is voluntary, is peculiar to man, and arises from that distinctive superiority in his reasoning faculties which enables him to calculate distant consequences.' It sometimes takes the form of vice, and sometimes of moral restraint.

The argument of which a summary account has just been given is more original in the manner of its presentation than in the foundation on which it rests. Malthus himself says that in the course of the 'historical examination,' which he made between his first and second editions, he found that 'much more had been done' on the subject than he 'had been aware of when' he 'first published the essay.' 'The poverty and misery arising from a too rapid increase of population had been distinctly seen, and the most violent remedies proposed, so long ago as the times of Plato and Aristotle'; and of 'late years' the subject had been 'treated' 'by some of the French economists, occasionally by Montesquieu,' and 'among our own writers by Dr. Franklin, Sir JAMES STEWART, Mr. Arthur Young, and Mr. Townsend,' in addition to those authors, 'Hume, Wallace, Adam Smith, and Dr. Price,' 'from whose writings' he 'had' directly 'deduced the principle which formed the main argument of' his 'essay.' What he claimed to have himself done, was to state with greater 'force and precision' 'the comparison between the increase of population and food,' to inquire 'into the various modes by which' 'population' was 'kept down to

the level of the means of subsistence,' to pursue 'the principle' 'to its consequences,' and to draw 'practical inferences from it.' But, as in the case of Adam Smith and his predecessors, it is to Malthus that the economic conception of the bearings of the principle is really due, and he has stated it in such a way that his treatment may be regarded as substantially original. In his case, again, as in that of Adam Smith, the progress of economic inquiry has tended to modify and supplement his statement; and we may now proceed to consider the relation of his essay to the facts of the present day, viewed in the light of subsequent economic investigation.

The conception which he seems to have formed of the law of diminishing returns is, in the main, correct; but he does not lay stress, at any rate with sufficient explicitness, on the limiting conditions of its application to fact. The law of diminishing returns is the statement of a tendency which may be counteracted by opposing tendencies. It asserts that, after a certain point has been reached in the cultivation of land, the returns to each additional application of capital and labour will tend, other things being unaltered, not to increase proportionally to the increase of capital and labour. But it is difficult to fix the point with precision; and other things may not continue unaltered. It is possible that an increase of population may, while it augments the demand for food, permit of more systematic organization and greater division of labour in raising it, and the consequence may be that an additional application of labour to the cultivation of land may result in a return which increases instead of diminishing. And it is also possible that such an improved method of cultivation may follow on the application of additional capital in the form of manures or mechanical appliances as to produce an increasing and not a diminishing return. It is possible, again, that poorer soils may be taken into cultivation before richer, because the initial application of capital and labour

required in the case of the latter, in the shape of draining or fencing or the like, is greater than it is in that of the former, or for some other reason ; and then, in the progress of society, this initial application once accomplished, the returns may become proportionally greater and not less. Or, once more, it is possible that land may be applied to different uses, or filled with different crops, in a more advanced stage of civilization ; and then, while the returns from the old use or the old crops might diminish, those from the new may increase.

All these possibilities were to some extent realized in England after Malthus wrote. A larger population permitted more systematic organization, and greater division of labour, in manufactures, if not in agriculture ; and the repeal of the Corn Laws allowed the exchange of the increased products of English manufacturing skill and industry for more abundant supplies of foreign corn. It extended the number and area of the sources from which food is provided for the population of England until they embraced the wheat-fields of America, Russia, and India. It brought the rich virgin soils of the New World to reinforce the more exhausted soils of the Old ; and it allowed some of these soils to be turned to other uses, and filled with other crops. The means of communication at home, and of transportation from abroad, were vastly improved ; and the cost of conveying the produce to the market, which forms part of the total cost of production, was considerably diminished. The methods of cultivation exhibited improvement ; and the close of the eighteenth, and the first half of the next, century saw a transformation in English agricultural practice which almost kept pace with the revolutionizing inventions in manufacturing industry, while the period which followed on the repeal of the Corn Laws, and the introduction of Free Trade, was a period of high intensive farming unknown before.

It would be incorrect to say that Malthus ignored the

effects which might be produced by such changes as these ; but he certainly could not have foreseen the full extent of their consequences. He was aware that there were ' many parts of the globe ' ' hitherto uncultivated and almost unoccupied ' ; but the ' process of improving ' the ' minds and directing ' the ' industry ' of the inhabitants of ' these thinly-peopled regions ' ' would,' he thought, ' be necessarily slow.' He recognized that ' Europe ' was ' by no means so fully peopled as it might be,' that the ' science of agriculture ' had ' been much studied in England and Scotland,' and that there was ' still a great portion of uncultivated land in these countries.' He speaks of the ' employment of a larger capital in draining,' or in applying ' natural and artificial manures,' as being ' productive in a high degree ' ; and he says that ' an improved system of cultivation, and the use of better instruments, may for a long period more than counterbalance the tendency ' to ' smaller proportionate returns.' ' I can easily conceive,' he writes, ' that this country, with a proper direction of the national industry, might in the course of some centuries contain two or three times its present population : and yet every man in the kingdom be much better fed and clothed than he is at present.' But he held that to allow ' that by the best possible policy, and great encouragements to agriculture, the average produce of the island ' of Great Britain ' could be doubled in ' ' twenty-five years,' would be ' allowing, probably, a greater increase than could with reason be expected ' ; and that ' to suppose ' that ' in the next twenty-five years ' it ' could be quadrupled ' would be ' impossible,' and ' contrary to all our knowledge of the properties of land.'

He was so far from being a pessimist that he believed that the pressure of population stimulated improvement. ' Evil exists,' he writes, ' not to create despair, but activity ' ; and he maintains that an increase of population is ' both a great positive good and absolutely necessary to a fur ther

increase in the annual produce of the land and labour of any country,' 'when it follows in its natural order.' 'It is an utter misconception of my argument,' he says, 'to infer that I am an enemy to population.' 'I am only an enemy to vice and misery.' And he states that 'a careful distinction should always be made between a redundant population and a population actually great.'

But still he was in a sense, as a French economist¹ observed, no 'geographer'; and, while he recognized the advantages of foreign commerce, he could not have anticipated the expansion and diffusion of English trade which would accompany the abandonment of a protectionist policy, and the provision of easy, inexpensive, and rapid means of transportation. 'In the wildness of speculation,' he writes, 'it has been suggested (of course more in jest than in earnest) that Europe ought to grow its corn in America, and devote itself solely to manufactures and commerce, as the best sort of division of the labour of the globe.' Nor could he have gauged the dimensions to which the tide of emigration of labour (or of capital) would swell; and it was partly for this reason perhaps that he regarded emigration as a 'slight palliative' rather than an 'adequate remedy.' 'As a partial and temporary expedient, and with a view to the more general cultivation of the earth and the wider extension of civilization,' he thought that it was 'both useful and proper.'

But probably the chief reason was that he conceived the whole situation somewhat differently from ourselves. He appears to have regarded population as getting, now and again, the start of improvement, and straining every nerve to maintain an advantage in the race. We should probably be inclined to be more positive in representing improvement as, on the whole, in civilized countries keeping ahead of population. 'Though the barriers,' he writes, 'to a further increase of population be not so well

¹ Paul Leroy-Beaulieu.

defined, and so open to common observation, on continents as on islands, yet they still present obstacles that are nearly as insurmountable, and the emigrant, impatient of the distresses which he feels in his own country, is by no means secure of finding relief in another. There is probably no island yet known, the produce of which could not be further increased. This is all that can be said of the whole earth. Both are peopled up to their actual produce.' In another passage he remarks—'When we refer ' to the practical limits of population, it is of great importance to recollect that they must be always very far short of the utmost power of the earth to produce food'; and it is 'also of great importance to recollect that long before this practical limit is obtained in any country the rate of the increase of population will gradually diminish.' On the whole we may affirm that, although he himself remarked when writing on the determining influence of population, and answering the question whether agriculture might 'with more propriety be termed the efficient cause of population, than population of agriculture,' that 'all the prejudices respecting population' had 'perhaps arisen from a mistake about the order of precedence,' yet the course of later inquiry has tended to throw some doubt upon his own entire freedom from mistakes about that order. His perception of the elastic nature of the limit set by the law of diminishing returns might be regarded as dim and imperfect by comparison with our more extensive and positive knowledge; and he confined his considerations for the most part to agricultural industry. We should be inclined to lay greater stress on the elasticity of the limit, and to set the tendency to increasing returns in English manufactures against the tendency to diminishing returns in our agriculture, and to returns which perhaps increase, and perhaps are at present constant, but as yet are scarcely diminishing, in the agriculture of many, or most, of the countries which supply us with wheat. But

it must, on the other hand, be remembered that he thought that to allow 'the produce of the earth to be absolutely unlimited, scarcely' removed 'the weight of a hair from' his 'argument, which' depended 'entirely upon the differently increasing ratios of population and food'; and that subsequent experience has so far tended to support his position that it has witnessed in our own country an increase in the average produce of wheat from twenty-three bushels an acre in 1770 to twenty-eight in 1880, and a simultaneous growth in population from some six to twenty-six millions.¹

If we now turn to the other part of his argument, we may say that he was on the whole perhaps inclined to lay greater stress on the tendency of population to increase than on the strength of those 'positive and preventive checks' which he illustrated with such abundant detail. 'In every country,' he writes, 'some of these checks are, with more or less force, in constant operation; yet, notwithstanding their general prevalence, there are few states in which there is not a constant effort in the population to increase beyond the means of subsistence. This constant effort as constantly tends to subject the lower classes of society to distress, and to prevent any great permanent amelioration of their condition.' In the first edition of his essay he had represented these checks to population as two in number—vice and misery; and it was only in his second edition that he recognized the 'action of another check,' consisting in 'moral restraint.'

He is very careful to indicate what he means by this. He defines it as a 'restraint from marriage from prudential motives with a conduct strictly moral during the period of this restraint'; and no authority can be found in his writings for what has been known as 'Neo-Malthusianism.' Much has been said or thought by others since on the possibilities of, and reasons for and against, 'birth-control'

¹ In 1911, 36,070,492 persons, and in 1931, 39,952,377 persons.

after marriage ; and guarded but notable utterances on the debated question have come from medical authority of high standing¹ and from the Pan-Anglican Conference of the bishops assembled at Lambeth.² But of Malthus himself it should be said that it is one of the many examples of the irony of fate, to which he has been a victim, that his name should be even invoked. For he stated expressly that a 'cause which may prevent any particular evil may be beyond all comparison worse than the evil itself' ; and in another passage he writes : 'I should be extremely sorry to say anything which could either directly or remotely be construed unfavourably to the cause of virtue.' Nor again did he wish, as some of his critics have thought, to propose 'a law to prohibit the poor from marrying.' He sought, simply and solely, to impress upon us 'our obligation not to marry till we have a fair prospect of being able to support our children,' and he argued that time should be allowed 'for forming those strong and lasting attachments without which the married state is generally more productive of misery than of happiness.' 'It is less the object of the present work,' he writes, 'to propose new plans of improving society than to inculcate the necessity of resting content with that mode of improvement which already has in part been enacted upon as dictated by the course of nature, and of not obstructing the advances which would otherwise be made in this way.'

Bagehot has epigrammatically remarked³ that 'in its first form the *Essay on Population* was conclusive as an argument, only it was based on untrue facts ; in its second form it was based on true facts, but it was inconclusive as an argument.' For, he urges, by introducing this additional check of moral restraint Malthus 'has cut away the ground

¹ Lord Dawson of Penn at a Church Congress.

² In 1930. The Bishops were not unanimous in their pronouncement.

³ *Economic Studies*, p. 137.

of his whole argument. If there be this principle of virtuous self-restraint, he no longer answers Godwin; he no longer destroys the dreams of perfectibility. If it be possible for a perfectly virtuous community to limit their numbers, they will perform that duty just as they perform all others; there is no infallible principle that will break up the village community; it can adjust its numbers to its food, and may last for ever.'

Here, as elsewhere, Malthus seems to have possessed a dim perception rather than a clear vision of the full consequences of his statements. His argument, indeed, even in its amended form, was fatal to systems of equality, but it was not fatal to progress; and he appears, though imperfectly, to have discerned this fact. 'Universally,' he writes, 'the practice of mankind on the subject of marriage has been much superior to their theories; and however frequent may have been the declamations on the duty of entering into this state,' 'each individual has practically found it necessary to consider of the means of supporting a family before he ventured to take so important a step. That great *vis medicatrix reipublicæ*, the desire of bettering our condition and the fear of making it worse, has been constantly in action, and has been constantly directing people into the right road in spite of all the declamations which tended to lead them aside. Owing to this powerful spring of health in every state, which is nothing more than an inference from the general course of the laws of nature irresistibly forced on each man's attention, the prudential check to marriage has increased in Europe, and it cannot be unreasonable to conclude that it will still make further advances.'

But, on the other hand, there are passages which seem to show that he never rid himself entirely of the associations of his first edition. He 'was accused,' so he himself states, 'of not allowing sufficient weight' in his 'review of the different stages of society' to 'moral restraint';

but he 'thought that' he should 'not be found to have erred much' on that account. He was not disposed to deny that the sexual passion was 'one of the principal ingredients of human happiness,' and that its 'extinction or diminution' 'would probably convert human life either into a cold and cheerless blank or a scene of savage and merciless ferocity.' It was, therefore, 'regulation and direction' that 'were wanted, not diminution or extinction.' But he believed that 'few' of his 'readers' could 'be less sanguine' than himself 'in their expectations of any sudden and great change in the general conduct of men on this subject.' And, firmly as he held the opinion that the 'system of the poor laws' was the 'first grand obstacle' which opposed the accomplishment of such a change, and emphatically as he declared that that system had 'been justly stated to be an evil, in comparison of which the national debt, with all its magnitude of terror,' was 'of little moment,' he still felt that the 'evil' was 'now so deeply seated, and the relief given by the poor laws so widely extended, that no man of humanity could venture to propose their immediate abolition.' He himself 'would never wish to push general principles too far,' and he only proposed 'the *gradual*, and *very gradual*, abolition of the poor laws.'

Nor, again, did he form any very definite or consistent conception of the considerations which entered into the thoughts of the man who practised moral restraint. Sometimes he writes as if they were confined to the provision of the means requisite to secure the necessaries of a bare subsistence. Sometimes he includes considerations of rank and social status for the man himself and of education for his children. 'The comforts of the lower classes of society,' he writes in one passage, 'do not depend solely upon food, nor even upon strict necessaries.' And in another he says that 'two or three steps of descent in society, particularly at this round of the ladder where

education ends and ignorance begins, will not be considered by the generality of people as a chimerical but a real evil.'

To this side of Malthus' argument, as to that connected with the increase of food, later economic inquiry has added an element of elasticity which is more prominent than it seems to be on his pages. It is now stated with greater emphasis than he can be said to have employed, that the 'standard of comfort,' which under the form of 'moral restraint' exercises an influence on marriage and the rearing of children, is not limited to the physical minimum of a bare existence, but is based on a moral minimum of decencies, comforts, and luxuries, below which men or women will not willingly sink, by incurring the expense attendant on marriage or its natural consequences. The standard may vary from class to class, and from country to country; and it may be, and as a matter of fact it has been, raised from age to age, and generation to generation. The element of food no longer enters so largely as it once did into the component parts of the standard in a civilized and progressive country like England, and the marriage rate conforms rather to the general fluctuations of trade, with its alternating periods of prosperity and depression, than, as it once seemed to do, to the rise and fall of the price of wheat. The 'iron' law of wages, which was represented by some pessimistic writers as ever forcing wages down to the level of a bare subsistence, and by others as tending to make them conform to the requirements of the standard of comfort, because, if they rise above this level, population will grow and competition for employment increase, has lost much, if not all, of its hard and unyielding character when subjected to the test of the modern interpretation of the standard.

This emphatic recognition of the elastic nature of the standard of comfort is an important modification which has been introduced into Malthus' reasoning by later economic study; but that study has only served to confirm, though

some of its exponents have treated the confirmation as a fresh discovery, the truth of his observation that 'even poverty itself, which appears to be the great spur to industry, when it has once passed certain limits, almost ceases to operate.' A 'degradation of labour' may follow on some very serious and extensive economic calamity, before which the restorative influence of the standard of comfort is powerless; and in the same way it has been urged that it needs a long spell of a considerable increase in wages to elevate that standard. The standard, in short, offers resistance to change; but it cannot prevail against the influence of a sudden change of great magnitude, or a gradual change of a persistent character.

Another important commentary on Malthus' Essay, which subsequent study has brought into prominence, is suggested by the reflection that we have not arrived at a full knowledge of the physiological laws which govern the increase of population. There may be relations between the nervous strain, which often accompanies a higher standard of material comfort and intellectual acquirements, and the growth of population, which have not been completely disclosed or investigated. But, whether the explanation of changes in the rate at which population increases rests on a moral or a physiological basis, the tendency of recent economic thought has on the whole inclined in the opposite direction to that once imposed by Malthus.

Later statistical inquiry, it should be noted, has, in the region of fact, pointed to a diminution of the death-rate, reflecting social advance or improved sanitation, rather than an increase of the birth-rate, as the more potent cause of the startling growth of numbers in Malthus' day. This must be given its place among evidence invoked to qualify the gloom of the pictures of the Industrial Revolution. The numerical data forthcoming are not free from deficiency or suspicion, and the inferences drawn have not

passed without questioning. But it is difficult to doubt, and it seems unreasonable to dispute, their broad bearing in the direction indicated.¹

In the domain of thought special stress is being laid on what is now called the 'optimum theory.' That considers the relation of the size of population and its character to economic welfare, which may of course vary with change of environment. Alterations in industrial technique may sometimes make a larger and sometimes a smaller population desirable; and the shifting of the 'optimum' is generally, it may be said, towards an increase. A maximum return per head under the given conditions of production is the aim in view. Such is the summary of Cannan's 'optimum theory' as set forth by his pupil, Professor Robbins; ² and it will be allowed to put the problem in clearer light, if its essential difference from, or marked improvement on, earlier accounts should not be exaggerated.

The question of 'over-population' is not easy to determine; and it can be viewed from different standpoints. We may take into consideration the whole world, or we may look at a particular country and at a particular time. Or again, we may direct our gaze on special localities, occupations, or classes within the boundary of one nation. The story of an eminent scientist ³ who, forecasting impending scarcity of wheat hinging on insufficient supplies of nitrogen, and confronting his alarmed hearers with the certain prospect of the inevitable confirmation of his dire prediction, has been proved a false prophet through the successful extraction from the air of that source of plant-sustenance, may point a moral so far as the whole world is concerned. Deserted sites, occupied once by populous

¹ Cf. M. C. Buer, *Health, Wealth, and Population in the Early Days of the Industrial Revolution*.

² Cf. *London Essays in Economics*.

³ Sir William Crookes.

cities, tell their own lesson ; and a sequel of the War of 1914-18 brought apparent relative over-production of agricultural produce together with raw material. A large rapid decline in their prices at any rate occurred, while those of the manufactured articles and goods sold retail lagged behind. But none the less that War itself was traced by some observers to the pressing desire of a chief combatant, Germany, to get control, not alone of markets for the sale of manufactures to be exchanged for necessary food, but also of the areas themselves of agricultural supply. Nor can it be doubted that nations like the Italians in Europe and the Asiatic Japanese demand urgently room for expansion by occupying other lands, while the significant inference cannot be escaped that there is a population problem of an imperative character in China and India. The menace again that threatens superior races, or people commanding a higher level of livelihood, with being swamped or carried down to a lower standard by the influx of inferior immigrants, has brought severe restriction on such a movement ; and in our own country the ' eugenic ' aspect has similarly come forward with the ominous sight of comparatively reckless increase of undesirable elements and relative relaxation in the growth of the stronger or better in body, mind, or character. Such are a few examples of different phases that the question assumes. It is not, perhaps, a smaller, but it is certainly a more varied problem than it was in Malthus' day.¹ Under-population is now hinted.

¹ Cf. A. M. Carr-Saunders, *The Population Problem*, and also H. Wright, *Population* ; and a reprint, with expanded biography, of Dr. Bonar's *Malthus and his Work* (1924), and notes by the same writer to a reprint of the first edition of the *Essay* (1926). Cf. also G. Talbot Griffith, *Population Problems of the Age of Malthus*.

CHAPTER III

DAVID RICARDO. 1772-1823

THE THEORY OF RENT

The 'Industrial Revolution' of the Eighteenth Century—Ricardo's Assumption of Competition—His Influence on Economic Opinion—His Jewish Nationality, and his Training on the Stock Exchange—His Writings—Their Abstract Character—The Misrepresentations of other Writers—Marx's Theory of Surplus Value—Ricardo's Theory of Rent—Origin of the Theory—Its Statement by Ricardo—Definition of Rent—Its Origin and Growth—Ricardo's Lack of Systematic Arrangement—Conclusions drawn by him from the Theory: (1) The Connexion of Rent with Price—(2) Erroneous Opinions of other Writers—(3) The Order of Distribution of Wealth and the Progress of Society—Subsequent Criticism—The Historical Order of Cultivation—The Theory must be Interpreted Liberally—The Assumption of Competition—The 'No-Rent' Land—The Unearned Increment—Difficulty of Distinction—Modern Socialism and 'Unearned Surpluses'

THE close of the eighteenth and the beginning of the next century marked a period of momentous importance in English industrial history. The character and methods of industry then underwent a change of so vast a nature as to earn the name of a 'revolution.' It was on the eve of this change that Adam Smith wrote the *Wealth of Nations*; but Malthus saw its fulfilment, and he was contemporary with RICARDO, the third of the great writers who are known by the common designation of the 'older English economists.'

This 'industrial revolution' transformed the character

of agriculture, manufactures, and commerce. The system of large holdings of land tended to supersede the small scattered holdings of the past ; and the open fields and wastes were rapidly enclosed. Cultivation conducted on scientific principles was substituted for primitive methods. The breeding of cattle was improved, and a new order of rotation of crops introduced.

But the changes in manufacturing industry were more revolutionary. A series of inventions, consisting of the spinning-jenny, the water-frame, the self-acting mule, and, finally, the power-loom, summoned into activity the cotton industry, which was eventually to supersede the woollen trade as the chief textile industry of the country, and to render parts of Lancashire as populous as London itself. The process of smelting iron by coal revived the declining energy of the iron trade, and attracted it to the neighbourhood of the collieries of the North and the Midlands. The construction of canals improved the means of communication between the growing industrial centres ; and, some years later, the roads of Telford and Macadam took the place of those ' vile ' and ' execrable ' highways, which had excited the indignation of ARTHUR YOUNG on his travels at the beginning of this period in the middle of the eighteenth century. But it was the invention of the steam-engine which, more than anything else, caused the ' revolution ' in manufacturing industry. It gave an added significance to the mechanical improvements which were introduced into the cotton trade ; it was applied to blast-furnaces in the iron industry ; and, finally, it tended to supersede the canal and the road by the railway.

These various improvements were not fully accomplished until the middle of the last century ; but the changes which they occasioned in the character and methods of industry and commerce were taking place during Ricardo's life. There had been some examples of capitalistic under-

takings even of the present type¹ before the 'industrial revolution'; but they had formed the exception to a general rule. But now the small domestic establishments of the country gave way to the large factories of the towns. The craftsman, who worked together with his apprentices and journeymen, was superseded by the employer who might not know the homes of his workmen, just as in agriculture the farmers became more distinct from the labourers. The familiar routine of a neighbouring market, where fashion varied gradually and slightly, and goods were produced to order, was exchanged for the feverish activity and fluctuating demands of trade with distant places and strange customers.

The age was one of 'revolution,' and, it almost seemed, of anarchy, in industrial affairs. Population increased with rapidity, and commerce and manufactures expanded; and the great war with France gave additional stimulus to both, to be followed by a distressing depression in trade and agriculture after the conclusion of peace. The War promoted the growth of population; for men were required by the recruiting officer as well as the employer, to fill the ranks of the army and navy as well as places in the factories, and it was regarded as a patriotic duty to increase the numbers of the nation. And the war also encouraged the development of manufactures, and advanced the prosperity of agriculture. It raised the price of English corn, and it opened markets abroad to English goods, by suspending the industry of the continental nations. This expansion of trade, like the growth of population, was accompanied by new and significant circumstances. The population moved from one place to another, and from villages into the towns; and the trade was subject to

¹ The owners of actual *factories* should be distinguished from the *undertakers* (cf. p. 6), who in many cases seem to have supplied the materials, and sometimes the implements, of industry to the small *domestic manufacturers*, and sold the finished goods.

sudden and considerable fluctuations, and apprentices and workmen were liable to speedy dismissal if the demand for the goods which they produced abated. A busy, restless competition, with men, women, and children hurrying themselves, or hurried by others, in new and different directions, and factories crowded with hands, and working at full pressure, seemed to prevail.

Such was the condition of the industrial world of England when, in 1817, two years after the conclusion of peace, Ricardo published his *Principles of Political Economy and Taxation*. In basing his reasoning on the universal prevalence of competition, he seems to have formed a conception of society which did not differ widely from the actual circumstances of English industry at the time. He appeared to have arranged the seeming anarchy of affairs in the intelligible order of so luminous and precise a theory of the action of competition, that the success of his book was immediate and complete. His friend and contemporary Malthus thought indeed that 'the main part of his structure would not stand'; and Malthus' successor at Haileybury, RICHARD JONES (1790-1855), controverted many of Ricardo's positions on the theory of rent in his *Essay on the Distribution of Wealth and on the Sources of Taxation*. But Ricardo's influence on the general course of English economic opinion remained unshaken. JAMES MILL, who had been his intimate friend, and, according to Bentham, who said, 'I was the spiritual father of Mill, and Mill was the spiritual father of Ricardo,' was the inspirer of his opinions, published a treatise on the *Elements of Political Economy*, in 1821, in which he presented the Ricardian theories in a neat and compact form. J. R. McCULLOCH (1789-1864), who, amongst other economic work, edited Ricardo's writings¹ and the *Wealth of Nations*,

¹ He thought it unnecessary to include among these Ricardo's 'vindication of his own doctrines from the objections' of Malthus.

reproduced the same theories. NASSAU WILLIAM SENIOR¹ (1790-1864) indeed was in many respects an exponent of independent and original thought; but it is not until we reach in 1848 the *Principles of Political Economy* of JOHN STUART MILL that we can discover any distinct infringement of Ricardo's supremacy, and Mill himself spoke of the older economist with the 'piety of a disciple,' although he supplemented and amended his reasoning in more than one important respect.

The characteristic feature of that reasoning was its exclusively abstract nature. Ricardo assumed the prevalence of competition; and he endeavoured to ascertain what would, on this assumption, be the natural order of the distribution of wealth among the various classes of society. 'Political Economy,' he writes in a letter to Malthus, 'you think is an inquiry into the nature and causes of wealth; I think it should rather be called an inquiry into the laws which determine the division of the produce of industry amongst the classes who concur in its formation.' 'Every day I am more satisfied that the former inquiry is vain and delusive, and the latter only the true object of the science.' His assumption of competition was, as we have seen, scarcely untrue to the general circumstances of the times; but his abstract method of inquiry may be traced to the influence of his nationality and training.

He was born in 1772 of Jewish parentage, and he had the fondness of his race for abstract speculation. He received a commercial education, and, at the early age of fourteen, commenced his acquaintance with the Stock Exchange, of which his father was a member. When he was twenty-one years old he began business on his own account, and acquired a fortune which enabled him to retire at an early age. The sphere of activity in which he thus passed the business period of his life was calculated

¹ Senior wrote a general treatise.

to increase his fondness and capacity for abstractions. As Bagehot has observed,¹ 'there is no place where the calculations are so fine, or where they are employed on *data* so impalpable and so little "immersed in matter."' 'The Jews excel on every Bourse in Europe.' His association with the Stock Exchange also led him to write his first economic production on a branch of the subject where a power of abstraction was especially appropriate. This was the topic of money in its connexion with foreign trade; and later economic inquiry has never failed to recognize the propriety and advantage of an abstract method in elucidating the subtle and perplexing intricacies of this topic. It is when we come to deal with the industrial relations of men to one another, and the human services remunerated by profits and wages, that an abstract method is liable to mislead, if it is not supplemented and qualified by constant reference to facts. But the work of the economists of Ricardo's time on money and foreign trade has, even in our own days, met with complimentary approval rather than disparaging or emending criticism.² Ricardo's tract entitled *The High Price of Bullion a Proof of the Depreciation of Bank Notes* was published in 1809, and the opinions which he advocated were afterwards adopted in the Report of the Bullion Committee. In 1811 he wrote a reply to Mr. Bosanquet's *Practical Observations* on that report; in 1815 an *Essay on the Influence of a Low Price of Corn on the Profits of Stock*, in which he opposed Protection; in 1816 a pamphlet containing *Proposals for an Economical and Secure Currency*; and in 1817 *The Principles of Political Economy and Taxation*. This was his most important systematic work, but in 1820 he contributed an article on the *Funding System* to the supplement to the *Encyclopædia Britannica*, and in 1822 he published a tract on *Protection to Agriculture*. In 1819 he entered Parliament, where his influence, derived from the

¹ *Economic Studies*, p. 151.

² It has not entirely escaped.

repute of his economic writings, seems to have been considerable. He was a zealous and outspoken advocate of Parliamentary Reform. In 1823 he died, in the fifty-second year of his age.

He himself seems to have been aware of the abstract character of his writing, and of his own deficiencies as a writer. In judging his *Principles* we have to remember that he was only induced by the pressure of friends to publish a systematic treatise, and that the treatise is so far from being systematic that it presents the appearance of a collection of detached notes. His abstractions were also so much related to practice that the political proposals which he supported were measures of practical usefulness, and yet were based upon his economic principles. But his method was certainly very abstract; and he does not seem to have been, in the nicer sense of the words, a systematic writer. He is not careful to make the assumptions on which his reasoning rests clear at each successive stage in the argument. He is generally content to state them once, and then to take them for granted. No unfriendly critic¹ has said that 'he never explains himself.' 'My speaking,' he himself declares in a letter to Malthus, 'is like my writing, too much compressed. I am too apt to crowd a great deal of difficult matter into so short a space as to be incomprehensible to the generality of readers.' 'I am fully aware,' he writes on another occasion, referring to a manuscript which he had sent, 'of the deficiency in the style and arrangement: those are faults which I shall never conquer.' And again: 'I am but a poor master of language, and therefore I shall fail to express what I mean.'

But he was careful also to emphasize the intentional nature of the abstract character of his work. Thus he says to Malthus, 'Our differences may in some respects, I think, be ascribed to your considering my book as more

¹ Marshall in his *Principles of Economics*.

practical than I intended it to be. My object was to elucidate principles, and to do this I imagined strong cases, that I might show the operation of those principles.' And again : ' You have always in your mind the immediate and temporary effects of particular changes, whereas I put these immediate and temporary effects quite aside, and fix my whole attention on the permanent state of things which will result from them. Perhaps you estimate these temporary effects too highly, while I am too much disposed to undervalue them.'

Many, and perhaps most, of the accusations, which have been freely brought against him in our day, may be traced to a misunderstanding of his own language, and this misunderstanding is often due to those deficiencies in composition of which he himself was conscious. Other charges are based on the perversions of his words by other writers, but these perversions, again, are frequently due to his own failure to state explicitly, and repeatedly, what he takes for granted. It is a striking illustration of the irony of fate that the writings of so strong an individualist should have supplied two main fundamental doctrines on which the superstructure of modern socialism rests. And yet it is his theory of rent, and his theory of value, which have been used to furnish a ' scientific ' basis for the ' nationalization ' of land and of capital.

Ricardo put forward a theory of value, according to which the ' value of a commodity ' depended ' on the relative quantity of labour which ' was ' necessary for its production ' ; and he held that the value of labour itself, or the rate of wages, similarly depended on the cost of production of labour, or, in other words, on the cost of the labourer's subsistence. This theory has been used to justify the contention of Karl Marx that the value of commodities is due solely to the labour of the workman, and not also to the machinery or other capital employed, that the wages of the workman are equal to what is required

for his subsistence, and that, so far as the value of the commodities produced exceeds this amount, the surplus is appropriated by the employer, who thus robs the workman and 'exploits' his labour, because he has the advantage of possessing the means of production, and can compel him to work for longer hours than would suffice to produce enough to exchange for the necessaries of his subsistence.

This theory of *surplus value*, which is used to support the proposal for the collective ownership of the means of production by the State as the representative of society, bears some resemblance to Ricardo's theory; but the resemblance is obtained by ignoring important differences. Ricardo qualifies his statement in several ways. He applies his theory to 'such commodities only as can be increased in quantity by the exertion of human industry, and on the production of which competition operates without restraint.' 'In speaking' 'of the exchangeable value of commodities, or the power of purchasing possessed by any one commodity,' he means 'always that power which it would possess, if not disturbed by any temporary or accidental cause.' He allows that 'the principle that the quantity of labour bestowed on the production of commodities regulates their relative value' is 'considerably modified by the employment of machinery and other fixed and durable capital.' He maintains that the 'natural price of labour depends' 'on the quantity of food, necessaries, and conveniences become essential' to the labourer 'from habit,' and that the 'market rate' of wages 'may, in an improving society, for an indefinite period, be constantly above' this 'natural rate,' which itself 'varies at different times in the same country, and very materially differs in different countries.' All these qualifications are made by Ricardo himself, and it is only by ignoring their general drift that the theory of surplus value can be regarded as the logical outcome of his reasoning.¹

¹ Cf. below, note 3 on page 202.

To his theory of rent we may devote more detailed attention. It is that part of his work by which he is perhaps best known. It is true that he can be called the author of the theory with less accuracy than Malthus can be considered responsible for the doctrine of population. Not only Malthus himself in his *Inquiry into the Nature and Progress of Rent*, which was published in 1815, but Sir EDWARD WEST also, in an anonymous *Essay on the Application of Capital to Land*, written under the name of 'a Fellow of University College, Oxford,' had, as Ricardo himself states in his preface, 'presented to the world, nearly at the same moment, the true doctrine of rent'; and, as far back as 1779, DR. ANDERSON seems to have stated the theory in his *Enquiry into the Nature of the Corn Laws*. But its connexion with the name of Ricardo in the history of Political Economy is not without justification. His treatment has been generally adopted, and he founded his whole economic doctrine upon it. 'Without a knowledge' of rent, he says, 'it is impossible to understand the effect of the progress of wealth on profits and wages, or to trace satisfactorily the influence of taxation on different classes of the community.'

In the second chapter of his *Principles*, accordingly, immediately after the exposition of value which is contained in the first, he deals with rent. 'Rent' he defines as 'that portion of the produce of the earth which is paid to the landlord for the use of the original and indestructible powers of the soil.' This is the 'strict sense' of the term, and must be distinguished from that 'popular sense,' which is found in Adam Smith, and, applying the term to 'whatever is annually paid by a farmer to his landlord,' confounds 'the interest and profit of capital' with it.

Having framed his definition of rent, Ricardo proceeds to consider how it arises. 'On the first settling of a country,' he writes, 'in which there is an abundance of rich and fertile land, a very small proportion of which is

required to be cultivated for the support of the actual population,' 'there will be no rent; for no one would pay for the use of land, when there was an abundant quantity not yet appropriated, and, therefore, at the disposal of whosoever might choose to cultivate it.' 'On the common principles of supply and demand, no rent could be paid for such land.' 'If,' indeed, 'all land had the same properties, if it were unlimited in quantity, and uniform in quality, no charge could be made for its use, unless where it possessed peculiar advantages of situation. It is only, then, because land is not unlimited in quantity and uniform in quality and because, in the progress of population, land of an inferior quality, or less advantageously situated, is called into cultivation, that rent is ever paid for the use of it. When, in the progress of society, land of the second degree of fertility is taken into cultivation, rent immediately commences on that of the first quality, and the amount of that rent will depend on the difference in the quality of these two portions of land. When land of the third quality is taken into cultivation, rent immediately commences on the second, and it is regulated as before, by the difference in their productive powers. At the same time, the rent of the first quality will rise, for that must always be above the rent of the second, by the difference between the produce which they yield with a given quantity of capital and labour. It often' 'and indeed commonly happens,' however, 'that before' 'the inferior lands are cultivated, capital can be employed more productively on those lands which are already in cultivation,' but with a 'diminished return.' 'In such case, capital will be preferably employed on the old land, and will equally create a rent; for rent is always the difference between the produce obtained by the employment of two equal quantities of capital and labour.'

But what is the reason of this? It is that the 'exchangeable value of all commodities,' and, amongst these,

of 'the produce of land,' 'is always regulated, not by the less quantity of labour that will suffice for their production under circumstances highly favourable, and exclusively enjoyed by those who have peculiar facilities of production; but by the greater quantity of labour necessarily bestowed on their production by those who have no such facilities; by those who contrive to produce them under the most unfavourable circumstances; meaning, by the most unfavourable circumstances, the most unfavourable under which the quantity of produce required renders it necessary to carry on the production.' 'When land of an inferior quality is taken into cultivation, the exchangeable value of raw produce will rise, because more labour is required to produce it.' 'It is true, that on the best land, the same produce would still be obtained with the same labour as before, but its value would be enhanced'; and the 'advantages' thus resulting are 'transferred from the cultivator, or consumer, to the landlord.'

This, then, is the way in which rent arises. We start with the market, and we find that the price of 'the produce of land' is regulated by that part of the supply, which is produced, and brought to market, at the greatest expense. The price obtained by this must be sufficient to repay the expense of producing it, and bringing it to market, and to yield the 'usual and general rate of profits on stock'; or it will not come. But the price will not rise above this point, and will yield no rent, while those who produce at greater advantages, obtaining the same price for that which has cost less to produce, have a surplus in hand, which competition compels them to transfer to the landlord as rent.

It may be observed that Ricardo's statement affords an illustration of that lack of systematic expression and ordered arrangement which was previously noted. He defines¹ rent as 'that compensation which is paid to the owner of

¹ This is an alternative definition to that quoted above.

land for the use of its original and indestructible powers,' and apparently all that he has in his mind at the moment is the 'natural fertility of the soil.' But, before he has gone very far in his exposition, it seems to occur to him that 'advantages of situation' have also an importance of their own, although it is straining language to reckon them, as apparently he does, as part of 'the original and indestructible powers of the soil.' They may be due to extraneous improvements in the means of communication with the market. However, he now introduces this fresh element of 'advantages of situation,' but the introduction is effected by a qualifying clause, which has the appearance of being incidental; and, after proceeding to trace the rise of rent by differences of fertility alone, it is only at the end that he becomes more comprehensive, and says that the 'exchangeable value' of the 'produce' of 'the most fertile and favourably situated land' 'will be adjusted by the total quantity of labour necessary in various forms, from first to last, to produce it and bring it to market.' It is this lack of strict systematic expression which later economists have endeavoured to supply, and, had his own statement been more explicit, he would probably have avoided considerable misunderstanding. In a similar way there are, according to his statement, three causes of rent; but they are not distinctly set forth, or arranged in order. One is the difference of natural fertility between different soils; the second, the difference of situation with reference to the market; and the third, the difference in the returns to capital and labour on the same soil, owing to the action of the law of diminishing returns.

From his theory of rent he draws certain conclusions. The first is that 'corn is not high because a rent is paid, but a rent is paid because corn is high; and it has been justly observed that no reduction would take place in the price of corn, although landlords should forgo the whole of their rent.'

The second is that writers like Adam Smith were wrong in supposing that rent was a mark of 'the advantages which the land possesses over every other source of useful produce,' and a sign that in agriculture 'nature labours along with man.' 'There is not a manufacture,' Ricardo writes, 'in which nature does not give assistance to man'; and he quotes with approval the commentary made by Buchanan¹ on Adam Smith's words. 'It is not from the produce, but from the price at which the produce is sold, that rent is derived; and this price is got not because nature assists in the production, but because it is the price which suits the consumption to the supply.' 'When land is most abundant,' Ricardo observes, 'when most productive, and most fertile, it yields no rent; and it is only when its powers decay, and less is yielded in return for labour, that a share of the original produce of the more fertile portions is set apart for rent.' 'The rise of rent' may be a 'symptom, but it is never a cause of wealth.' It may be a 'symptom,' for it is always the 'effect' of increasing wealth, and of 'the difficulty of providing food for' an 'augmented population'; and 'population' itself 'increases or diminishes with the increase or diminution of capital.' But, on the other hand, 'wealth often increases most rapidly while rent is either stationary or even falling'; for this increase takes place 'where the disposable land is most fertile, where importation is least restricted, and where, through agricultural improvements, productions can be multiplied without any increase in the proportional quantity of labour, and where consequently the progress of rent is slow.' 'The wealth and population of a country' may be increased, and yet, if that increase is 'accompanied' by 'marked improvements in agriculture,' rent may be lowered. Such improvements are of two kinds. They may 'increase the productive powers of the land' by the 'more skilful rotation of crops, or the

David Buchanan edited the *Wealth of Nations* in 1814.

better choice of manure.' Or they may 'enable us, by improving our machinery, to obtain' the 'produce of land with less labour.' 'Improvements in agricultural implements, such as the plough and thrashing machine, economy in the use of horses employed in husbandry, and a better knowledge of the veterinary art, are of this nature.' The 'immediate effect' of both kinds of improvements is to 'lower rent,' although they may be 'ultimately of immense advantage to landlords,' by giving a 'great stimulus to population.'

Thirdly, and lastly, it is on his theory of rent that Ricardo bases his conception of the 'natural' order of the distribution of wealth, and of the future condition of society. His theory of wages and his theory of profits are intimately related to his theory of rent, and his theory of the incidence of the various forms of taxation rests on the same basis. Wages depend on the 'price of the food, necessaries, and conveniences required for the support of the labourer and his family'; and, 'with a rise in the price of food and necessaries, the natural price of labour will rise,' as it will fall 'with the fall in their price.' Profits in their turn 'depend on wages,' for 'the whole value' of the 'commodities' of the 'farmer' and the 'manufacturer' 'is divided into two portions only,' one of which 'constitutes the profits of stock, the other the wages of labour.' Neither the farmer who cultivates that quantity of land, which regulates price, nor the manufacturer who manufactures goods, sacrifice any portion of the produce for rent.' And so the general position is reached, 'Profits depend on high or low wages, wages on the prices of necessaries, and the price of necessaries chiefly on the price of food, because all other requisites may be increased almost without limit,' for the simple reason that the 'rise in the natural price of the raw material,' of which such requisites are made, is 'more than counterbalanced by the improvements in machinery,

by the better division and distribution of labour, and by the increasing skill, both in science and art, of the producers.' Or, as the position is differently and more briefly stated in another passage, 'In all countries, and all times, profits depend on the quantity of labour requisite to provide necessaries for the labourers on that land, or with that capital which yields no rent,'

From this general position a conclusion follows respecting the future of society: 'In the progress of society and wealth, the additional quantity of food requisite is obtained by the sacrifice of more and more labour.' The 'natural tendency,' therefore, of wages is to rise in money value, in order to purchase the requisite food, but to remain constant, or to slightly fall, in their real value, or command over the necessaries of subsistence, as the pressure of population on the resources of land increases. The 'natural tendency' of profits is to fall in consequence of the diminishing productiveness of land, and the constant, or slightly diminished, requirements of subsistence of labour, although the tendency may for a time be arrested by 'improvements in agriculture,' or the 'discovery of new markets, whence provisions may be imported.' The 'natural tendency' of rent is to increase, if not immediately, at least in the long run.

These are the main points of Ricardo's argument as it is expounded in his *Principles of Political Economy and Taxation*, and also in his earlier *Essay on the Influence of a Low Price of Corn on the Profits of Stock*, and his later pamphlet on *Protection to Agriculture*. HENRY SIDGWICK has said¹ that what is known as the Ricardian theory of rent 'combines, in a somewhat confusing way, at least three distinct theories,' of which the first is an 'historical theory as to the origin of rent,' the second a 'statical theory of the economic forces tending to determine rent at the present time,' and the third a 'dynamical theory of the causes

¹ *Principles of Political Economy*, bk. ii. ch. vii. sec. 1.

continually tending to increase rent, as wealth and population increases.'

The theory has been subjected to severe criticism from various standpoints. The American economist Carey has urged that the historical order of cultivation assumed by Ricardo is incorrect. It is not always the case, and actual American experience has afforded an illustration, that the richer soils are taken first into cultivation, and that in the progress of society cultivation extends downwards to the poorer land. There may be circumstances, such as the necessity of defence from hostile attack, or the expenditure requisite to bring certain land under cultivation, which lead men in an early stage of civilization to occupy the poorer hillsides in preference to the richer valleys; and then, in the progress of society, when the advantage of a position secured against the assaults of enemies becomes less urgent, and the initial expenditure of draining, it may be, or fencing, is more easily met, the soils which are naturally richer are brought under cultivation, and substituted for those which are naturally poorer.

This criticism is instructive, but it does not seem to be conclusive. The Ricardian theory, when liberally interpreted, affirms that men bring under cultivation in the first instance those soils which they consider at the time to possess the greatest advantages, and that cultivation extends afterwards under the pressure of population to less advantageous soils. The advantage may consist in natural fertility, or it may consist in situation, or possibly in other circumstances, and the total advantage can only be determined when we take into account all these factors, of which one may outweigh or be neutralized by another. What the criticism seems especially to show is that the conception of a constant tendency to an increase in rent, which Ricardo had formed, needs considerable qualification. For the progress of society may not only change the situation of different soils with reference to the market where

the produce is sold, by altering the routes, or improving the means of communication and transport, but it may also affect their natural fertility, by substituting one method of cultivation or variety of crop for another. It may lessen and not increase the differences between the advantages of different soils, and it may postpone the diminution in the average return to capital.

It is only by a liberal interpretation that the Ricardian theory can be considered adequate, whether we regard it as an explanation of the past, or a statement of the present, or a prediction of the future. The theory maintains that, viewed from the standpoint of the present, rent is equivalent to the differences between the returns yielded to the application of capital (and labour) to land under the most disadvantageous circumstances and the returns yielded to their application under more advantageous conditions. As a statement of the present, this conclusion seems to be a necessary corollary from the market price of the produce of land ; for that is determined by the expense of production of that part which is produced at the greatest expense, and other producers, realizing the same price, and finding their expenses less, have a differential advantage, which competition for the enjoyment of their position compels them to transfer to the landlords as rent.

The theory is based on the assumption of competition ; and, so far as competition is hindered in its action, it fails to accord with fact. It assumes that landlord and tenant respectively are actuated by competitive considerations alone ; that the landlord endeavours to obtain the highest rent he can, and the tenant the lowest ; that both are independent, intelligent agents, able and willing to carry their wares and services to the best market ; that the landlord will not be influenced by kindly feeling, or political obligation, or long connexion ; and that the tenant produces with a single view to the sale of his produce, and, knowing all the advantages of different soils, and places, and trades,

is able and willing to move, taking with him his improvements or their value, to any soil, or place, or trade, where he will be more favourably situated.

This assumption, however, is seldom completely realized. The system of landlord and tenant is far from being the universal form of tenure; and the influence of custom modifies the action and effects of competition. The peasant proprietor does not cultivate with a single eye to the sale of the entire produce of his land, but he and his family consume part of that produce; and he can only be said to pay a rent to himself, for he is at once landlord, farmer, and labourer. The metayer, again, who is found in districts of Southern Europe, pays a rent, it is true, to a landlord, who furnishes, according to the custom of the district, a varying part of the capital needed for cultivating the land; but the rent is a definite proportion of the produce determined by custom, and not by competition. The Indian ryot, or zemindar, pays his rent in the form of a land-tax to the Government; but this again is fixed for a long period, or in perpetuity, and is regulated to a great extent by custom. Nor does the English landlord exact in every case an extreme competitive rent for the use of his land, and dismiss at once the tenant who will not pay it;¹ while the Irish cottier had practically no other occupation into which he could turn his energies but that of cultivating land, and could not, therefore, compare his earnings with those obtained in other employments. In the first of these two last cases rents are probably on the whole below, in the other they were apparently above, the level which would be fixed by active independent competition on both sides of the contract. In all these instances

¹ Since the War of 1914-18 occupying ownership has in many instances replaced the system of landlord and tenant. Many farmers were eager, or were compelled, to buy their farms. But this was often done with borrowed money, on which interest has to be paid, and the exchange did not prove wholly advantageous.

the assumption of competition is useful as a basis of inquiry ; but it is liable to considerable modification when it is applied to the explanation of actual fact.

But the theory has been criticized on other grounds. It has been said that it is not possible to discover any land which yields ' no rent,' but only the expenses of production and ordinary farming profits. To this the reply has been made that, although a farm as a whole may thus pay rent, the differences in quality of its various portions may be such that part may be considered to contribute nothing in that form. Ricardo himself met the objection by urging that the theory would be equally valid, if there were an application of capital to land which yielded ' no rent.' The last, or marginal, ' *dose* ' of capital applied—to use James Mill's suggestive phrase—yields no more than the expenses of production and ordinary farming profits, and the previous ' doses,' or the ' doses ' applied under more favourable circumstances, yield in comparison a surplus. It may be also urged that, even if there were not any ' no-rent ' land, or ' no-rent ' application of capital to land, yet the rent yielded in some cases might be so small that in comparison it might be properly treated as *nil* ; and that, in any event, differences in relative advantage would exist.

These difficulties have, however, presented themselves in another form. The theory is based on the relative advantages of different applications of capital to land measured upwards from a minimum level where ' no rent,' or next to none, is paid. But it is possible that these advantages may vary at the same or different times, according as the rates of wages and profits vary, and according as land is used for different crops, or cultivated by different methods, or its produce is sent to different markets by different routes or means of communication. The land, which is a ' no-rent,' or inferior, land with reference to one crop, may not be so with regard to another,

and similar considerations apply to the case of different rates of profits and wages, and different markets, and methods of cultivation and transport. Such considerations as these are important ; and they undoubtedly also affect the validity of Ricardo's conception of the causes continually tending to increase rent in the future.

This conception it is which is used to support the socialistic scheme of the 'nationalization of land.' Rent, in the economic sense of the term, it has been urged, is due to the 'inherent qualities' of the soil—to its natural fertility, or its situation with regard to the market ; and it is continually increasing in amount, as population and wealth increase. Why then should not society, or the State as its representative, appropriate for the common benefit this growing fund, which is due to nature or society at large rather than to individual landlords, and tends at present to the advantage of one class of the community at the expense of others ? This is the conception of the 'unearned increment' ; and it is based on the Ricardian theory of rent.

But it is difficult to apply the nice distinctions of that theory to practical affairs. The changing methods of cultivation, and communication with the market, may convert what is at one time an 'unearned increment' into an 'unearned decrement' at another ; and in later years the cultivation of virgin soils in America, and the decrease wrought in the cost of transporting foreign grain, occasioned a serious fall of agricultural rents in old countries like England, and robbed them to a certain extent of the 'natural protection' they may have derived from their proximity to the market, or the quality of their soil.

Ricardo was aware that this would be, for the time at least, the result of the 'discovery of new markets whence provisions' could 'be imported,' and of 'improvements' in agricultural science and practice. But he formed a restricted idea of the extent of these changes ; for, like

Malthus, he was no 'geographer,' and the law of diminishing returns seemed to be rigorously applying to English agriculture. Nor did he recognize sufficiently the benefits of a dense population in permitting division and organization of labour, and, by an increase in the product of industry, allowing of an advance in wages and profits, of the determination of which he seems to have formed too rigid and absolute a conception. Nor, again, did he take into consideration the question of such an application of land to different crops, or uses, that the returns, which were diminishing under the old, might increase under the new application, and the relative advantages of different soils be altered.

Another serious difficulty confronts the proposal to apply to practice the theoretical conception of the 'unearned increment.' How can economic 'rent,' strictly so called, be distinguished from interest or profits? How can the 'no-rent' land which only yields profits, or the 'no-rent' application of capital to land, be identified? How far is the produce of land due to its 'original and indestructible powers,' and how far to the expenditure and labour of landlords and tenants? How far is the 'increment,' or 'decrement,' as the case may be, 'earned' or 'unearned'? 'In popular language,' as Ricardo allows, the term 'rent' 'is applied to whatever is annually paid by a farmer to his landlord'; and, although in his chapter on Rent he is 'desirous of confining' the term to its 'strict sense,' in a footnote to his eighteenth chapter on the Poor Rates he says that 'part' of the capital applied to the 'improvement' of land, 'when once expended,' 'is inseparably amalgamated with the land, and tends to increase its productive powers,' and that 'the remuneration paid to the landlord for its use is strictly of the nature of rent, and is subject to all the laws of rent.' But, although regarded from the standpoint of the present it is a differential advantage in favour of the land in question, and is indis-

tinguishable from 'its original and indestructible powers,' viewed from an historical standpoint, it is 'earned' and not 'unearned.' Carey, indeed, and others, have pushed this historical argument so far as to contend that rent represents nothing more than a return for what has been expended on the cultivation of land in the past; and, although their contention is open to criticism on the ground that some of the outlay on agricultural improvements is expended once for all, and does not recur, and is undertaken with the expectation that the return will suffice, not only to pay the interest, but also to repay the principal, within a limited time, there is no doubt, as Ricardo himself says, that the improvement 'will not be undertaken in the first instance, unless there is a strong probability that the return will at least be equal to the profit that can be made by the disposition of any other equal capital.'

The difficulty of distinguishing that part of 'rent' which is 'earned' from that which is 'unearned' is a crucial difficulty. There may be instances of agricultural land, where the distinction can more readily be established; and it can be drawn with greater ease in the case of urban land, where we find differences of 'economic rent' due to the suitability of different sites for various employments, and to their relative situation, and also differences of rent, in the popular use of the term, due to the expenditure of landlords or tenants on the bricks and mortar of a house, or the improvement of the ground.

But in many, and perhaps most, cases the difficulty of drawing the distinction is very great, and in not a few it seems insuperable. The way in which the conception of an 'unearned increment' has been extended to other forms of wealth besides land, like the possession of fine pictures, or extraordinary business or professional opportunities, illustrates the difficulty. On the one hand these incomes, including wages, may be due in some degree, like rent, to causes apart from the action of their possessors, and on

the other it seems impossible to say how far they are, and how far they are not, thus due. The case is less obscure with regard to land, but it is not clear. As an explanation, therefore, of the action and results of free competition in connexion with land, Ricardo's theory helps to disentangle what would otherwise be very intricate ; but, in its application to practical affairs, it requires great discrimination. The intellectual discipline demanded for a thorough and accurate grasp of its theoretic bearings might well beget a wise caution in practice ; and Ricardo is not alone, or entirely, responsible for the misunderstanding, or misapplication, of his views by unpractical or unscientific followers.

Yet it remains true that the *intelligentsia* of latter-day socialists, discarding Marx, and the theory of the exploitation of labour, to which we have referred,¹ cling, one and all, well-nigh without even a solitary exception, to the captivating idea of 'unearned surpluses,' which should be taken by the State for common use through taxation or otherwise. These, it is held, accrue to classes, or to individuals, that have a 'pull,' or enjoy some 'differential advantage,' over their fellow-members or rival competitors under existing social and economic arrangements and institutions.² But to effect the transfer without blunting the spur to that risk and enterprise, or impairing seriously the strength of one cogent motive for that provision of capital, which, if they are not absolutely indispensable, nevertheless tend generally to promote the common interest, continuance, and progress of society, is no easy or safe adventure. It is a hard knot to relax in actual practice, however seductive its untying may be, or appear, in theory. It may be doubted whether the formidable obstinate tangle will or could be satisfactorily unravelled.

¹ Cf. above, p. 68.

²Cf. below, p. 290.

CHAPTER IV

JOHN STUART MILL. 1806-1873

THE THEORY OF VALUE

Mill's Influence—His Education—The Occupation of his Later Life—His Fairness—The 'Crisis' in his 'Mental History'—Bentham's School of Thought—Mill's 'Awakening' from his 'Dream'—His Sympathetic Nature—His Apparent Inconsistencies—His Socialistic Tendencies—Transitional Character of his Work—Its Merits—The Theory of Value—Mill's Declaration—The Importance of the Theory—The History of its Development—Mill's Exposition contrasted with that given later—The Definition of *Price*—And *Market*—And *Normal Price*—(1) The Theory regarded from the Side of the *Sellers* or *Supply*—*Commercial* and *Industrial* Competition—*Expenses* and *Cost of Production*—*Non-competing Groups*—The Different Classes of Commodities—(2) The Theory regarded from the Side of the *Buyers* or *Demand*—*Final* or *Marginal Utility*—(3) Combination of both Sides—The Four Classes of Commodities: (1) Articles of Rarity—(2) Articles with Unvarying Expenses of Production—(3) Agricultural Produce, and (4) Manufactured Articles—Possibility of Two or more Normal Prices—Mill's Treatment of (1) *Market* Values—(2) *International* Values—(3) The Theory of Distribution—Later Use of Curves and Mathematics—Margins and Marginal Forces

THERE are few, if indeed there were any, writers who exercised a more profound or extensive influence over the general thought and opinion of Englishmen in the second half of the last century than JOHN STUART MILL. Nor is it hard to account for this; for he wrote on a variety of subjects, and, amongst them, on some which concern the highest and most permanent interests of men. The education imparted to him by his father, and described by himself in his *Autobiography*, may well excite astonishment.

He characterized it as 'unusual' and 'remarkable.' His earliest recollections took him back to the days when, a child of some three years of age, he committed to memory lists of Greek words written by his father on cards. From three to seven he was occupied with Greek, history, and arithmetic; and the list of books he read was long and varied. At seven years of age he began Latin, and, about twelve, logic, and, a little later, political economy. He then, in 1820, went for a year to France, and continued the same routine of incessant study. Nor did that end with his return to England, for, he writes, 'my education resumed its ordinary course.' 'I continued my old studies, with the addition of some new ones.' He worked for some nine hours a day, and there can be little doubt that he overtaxed his strength in these early years. Of course he may not, and we may perhaps add that he could not, have entirely assimilated the vast mass of material; but it undoubtedly contributed to increase the variety of the topics on which he afterwards wrote, and to produce the breadth of knowledge with which he handled them.

Among these many subjects of study there were some on which his early attainments were most remarkable, and his later performances promise to be most enduring. These were Logic, Politics, and Political Economy. His father was most interested in these subjects, and laid the greatest stress upon them. James Mill, who is sometimes distinguished as the 'elder Mill,' was unquestionably a remarkable figure of the time in which he lived. He exercised an extraordinary personal influence over his contemporaries; and he is even said to have resembled Socrates in his power of making those who conversed with him sift their ideas, and aim at pure unadulterated truth. It was his habit to take his son for walks, and discuss the subjects which he was studying. The boy made notes on slips of paper of his reading as he went on, and with their assistance he had to give an account of it during these

walks. From the very first he was compelled to think for himself, and his father would never explain a difficulty to him until he had fully realized it, and made a serious effort to solve it. The education, wide as was the ground which it covered, was not mere 'cram,' but it was intellectually stimulating in a high degree.

The occupation of his later life afforded him leisure for abundant literary work. In 1823, when he was seventeen years of age, he obtained a post in the India House, immediately under his father, and he was finally appointed Examiner of Indian Correspondence in 1856, two years before the transfer of the whole government of India to the Crown, and his own retirement. He himself said that there could be no employment more suitable for literary pursuits, and he found his 'office duties an actual rest' from his 'other mental occupations.' They had the additional advantage of making him realize practical difficulties, and of compelling him habitually to put his thoughts into a shape which could be readily understood. To this habit we may attribute in some measure the characteristic lucidity of his writings, and his faculty of giving easy expression to abstract argument.

For a time, indeed, after his retirement from the India House, he discharged parliamentary duties, exchanging, as he himself said, his 'tranquil and retired existence as a writer of books,' 'for the less congenial occupation of a member of the House of Commons.' Gladstone affirmed¹ that, during Mill's presence in Parliament, he was sensible of a 'singular moral elevation' about him; but that presence was comparatively brief, and he was the successful candidate for Westminster at the election of 1865, only to be defeated three years later. He died at Avignon in 1873.

The diversity of his early reading may have had a further consequence beyond those we have noted. At any rate, he was singularly fair-minded. He was conscientiously

¹ In a letter printed in W. L. Courtney's *Mill*.

anxious to do justice to an opponent, and to state that opponent's view in the fairest way, even though he himself were opposed to it, and intended to rebut it. He was ever 'ready,' in his own words, to 'learn and unlearn'; and he showed this in his economic studies by the frankness and completeness with which he abandoned in later life the theory of a fixed 'wage-fund,'¹ on which he had previously insisted. At one period of his early life it was his custom to meet twice a week with other young men, and discuss the books they had read; and he himself attributes to these conversations his 'real inauguration as an original and independent thinker.' His father, moreover, had carefully guarded against encouraging any idea of self-conceit, and had endeavoured to make him feel how little he really knew.

But, were we to stop here, we should have given an inadequate account of his intellectual characteristics. The most important chapter of his *Autobiography* is that in which he describes the change that passed over him at what he terms a 'crisis' in his 'mental history.' He had been brought up by his father in the strictest tenets of a very strict school. The school of thought in which he was trained discountenanced feeling and imagination as mere sentiment, and regarded rigid thought and severe analytical reasoning as alone desirable. It was the school of JEREMY BENTHAM,² and it held that the complex phenomena of society could be explained in the light of a few simple principles. It believed implicitly in representative government. It maintained that the goal of all legislative effort should be the 'greatest happiness of the greatest number,' and that the surest road by which to travel to reach this end was that of reducing governmental interference to the minimum; and of affording to the individual the maximum

¹ See below, pp. 190-191.

² Bentham himself wrote upon economics, notably in his *Defence of Usury* (1787).

of liberty of action and discussion. It declared that the source of all morality was an 'enlightened selfishness,' each man pursuing that course of action which would bring him the greatest pleasure or the least pain, and that the interests of the individual coincided with the interests of the community. It contended that our minds were but 'bundles of sensations,' and our characters the result of the moulding of circumstance. It thought that jurisprudence could be explained by the rigid analysis of a few such terms as sovereignty, right and duty, psychology by the principle of the 'association of ideas,' ethics by that of the 'greatest happiness of the greatest number,' and economics by that of *laissez-faire* and the doctrine of population. 'Euclid was to this school,' as Bagehot graphically wrote,¹ the 'one type of scientific thought.'

In his *Autobiography* Mill describes how, after reading Bentham in a French reproduction, the 'feeling rushed upon' him 'that all previous moralists were superseded, and that here indeed was the commencement of a new era in thought.' Here was 'intellectual clearness,' and here were also 'the most inspiring prospects of practical improvement in human affairs.' 'Now,' he writes, he 'had opinions; a creed, a doctrine, a philosophy; in one among the best senses of the word, a religion; the inculcation and diffusion of which could be made the principal outward purpose of a life.' And inculcate and diffuse it accordingly he did. A little society, called the 'Utilitarian Society,' was formed in the winter of 1822-23, and consisted of young men, 'acknowledging Utility as their standard in ethics and politics,' and meeting once a fortnight for the reading of essays and the discussion of questions. The new *Westminster Review* was the organ of publication to a larger world of those doctrines of utility and other kindred principles, which were afterwards known as 'Philosophical Radicalism.'

¹ *Economic Studies*, p. 156.

But a change came. In the autumn of 1826 he awakened from his 'dream.' It 'occurred' to him 'to put the question directly' to himself: "'Suppose that all your objects in life were realized; that all the changes in institutions and opinions which you are looking forward to, could be completely effected at this very instant: would this be a great joy and happiness to you?'" 'And an irrepressible self-consciousness distinctly answered, "No."' At this his 'heart sank within' him, and 'the whole foundation on which' his 'life was constructed fell down.'

'At first' he 'hoped that the cloud would pass away of itself; but it did not.' On the contrary, it 'seemed to grow thicker and thicker.' 'In vain' he 'sought relief from' his 'favourite books': they could not help him. Nor could he find assistance in his father's advice; for his education, which had been 'wholly' his father's work, 'had been conducted without any regard to the possibility of its ending in this result.' The 'habit of analysis,' which had been the centre of his father's system, had a 'tendency to wear away the feelings,' and needed 'complements and correctives.' 'The pleasure of sympathy with human beings, and the feelings which made the good of others, and especially of mankind on a large scale, the object of existence' might be, and probably were, the 'greatest and surest sources of happiness.' But the knowledge that they were so, which might be disclosed by analysis, did not impart the feelings; and Mill considered rather that he 'was left stranded at the commencement of' his 'voyage, with a well-equipped ship, and a rudder, but no sail,' no 'real desire for the ends' he 'had been so carefully fitted out to work for, no delight in virtue, or the general good, but also just as little in anything else.'

After half a year of this feeling, a 'small ray of light broke in upon' his 'gloom.' He was reading, by accident, Marmontel's *Mémoires*, and he 'came to the passage which

relates his father's death, the distressed position of the family, and the sudden inspiration by which he, then a mere boy, felt and made them feel that he would be everything to them—would supply the place of all that they had lost.' Reading this account, Mill was 'moved to tears'; and from that moment his 'burden grew lighter.' He knew that he had 'feeling,' and that he 'was not a stock or a stone.' And now his 'theory of life' was altered. He now felt that, although 'happiness' might indeed be the 'test of all rules of conduct, and the end of life,' it 'was only to be attained by not making it the direct end.' 'Those only' were 'happy, who' had 'their minds fixed on some object other than their own happiness; on the happiness of others, on the improvement of mankind, even on some art or pursuit, followed not as a means, but as itself an ideal end.' From that time forward he also gave a place 'among the prime necessities of human well-being, to the internal culture of the individual,' and 'ceased to attach almost exclusive importance to the ordering of outward circumstances, and the training of the human being for speculation and for action.' He began to cultivate his feelings, he strengthened the interest he already felt in music, and he took a fresh interest in the poetry of Wordsworth.

The fact was that he had a warm, sympathetic, and emotional side to his nature, and that he now burst asunder the bonds in which his father's stern and rigid system had confined him. The influence of this emancipation made itself felt in all the various departments of his intellectual activity, and tended to produce those inconsistencies, apparent or real, which have been discovered in his writings by the scrutiny of unfriendly critics. The recoil from the narrow creed of his earlier years gave place after a time to a reaction from that recoil, and he endeavoured to reconcile the new faith he had gained with the old, and to combine the more tender and human doctrine

with that which was more severe and more rigidly abstract.

He may not have been always successful in the attempt. He introduces elements into his philosophy which some critics have held to be really destructive of the basis on which it is ostensibly founded. The theory that character is due to the moulding of outward circumstances is qualified by the reflection put forward in his *Logic*, which was published in 1843, that we may ourselves help to shape those circumstances. The theory that the morality of actions is tested by the amount of pleasure or pain that results is modified by the conception introduced into his *Essay on Utilitarianism*, which was published in 1863, that there may be differences of quality as well as of quantity in pleasures, and that some may be higher than others. And similarly, in politics and political economy, he no longer holds in an absolute form the belief that the goal of all legislative effort is to be entire liberty of action for the individual, and non-interference on the part of the government; but he now says that the 'admitted functions of government embrace a much wider field than can easily be included within the ring-fence of any restrictive definition'; and that 'it is hardly possible to find any ground of justification common to them all, except the comprehensive one of general expediency, nor to limit the interference of government by any universal rule, save the simple and vague one that it should never be admitted but when the case of expediency is strong.'

Mill's economic writings, indeed, might be said to be coloured by a diluted socialism, and he himself states that he was influenced by the socialistic literature of the 'St. Simonian school in France' at the time when he was passing through the 'crisis in' his 'mental history.' In his *Principles of Political Economy* he draws a distinction,¹ which he says he was the first to establish, between the

¹ Cf. below, p. 271.

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laws of the production of wealth, which form the subject of his first book, and the laws of its distribution, which are discussed in the second. The first are 'real laws of nature, dependent on the properties of objects,' and cannot be modified; but the second are only the 'necessary consequences of particular social arrangements,' and are 'liable to be much altered by the progress of social improvement.' And so he 'looked forward to a time' when a social order would prevail unlike the existing economic regime. 'The social problem of the future' would, he considered, be how to 'unite the greatest individual liberty of action, with a common ownership in the raw material of the globe, and an equal participation of all in the benefits of combined labour.' This socialistic tendency seems to have been partly due to the influence of Mrs. Taylor, who became his wife, and he himself states that the distinction between the laws of production and those of distribution was made at her suggestion. The affection which he felt for her amounted to a reverence which was almost extravagant; and it is a sure indication of the strength of the emotional side of his nature.

We may define his position in the history of English political economy by saying that his work seems to mark a transitional stage. He was, in a sense, if we may give an interpretation to the phrase which differs slightly from that in which it was originally applied,¹ the *Secrétaire de la Rédaction*, systematizing and arranging the ideas of his predecessors in his five books on Production, Distribution, Exchange, the Influence of the Progress of Society, and the Influence of Government, so as to form one great whole; and he sometimes spoke of Ricardo 'with the piety of a disciple.' But he imported a human element into Ricardo's abstractions; and he stated his theories more guardedly, and supplemented them by many qualifications. In his own early *Essays on some Unsettled Questions*

¹ Cf. Bagehot's *Economic Studies*, p. 19.

of *Political Economy*, which were published in 1844, but written in 1829 and 1830, he had formed the idea of constructing a theoretical science which should be rigidly abstract; but when he published his great book in 1848 he had moved away from this conception. Its title is: *Principles of Political Economy with some of their Applications to Social Philosophy*, and he states in the preface that its 'design' is 'different from that of any treatise on Political Economy which has been produced in England since the work of Adam Smith.' 'The most characteristic quality of that work' is, he maintains, 'that it invariably associates the principles with their applications,' and, in these applications, Adam Smith 'perpetually appeals to other and often far larger considerations than pure Political Economy affords.' The note thus struck in the preface is dominant throughout, and the reforming zeal which characterizes Mill's applications of his principles to social practice may be held responsible for some of his apparent or real inconsistencies, as others may be traced to the changes which he made in successive editions.

His general attitude, then, is transitional, and his treatment is wanting in finality. Critics have urged that the tendency to socialism manifested in some of his chapters is inconsistent with his strenuous support of a system of peasant proprietors in others, and they have declared that the position he takes up¹ in his fifth book 'on the influence of government' is lame and halting. But his work has its conspicuous merits as well as its drawbacks. There may be some inconsistencies, and the theory may not always be fully developed, or the facts be entirely harmonious with the theory. But the inconsistencies are often more apparent than real, and the whole book is marked by a tone of moral elevation, a contagious enthusiasm for human improvement, and an inspiring belief in the possibility of accomplishing that improve-

¹ See the passage quoted above on page 92.

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ment, even though it be by gradual stages. It brings an element of humanity to bear on subjects which had sometimes received a dry, unsympathetic treatment; and, partly in consequence of this very element, it suggests some of the ways in which the older doctrines may be qualified and amended.

~~On one point however, with a confidence which was unusual in him, Mill claimed to have attained finality.~~ This was the theory of value, which he expounded in his third book. 'Happily, there is nothing,' he writes, 'in the laws of Value, which remains for the present or any future writer to clear up; the theory of the subject is complete; the only difficulty to be overcome is that of so stating it as to solve by anticipation the chief perplexities which occur in applying it.' If these remarks are understood in a liberal sense, they may be regarded as substantially true; but the interpretation must needs be so generous as to amount to looseness. Mill's exposition of the theory remains unshaken in some fundamental bases; but he stated it better than his predecessors had done, and here, as elsewhere, supplied many of the necessary qualifications of their doctrines. It contains some of his best and most enduring work. But in certain respects it also illustrates the transitional nature of his thought. Considerable developments have been made since he wrote, and he never brought his theory of distribution into harmony with his theory of value. With a firm recognition of its great importance he did not grasp the conception, now prevalent, of a central theory of economics applicable to the exchange of commodities and of services in domestic and international markets.

He was, however, fully sensible of its importance, for he stated that the 'question of Value is fundamental' in modern industrial society. 'The smallest error on that subject infects with corresponding error all our other conclusions; and anything vague or misty in our conception

of it creates confusion and uncertainty in everything else.' If, then, we desire to determine the position occupied by Mill in the history of English economics, and to gain an appreciation of the character of his work, we can hardly select for examination a better example of his method than his treatment of what he himself describes as a 'fundamental' question, and other writers, before and since, have regarded as the central part, or even the whole, of political economy. That examination may be conveniently conducted by reviewing the theory as presented later, and discovering how much of that presentation may be found in Mill himself, and how much was due to other and subsequent writers.

As we saw, when we were considering the work of Adam Smith,¹ the division of labour implies a market, and exchanges in that market. The question at once offers—on what terms will these exchanges be effected? How much must a man give of his own goods in order to obtain a certain amount of the goods of his neighbours? How much of those goods can be obtained in exchange for a certain amount of his own? Here it is that the theory of value comes in, for the value of a man's own productions, or possessions, is measured by the amount of the productions, or possessions, of other people which can be obtained in exchange for them, and the value of the productions, or possessions, of other people is measured by the amount of his own which he will give in exchange; and the economic theory of value is based on an inquiry into the conditions and circumstances which influence and determine the transaction. The outline of such an inquiry is to be found in the *Wealth of Nations*, and this has even been called the 'chief work' of Adam Smith. The outline was more sharply defined by Ricardo and his followers, but it was left for Mill to fill in much of the necessary shading. As the theory left his hands it had many or most of the essential

¹ Page 22 etc.

details of a finished drawing, and the work of succeeding writers, like Jevons and Cairnes, mainly consisted in bringing some one of these into greater prominence. A later treatise¹ of great repute could rightly be described as an attempt to restore the due proportion to these details, and to produce a harmonious and unified presentation of the whole picture.

On both sides of the exchange, then, there are persons, and there are commodities; and from one point of view each of the persons is a buyer, as he is a seller from another. He buys the goods of the other party, and he sells his own. But, in order to avoid inconvenience, the transaction is generally effected by means of money; and similarly, from the point of view of economic theory, it is easier to look at one side only at a time. And so for the term *value* it is convenient to substitute the term *price*, by which, as Mill points out, the 'value of a thing in relation to money' is meant, and to regard the party offering the money as a *buyer*, and the party offering the goods as a *seller*.

The theory of value assumes that the exchange is freely made, and that competition is active on both sides; and, after Mill wrote, the term *market* was defined with greater exactitude by Jevons as expressing, not necessarily a particular locality, but a district stretching, it may be, over one country or more, where, as regards any particular trade or commodity, competition is fully and freely operative, communication is easy and rapid, all sellers know the terms on which other sellers are selling, and all buyers are acquainted with the conditions under which other buyers are purchasing. A *market*, in the economic sense of the term, is a sphere within which there is only one price for the same amount of the same quality of the same commodity; and the assumption of perfect competition which this definition implies has been brought into more distinct prominence since Mill's time.

¹ Marshall's *Principles of Economics*. Cf. below, p. 287.

In such a market, again, it is assumed that there will be a *normal* or *natural* price. There will be a price at which the competition of buyer with buyer, and seller with seller, will be always tending to make buyer and seller arrive. There may be temporary deviations from that price ; but, so long as competition is active, it must be the centre to which these deviations tend to return. The theory of value was considered by Mill to be concerned in the main with the influences affecting this *normal* price ; but the later course of economic inquiry distinguished with greater emphasis than he employed the temporary or *market* from the *normal* or *natural* price ; and it also exhibited the mutual influence exerted by the one on the other.

The forces affecting this *normal* price may be regarded from the side of the sellers, or from that of the buyers ; and, to make the theory complete, the results separately obtained must be combined together. Later economic study tended to show the advantage of dividing the inquiry, but also to emphasize the mutual dependence on one another of the influences operative on either side. It laid greater stress on those affecting the buyers than Mill himself was inclined to do ; for, like his predecessors, he devoted more pains to investigating the motives determining the action of sellers.

The obvious fact with regard to the *sellers* is that they will not continue to produce at a loss. They will endeavour to realize such a price at least as will cover the cost they have incurred in order to place the goods on the market. They will, it is true, individually be anxious to secure a higher price ; but, assuming that competition is active, were one of their number to endeavour to obtain this higher price, his competitors would, in their anxiety to secure a larger proportion of the custom, offer to sell at a lower price, and underbid him. He would be forced to bring down his price to their figure, and this would be the lowest price which would not result in loss. If it were

higher, fresh capital and labour would flow into the trade in pursuit of these advantages, and, in their eagerness to secure part of the custom, the new producers would offer successively at lower figures until they reached this point. For the competition assumed in the theory is not merely that of dealer with dealer, but also that of producer with producer; and Cairnes, who emphasized the distinction, defined the two varieties respectively as *commercial* and *industrial* competition. The *normal* price, then, is that which will recoup the *cost of production*. It cannot be lower in the long run, for producers will not continue to produce at a loss; and it cannot be higher, for otherwise fresh competitors will enter the trade.

Later economic study disclosed advantage in the substitution of the term *expenses of production* for that of *cost of production* which Mill employs; and that advantage appears on an analysis of the terms. By the term *expenses of production* is meant such remunerations for the effort of labour, and the abstinence, or postponement, of enjoyment, implied in the accumulation of capital, required for the production of the commodity, as are considered to be *normal*. It implies *wages* and *profits* paid to the workmen, and to the employers and capitalists, who have co-operated in the production of the commodity, of such an amount that, were they lower, some workmen, and some employers and capitalists, would withdraw their labour and capital from this particular trade, and seek more advantageous employment elsewhere, and, were they higher, some workmen, and some employers and capitalists, would leave some less advantageous industry and seek employment here. In the term *profits* are included the profits of the producer himself, and of all who have in any way contributed to the production of the commodity. The term *wages* is employed in a similarly comprehensive sense; and the *expenses of production*, which the *normal* price must recoup, comprise also such occasional items as

taxes and the like. Nor should it be forgotten that the expectation of competition from outside is often sufficient to lower the price. The fresh capital and labour need not actually come into the industry : it is enough that producers expect that it will.

So far Mill's analysis of what he calls the *cost of production* is in general agreement with this account, although he did not explicitly draw the distinction between the employer and the capitalist, specially emphasized since his time by the American economist Francis Walker, or lay any such stress on the separate importance of the component parts of what is commonly understood by *profits*. But he seems to have used the term *cost of production* in two senses. Sometimes it means the money wages and profits of different occupations, and sometimes the actual effort of labour, and abstinence from expenditure, or postponement of it, of which these wages and profits are the money rewards. Later economic inquiry explicitly distinguished these two meanings ; and the term *expenses of production* was introduced to mark the former, and the term *cost of production* confined to the latter meaning. This correction of Mill's phraseology was due in a large measure to the emphasis laid by Cairnes on the fact that, if *industrial* competition is not fully realized, wages and profits in different occupations may not be an equivalent reward for the labour incurred, and the abstinence from expenditure, or the postponement of it, undergone by workmen and capitalists¹ in their respective trades. Some workmen may earn more, and some capitalists less, than others in return for the same amount of effort and abstinence or postponement. There may be *non-competing groups* of labourers, between which competition is not thoroughly active, and labour does not freely move, leaving the less and passing into the more advantageous occupations.

¹ Cairnes did not distinguish between employers (as such) and capitalists (as such).

On this point Cairnes, following with apparent unconsciousness in the steps of Mill, who had noticed the fact, divided industrial society into four rough grades ; but later inquiry compared it rather to a staircase with different landings. There may be grades of industry, and sub-divisions of those grades ; and between the sub-divisions in each grade labour may move with comparative freedom, but not between the grades themselves. The professional classes may, for all practical purposes, be a *group* with which, save in exceptional cases, skilled workmen do not compete. They could not enter the professions, if they would ; for they have not the requisite education or social position. Nor again can there be any doubt that one of the most difficult barriers to pass is that which in modern industrial society separates the skilled artisan from the unskilled labourer. And similarly, though this point was not noticed either by Cairnes or by Mill, who failed to distinguish the functions of the employer as such from those of the capitalist, large capitalist-employers may have a certain advantage over their smaller rivals which is not removed by competition. The difficulty of administering larger amounts of capital may not increase proportionally to the increase of that capital ; and yet, as Sidgwick showed,¹ it was generally held that the component parts of profits advance and decline equally with one another, and that the *wages of superintendence or earnings of management*—the remuneration, that is, of the employer, as such—vary with the amount of capital administered and *interest* received.

In these cases, where competition is not sufficiently powerful to remove, or pass over, the barriers which intervene between different *groups*, the real *cost of production* may differ from what are now distinguished as the *expenses of production*. But here, as before in the case of *price*, money must be employed for purposes of comparison. It

¹ *Principles of Political Economy*, bk. ii. ch. ii. sec. 8.

is impossible to compare directly effort with effort, or abstinence with abstinence, or postponement with postponement : they can only be compared indirectly through the money remuneration they usually secure. The *normal price* of a commodity, therefore, is now said to represent its *normal expenses of production*.

The term *expenses of production* requires, however, further analysis ; for the circumstances and conditions of production may vary in the case of different commodities. There may be some of which the expenses *do not vary with the amount produced*. It might be difficult to name any particular commodities of this class, and Mill's description of the conditions of their production was not very explicit. But undoubtedly there are commodities which belong to the other two classes which he distinguished. There are *articles of rarity*, such as fine pictures and scarce books, which are limited in quantity ; and there are commodities, like *agricultural produce*, of which beyond a certain point, owing to the operation of the law of diminishing returns, an increased amount can only be produced at an *expense per item which increases more rapidly*. There is, lastly, a class of commodities which Mill might have done well to substitute for that which was mentioned first. It consists of commodities, such as *manufactured articles*, a larger production of which means a *decreased expense per item*. Division of labour can be pushed to a greater extent, and various economies effected.

In the last two cases the *expenses of production*, which will determine the *normal price*, will be those of that portion of the commodity for which there is a demand, the *expenses of production* of which are the greatest. This will be so ; for, were it not, some producers would fail to clear their expenses, and would be tempted, or compelled, to abandon production. As respects these two cases, then, which comprise the majority of commodities, a larger production implies, from the point of view of the seller, in the one a

higher and in the other a lower price, and diminished production *vice versa* in the one a lower and in the other a higher price. And so, before we can determine these *marginal expenses*, as we may call them, or expenses on the *margin* of production, which the *normal* price must recoup, we must know the quantity of the commodity which is demanded. We are forced to inquire into the circumstances affecting *demand*, and to investigate the *buyers'* side of the question.

It is on this side that the later development of the theory was most marked ; and Mill did not give adequate recognition to the influence of demand on the circumstances of supply. He was aware that the chief condition, which was needed to occasion a demand for a commodity, was that it should possess some *utility*, and conduce to some purpose, or satisfy some desire. If indeed it could be obtained for nothing, and its production involved no expense, no one would be willing to give anything in exchange for it. But, supposing that it cost something to produce, and presented some *difficulty of attainment*, it was still necessary that it should possess some *utility*. It was according to this *utility* that the demand varied ; for, the greater the utility, the greater would be the demand, and, the less the utility, the less also would be the demand. Buyers would give more for what they wanted, and less for what they did not.

The general law, which regulates demand, was recognized by Mill ; but it has since been stated with greater precision, and developed more fully. It is that, the larger the quantity a man already possesses of a commodity, the less is likely to be the *utility* to him of an additional quantity. The less he is willing to give of other commodities in exchange for it ; and, therefore, the larger the supply of any commodity, the lower, from the point of view of the buyers, is likely to be its price. The suggestive expression *final utility* was used by Jevons to illustrate this obvious inclination of human nature, and the alternative expression

marginal utility was substituted by more recent writers.¹ By the *final* or *marginal utility* of a commodity is meant the utility of it as measured by that of just that last portion for which the buyer is willing to give the price asked rather than go without it. If the price were slightly raised, he would prefer to dispense with that last portion; and, if it were lowered, he would purchase a little more. The whole of the commodity which is bought has a value or utility to the buyer; and this was what Mill called its *value in use*. It denotes the total amount of satisfaction derived from its enjoyment, or, in other words, its *total utility*. But this particular last portion has a particular value, by which the *final* or *marginal utility*, or, as Mill would call it, the *value in exchange*, of the commodity, is determined. It is this *final utility* which determines the *normal price* from the side of the buyers.

From the point of view, then, of the sellers, the *normal price* represents the *expenses of production*, and these vary in most cases with the amount demanded. From the point of view of the buyers it represents the *final* or *marginal utility*, and this varies with the amount supplied. In the majority of instances, accordingly, demand and supply are mutually determined, and Mill did not recognize this interdependence with sufficient distinctness. But there are some cases in which they are not thus determined.

If the *expenses of production* of a commodity are fixed in the sense that no more of it can be produced, its price will be determined from the point of view of the buyers rather than that of the sellers, by the influences affecting demand rather than those affecting supply. The sellers will not, indeed, willingly consent to receive less than will cover their *expenses of production*; but, so far as fresh competition on their side is concerned, they may obtain a much

¹ e.g. Marshall and the Austrian economists. Cf. below, p. 205. The idea was anticipated by W. F. Lloyd in 1833 in a lecture (reprinted in the *Economic History Supplement* of the *Economic Journal* for 1927).

higher figure. The price will depend on the *final* or *marginal utility* of the commodity to the buyers. They will not pass beyond this point, but they may be compelled to go as far. They may be forced to offer as much as they would be willing to give rather than dispense with the commodity. This is the case with *articles of rarity*, such as fine pictures, or sculptures, or old books; and Mill's explanation of this class of commodities may perhaps be thought adequate, although it had not the advantage of the more precise detailed analysis of the action of monopoly by later writers.¹

If, again, the *expenses of production* of a commodity are fixed in the sense that any additional amount of it can be produced at an *unvarying expense per item*, the price will be determined from the side of supply, and all that demand will do is to settle the amount produced. The price cannot rise above, or fall below, the *expenses of production*, so long as competition is freely and fully operative. It was to this class of commodities that Mill accorded a very large space in his exposition; and hence, possibly, it was that he gave too exclusive an emphasis to the influence of *cost of production* on the normal price. For the sake of theoretical completeness such a class should be considered, but it would be difficult in practice to discover the commodities belonging to it. The error of Mill seems to have lain in his failure to make an explicit application to the theory of value of what he had elsewhere shown to be the advantages attending the increased production of manufactures.

The largest classes of commodities are probably those of which the *expenses of production per item diminish or increase with the amount produced*, and it is, as a rule, under the first of these two classes that those *manufactured commodities* should be properly placed, which Mill put into the class which has just been considered. The second of the two classes includes, as a rule, *agricultural produce*. In the case of both classes, the *normal price* is the result of

¹ Cf. below, p. 298.

the mutual play of demand and supply. In either case, from the standpoint of the buyers, the law of demand holds good that, the greater the amount of the commodity offered the less, as a rule, will tend to be its *final* or *marginal utility*, and the lower its price; and, on the other hand, the smaller the quantity offered for sale, the greater will tend to be its *final* or *marginal utility*, and the higher its price. But the question becomes more complex when it is regarded from the standpoint of the sellers. In the case of *manufactured commodities* the *expenses of production per item* tend, as a rule, to diminish as the amount produced increases; and, therefore, the greater the amount demanded, the lower will be the price at which each item can be offered for sale, and, the smaller the amount demanded, the higher must be the price. In the case of *agricultural produce* the circumstances of production incline, as a rule, in the opposite direction, and the resulting conditions of sale are altered. In both cases, then, varying considerations have to be taken into account, and all that can be positively stated is, that the *normal price* must be such as to equate the demand with the supply forthcoming at that price.

This *normal price*, then, is not one single price; for the quantity supplied, as well as the quantity demanded, may alter with it. At a higher price less of the commodity might be demanded, for its *final* or *marginal utility* would diminish; but, if the commodity belonged to the class of *manufactured commodities*, the *expenses of its production* might also be such as to necessitate, with a decreased production, a higher price, and thus the new price might, like the old, represent the *marginal expenses of production* to the sellers, and the *marginal* or *final utility* of the commodity to the buyers. At a lower price, again, the buyers might be willing to purchase more, and this extension of demand might permit of diminished *expenses of production per item*, for it might allow of increased division of labour

with its attendant advantages. And so here again the price might represent the *marginal expenses of production* to the sellers, and the *marginal* or *final utility* of the commodity to the buyers. But it would be a different price from that realized before, although, like that, it would be a *normal* price. Later economists drew a distinction more explicitly than Mill had done between an *extension* of demand of this nature, resulting from a fall in price, and a *rise* of demand betokening an increase in the amount demanded of the commodity at a given price. Mill did not state this distinction with such explicitness, or emphasize the possibility of two or more *normal* prices ; but he seems to have been conscious of the distinction, and in his exposition of international value he definitely recognized the possibility. The work of later writers often consisted in rendering explicit what was only implicitly contained in his exposition.

Much of that work, however, was of importance ; and it helped to accomplish what Mill himself failed to effect. He did not realize, or at any rate he did not exhibit, the harmonious development of the theory of value in its full and varied application. He laid the foundations and in the main he laid them truly and well ; but he did not rear the complete superstructure. His work was transitional.

He recognized, for example, the existence of *market* values as affected by temporary and special circumstances ; and he instituted an instructive comparison between value and the sea, which, with a surface which is 'always ruffled by waves, and often agitated by storms,' 'everywhere tends to a level,' and 'never is at an exact level.' But he did not show, what later inquiry emphasized, the interaction of *market* and *normal* values. They are chiefly distinguished by the comparative length of the periods of time over which they extend ; but the starting-point of investigation must in either case be the mutual play of *demand* and *supply*, and it is only by analysing supply

that we reach that *cost of production*, which was given so prominent a place in Mill's exposition as the determining cause of *normal value*. He did not display adequately the influence of demand, the law of which is similar for *market* and *normal values*.

Nor, again, did he fully recognize the closeness of the connexion between the theories of *domestic* and *international* value. His treatment of the two is distinct, and yet the play of demand and supply must be present in both, and furnish the starting-point of investigation. Nations, it is true, so far as the movement of labour from the less to the more advantageous employment is concerned, are peculiar examples of *non-competing groups*; but capital exhibits every year less unwillingness to migrate from country to country, and the idea of *non-competing groups* is not in fact foreign to markets confined to the geographical limits of a single country. The tendency of subsequent inquiry was to show the similarity of the two theories, and to discover the operation of similar laws in both, although the particular conditions of their application may differ, and the *cost of carriage* to the market be a more important element in international than in domestic trade.

Thirdly, and lastly, Mill did not apply his theory to the exchange of services. He did indeed extend the application of it step by step from other commodities to money, and from money in domestic trade to money as a factor of the foreign exchanges; and the development thus traced in the successive chapters of his third book was admirably systematic. Nor are his allusions to wages and profits in these chapters open to much criticism; but he never brought the theory of distribution of his second book into harmony with his theory of value. Later inquiry took this important step, and showed how the theory of value applied to the determination of interest, profits, and wages, as well as prices. The terms on which capitalists will exchange their capital for the labour of employers and

workmen, and the terms on which employers and workmen will exchange their own services in the production of wealth for those of one another, were held to be determined by influences affecting demand and supply. There were *market* rates of interest, profits, and wages, due to transient and special circumstances, and extending over periods of time which are relatively short; and there were *normal* rates, to which these *market* rates tended in the long run to conform.

A capitalist will not obtain a higher rate of interest for the loan of his capital than that which represents the *marginal utility* of the capital to the borrower; and he will not in the long run be content with a lower rate than that which will satisfy the postponement of enjoyment which its accumulation has involved. A skilled workman will endeavour in the long run to secure for his services a wage which will repay the *expenses of production* of his skill—the expenses, that is, of his rearing and training—and, if he did not succeed in this endeavour, the supply of skilled workmen would in time fall off. But the employer on his side will not be willing to give higher wages than those which represent the *marginal utility* of the service to him, and the position of the workman and the capitalist with regard to his earnings of management will be similar. The more scarce, again, a service is, and the greater its *utility*, the higher will be the reward it will tend to secure; and the smaller its *utility*, and the more abundant it is, the lower will be its reward.

The *normal prices* of services are thus, like those of commodities, determined by the mutual play of demand and supply; and among the influences affecting supply the *expenses of production* occupy a predominant place. Perhaps the main defect of Mill's exposition was his failure to recognize this; although the fact should never be forgotten, which his separate treatment tended to emphasize, that there are elements connected with human

feelings and affections in the exchange of services which do not enter into the exchange of inanimate commodities.

The employment by some later writers of actual mathematical technique and even the practice by others as well as by them of using geometrical curves in expounding the theory of value and its various ramifications may bring certain advantages which Mill's statement, as we have summarized it, failed to secure. Greater nicety of precision may have been thus reached, and lurking unsuspected error disclosed or avoided. The reasoning may be made more close and firm. Such a conception as the mutually determining influence of demand and supply—with their action and reaction on one another—could, it would appear, be demonstrated with more neatness by such means. But there are also attendant drawbacks. The first procedure—involving the use of mathematical terms or language—is likely to scare those who cannot abide formidable or unfamiliar apparatus. And even the second convenient instrument of graphic illustration, which may be allowed to bring out what would otherwise escape ready detection or be less fully and distinctly recognized, may also foster the misleading excess of assimilating too nearly the conduct of men, women, and children with transactions in lifeless goods.¹

A further point in later discussion of the theory of value needs some allusion. The determining influence of what have been expressively called 'marginal' forces has been traced and developed; and crucial stress has been laid on small increases and diminutions of demand and supply proffered and withdrawn at the 'margin' of purchase and sale, where there is hesitancy about use or production, to be resolved by minute changes of price. This account sheds light on the conditions and circumstances of competitive marketing, and is in broad correspondence rather

¹ Cf. below on the mathematical treatment of economic theory, p. 277, etc.

than conflict with usual dominant fact. But a difficulty sometimes arises which must be made plain; and a distinction should be brought about between the action of the forces or influences which tend to fix the position from time to time of such 'margins' and the forces and influences that operate supposing the 'margins' to have been already fixed. Movement is, in fact, continually happening, it would seem, concurrently, with regard to both; but they need, it would also appear, to be separated in thought, if the distinction be fine. We will give illustrative instance. At any particular moment, we should argue, the price from the side of supply should tend to meet the expenses of production of those whose goods are required to satisfy the existing demand, and whose expenses are the greatest; for they will not, or cannot, continue to produce and sell at a loss, and presumably the buyers want to have their goods and are prepared to pay the necessary price. But it is also conceivable that they may be displaced at the margin by others who can produce more cheaply than they can and drive them out of the market. This means change in the 'margin' and an altered 'marginal' price. Or again, under certain circumstances, the movement may take a reverse direction, and the 'margin' of profitable production and sale be raised and not lowered. The distinction remains then of influences at work fixing the determining positions and forces operating when those positions have been determined.¹

¹ Cf. below, p. 292. It was to meet a theoretical crux of this character that the conception of a 'representative firm' was introduced; for otherwise it might appear as if the whole supply would come into the hands of the largest firm which, by availing itself of increasing returns, would produce most cheaply. Professor E. R. A. Seligman, in his *Principles of Economics*, brought out clearly the distinction noted.

CHAPTER V

JOHN ELLIOTT CAIRNES. 1823-1875

THOMAS EDWARD CLIFFE LESLIE. 1825-1882

ECONOMIC METHOD

Mill's Predominance—His Successors and Critics—Cairnes' Life—His Courageous Endurance of Physical Pain—The Character of his Writings—Their Defects—His *Slave Power*—His *Essays on the Gold Question*—His Deductive Method of Investigation—Cliffe Leslie's Life—His Criticism of the Deductive Method—The Advantages of both Methods: (1) The Abstract and Deductive, (2) the Inductive and Historical—The Relation of Economics to Sociology—The Special Advantage of the Historical Method in placing in their Right Setting the 'Exploded' Theories of the Past—The Usury Laws

IN the last chapter the position of Mill in the history of English Economics was brought under review. We saw that his work was transitional; and that the theory of value, which he held to be 'fundamental,' and to be presented in its final shape in his treatise, had since been criticized from various standpoints, and developed in different directions. For some years, however, after the publication of his *Principles*, it seemed as if his exposition of political economy, like that of Ricardo before him, would be unquestioned. Bagehot described¹ his influence as 'monarchical,' and remarked that modern students, instead of beginning with the older economists, approach them through the medium of Mill, 'and see in Ricardo and Adam Smith what he told them to see.'

¹ *Economic Studies*, p. 215.

But, after a lapse of some twenty years, his supremacy was disturbed. The assault came from various quarters, and was not in every case intended. Mill himself in 1869, in a review of W. T. THORNTON'S book *On Labour*, abandoned¹ the wages-fund theory, which he had previously accepted and explained. Jevons in 1871 published a *Theory of Political Economy*, in which he expounded, and illustrated by the aid of mathematics, that conception of 'final utility' which was noticed in the last chapter. He supplemented rather than refuted Mill, but he represented his own position as widely divergent; and, in a preface to the second edition of his book, he declared that he was 'ever more clearly coming' to the 'conclusion' 'that the only hope of attaining a true system of Economics' was 'to fling aside, once and for ever, the mazy and preposterous assumptions of the Ricardian school.' 'That able but wrong-headed man, David Ricardo, shunted the car of Economic science on to a wrong line, a line, however, on which it was further urged towards confusion by his equally able and wrong-headed admirer, John Stuart Mill.' In 1874 Cairnes issued a book on *Some Leading Principles of Political Economy newly Expounded*, in which he, like Jevons, supplemented Mill's theory of value, especially by the emphasis which he laid on that conception of 'non-competing groups' which has already been explained.² But, like Jevons also, he represented Mill's attitude on some points as approaching absurdity, although he avowed himself to be his disciple. In 1870 Cliffe Leslie began a series of attacks on the abstract Ricardian method from the general standpoint of the German historical school of economists; and, finally, in 1876, in some articles in the *Fortnightly Review*, which were published, together with other material, after his death in *Economic Studies*, Bagehot sought to limit the application of the Ricardian theories

¹ See Mill's *Dissertations and Discussions*, vol. iv. pp. 43, etc.

² Cf. above, p. 101.

to the facts of business life in large trading communities like England.

In these various ways the predominant influence of Mill was impaired ; and the fabric, which had been cemented together by him, and built on the foundations laid to some extent separately, and to some extent jointly, by Adam Smith, Malthus, and Ricardo, was closely inspected, unsparingly tested, and partly reconstructed. The period was thus one of development and criticism ; and although Fawcett, in his *Manual of Political Economy*—originally published in 1863 before Mill's pre-eminence had been disputed—was content to reproduce in the last of the six editions through which it successively passed during his life very nearly the same summary of Mill's *Principles* as that which he had furnished in the first, in this respect he stood outside the general line of development of economic thought. Happily it became possible to gather up and combine into a fresh, orderly, and harmonious whole such results of the criticisms and extensions of Mill's doctrines as could be considered to be approved. This work was, in fact, attempted and achieved especially by MARSHALL in his *Principles of Economics* ; and it was also the aim and desire of SIDGWICK and NICHOLSON.¹

The contributions made by two of Mill's successors to the advancement of economic study will occupy our attention in the two following chapters. In one ² we shall examine that description of banking and the money market, with which the name of Bagehot is associated ; and in the other ³ we shall give an account of the work of Jevons on that statistical side of economics, to which he felt himself most powerfully attracted. The present chapter will be especially concerned with the discussion of the method appropriate to economic inquiry ; for such a discussion will naturally arise in connexion with the writing of Cairnes and Cliffe Leslie. They occupied the

¹ Cf. below, Chapter XI. ² Chapter VI. ³ Chapter VII.

opposite poles of the question, and the one was a supporter and example of the deductive, while the other was an advocate and illustrator of the inductive or historical method.

The life of JOHN ELLIOTT CAIRNES furnished a remarkable instance of the power of a resolute will to overcome physical difficulties. During his later years he suffered from a malady, of which the severity continually increased, and death was the only possible termination. He was born in Ireland, in County Louth, in 1823, and, after leaving school, spent some time in the counting-house of his father's brewery. His tastes, however, inclined in another direction, and he entered Trinity College, Dublin. He then engaged in the study of law, and was called to the Irish Bar, but for many years he was chiefly occupied in writing articles for the press. He devoted great attention to Political Economy, and made the acquaintance of ARCHBISHOP WHATELY, who himself had been Professor of the subject at Oxford,¹ and had founded a chair in Trinity College. In 1856 Cairnes was appointed to this chair, and then in 1859 and the following year he wrote a series of articles on the probable results of the recent discoveries of gold in California and Australia. In 1859 also he was appointed Professor of Political Economy in Queen's College, Galway; and a course of lectures delivered in Dublin formed the basis of a book on *The Slave Power*. It was published at a critical juncture in the American Civil War, and, although opposed to the general drift of influential opinion in England, secured wide repute. In 1865, when he was forty-two years of age, his illness began with an attack of inflammatory rheumatism, from which a speedy recovery was at first confidently anticipated. But these hopes were disappointed, and the disease steadily advanced. In 1866 he was appointed

¹ Whately's *Lectures* were published in 1831. He proposed to call Political Economy 'Catallactics, or the Science of Exchanges.'

Professor of Political Economy in University College, London; but he was compelled to pass the session of 1868-69 in Italy, and in 1872 to resign the chair. In 1875 he died at the early age of fifty-two.

The disease from which he suffered was one of which the intensity was constantly growing, and it was impossible to foresee the full extent. It was a malady of the most discouraging nature. Joint after joint was attacked, and the movement that could barely be effected one month was not feasible the next. First Cairnes would walk, we are told,¹ with the aid of crutches; then he would be wheeled in a chair; then the shaking of the chair would become intolerable, and he would only be carried out now and again into his garden. At last even this was abandoned, and for some time before his death he never left the house at all. He was gradually reduced to a state of helplessness more complete than that of an infant.

And yet these years of intense physical suffering were years of great intellectual activity. During this period he prepared and published his largest work on *Some Leading Principles of Political Economy*; and he collected and rearranged his scattered writings in two volumes, one of which was entitled *Political Essays*, and the other *Essays in Political Economy, Theoretical and Applied*. He preserved such 'charm' of conversation, 'vivacity, and humour,' that his friends used to reserve their choicest jokes for him, feeling sure that he would evince the keenest relish in them, and looked forward to their talks with him as some of the brightest moments of their lives. His interest in contemporary politics was vividly maintained, and he united with this a power of abstract reasoning, which has seldom been equalled, and perhaps never surpassed, for clearness and firmness. Indeed, so clearly did he apprehend, and so firmly did he grasp one side of a question,

¹ By Fawcett, in an article in the *Fortnightly Review* for 1875, vol. xxiv.

and so luminous and forcible was his exposition, that he sometimes produced on his readers the impression that there could not possibly be another side or a different opinion. He seems, from the very strength of his intellect, and the energy of his will, to have been unable to enter fully into the point of view of an opponent; and this sometimes rendered him an unfair controversialist, although no unfairness was intended.

His largest economic work affords an illustration. *Some Leading Principles of Political Economy* is divided into three parts, the first of which is devoted to Value, the second to Labour and Capital, and the third to International Trade. The most important portion of the book regarded as a contribution to the development of economics consists in his examination of the theory of value. It is here that he puts forward the conception of 'non-competing groups.' But the force with which he urges the conception, and the vigour with which he maintains his position create the impression of a more fundamental correction of Mill's theory than he really made. It is true that he calls emphatic attention to cases where 'industrial competition' is not completely realized, and labourers do not freely move from the less to the more advantageous occupation in sufficient numbers to render the remuneration of labour in different trades an equivalent to the effort which is respectively required. This failure of competition may, as he shows, occasion a divergence between the real *cost* and the nominal *expenses* of production;¹ but on the one hand he appears, with all his intentions to the contrary, to have led many of his readers to picture the barriers separating these 'non-competing groups' as more rigid and impassable than they actually seem to be, while, on the other, he failed to indicate an alternative means of com-

¹ See above, p. 101. Cairnes himself did not use the expression *expenses of production*; and Senior had anticipated the distinction which he establishes.

paring effort with effort to that furnished by the money-remuneration they respectively obtain. He wrote out, in fact, one side of the question in a bold, clear hand ; but his argument lays stress on a qualification of Mill's theory rather than, as he seems to think, demonstrates its absurdity. It emphasizes the important consideration that competition is not always fully operative, and that a theory based upon competition may need modification ; but it exhibits some tendency to introduce into that modification the very absoluteness which it condemns in the theory.

In the same way, the criticism which he passed on Jevons' conception of *final utility* suggests that he had not fully grasped its meaning ; but he undoubtedly contributed some luminous suggestions to the elucidation of the principles which he 'newly' expounded, and his illustration of abstract theory by actual fact was often opportune. He showed, for example, that the recorded transactions and observed phenomena of commerce confirmed in fact the theory of international value, and the conception of international trade, which economists formed by abstract reasoning.

It is this capacity for disentangling, and exhibiting, the operation of a principle amid an intricate mass of complex facts which constituted his greatest intellectual gift ; and his book on *The Slave Power* was the most notable, and perhaps the most enduring, example of it. It seems to be that one of his writings on which his fame may eventually rest ; and even so hostile a critic as Cliffe Leslie declared that it 'will ever defy criticism,' while another writer described it as 'one of the finest specimens of applied economical philosophy.' In it he endeavoured to predict from the known effects of causes known to be present the events of the future, and he applied considerations based partly on speculative reasoning to the elucidation of a practical problem.

He investigated the economic influence of slavery on the

course of civilization. The advantages of slavery as a 'productive instrument' were 'comprised' in the 'absolute power' of the employer, and the consequent opportunity for organization. But its economic disadvantages were three in number. Slave-labour was 'given reluctantly'; and the industrial operations of slaves must be concentrated on a small space within reach of the superintendence of a few overseers. The slave was 'unskilful,' and, so far from having any inducement to acquire intelligence, he was kept in compulsory ignorance for fear of rebellion; and, therefore, the industry on which he was engaged must call for little or no skill. Thirdly and lastly, he was wanting in 'versatility,' and it was difficult enough to teach him a single trade; and so his work must be uniform.

The cotton industry of the Southern States of North America fulfilled these conditions; but it did so at the cost of serious injury to civilization. The want of skill and versatility forbade rotation of crops, and implied a constant abandonment of exhausted soils, which fell into a desert condition, and became the haunt of the 'promiscuous horde' of the 'mean whites.' And it also implied a continual acquisition of fresh fertile land at the expense of more civilized and industrious neighbours. The same deficiencies of slave-labour prevented the growth of manufactures or commerce, and compelled the planters to obtain the capital needed for working their large plantations by incurring debt.

And such a society might continue to exist, owing to the modern facilities of intercourse; for, through international division of labour, it might obtain the products of the skilled industry of other countries in exchange for its own, while the lands too exhausted for cultivation by slave-labour might be profitably devoted to the breeding of the slaves themselves. Just as an 'anatomist' might be 'able,' Cairnes remarked, 'from a fragment of a tooth or

bone to determine the form, dimensions, and habits of the creature to whom it belonged,' so might a 'political economist, by reasoning on the economic character of slavery and its peculiar connexion with the soil, deduce its leading social and political attributes, and almost construct, by way of *a priori* argument, the entire system of the society of which it forms the foundation.'

It is by a similar exhibition of the working of a principle amid a mass of facts that his *Essays towards a Solution of the Gold Question* are characterized. He traced the 'consequences which would result from' 'the increased supplies of gold,' which were pouring into the world from the mines of California and Australia, 'supposing all other things to remain the same.' He was aware that the 'actual course which phenomena' take is the 'composite result of the combined action of many' influences; but, for the purpose of effective inquiry, he isolated the one cause of which he endeavoured to deduce the probable effects. It had been commonly thought that a 'depreciation of money could only show itself in a uniform action upon all prices'; but he 'ventured to combat' this view, and to 'state the mode and order in which the monetary movement, as it proceeded, would be developed.' He showed that the prices of those articles, and those countries, with which the fresh supplies of gold first came into contact, would be first and most fully affected, and that the influence would be transmitted at a later time in a subordinate degree to other commodities and countries. He thought that the rise in price would be more rapid in raw materials than in manufactured commodities, because the latter could respond more readily to the stimulus to increased production afforded by the abundance of money and the expectation of the rise of price; and, for similar reasons, he held that, amongst raw materials, the rise would be greater in the case of 'animal products' than those of 'vegetable growth.' He believed that the productions of

England and the United States would experience the rise in the first instance after the commodities produced in the gold countries themselves, and then the productions of the continent of Europe, and lastly those of India and China, in consequence, partly of the relative extent of their dealings with the gold countries, and partly also of the relatively expansive capacity of their currencies, according as they did, or did not, consist largely of 'credit contrivances.'

The method of investigation thus employed by Cairnes in the cases of slavery and the gold discoveries was the method which he regarded as appropriate to economic inquiry. In his book on the *Character and Logical Method of Political Economy*, which originally consisted of a series of lectures delivered in Dublin as Whately Professor in 1857, but was revised in 1875 immediately previous to his death, he discussed elaborately the point. He defined Political Economy as 'the science which, accepting as ultimate facts the principles of human nature, and the physical laws of the external world, as well as the conditions, political and social, of the several communities of men, investigates the laws of the production and distribution of wealth, which result from their combined operation.' 'The phenomena of wealth, as they present themselves to our observation, are,' he remarks, 'amongst the most complicated with which speculative inquiry has to deal. They are the result of a great variety of influences, all operating simultaneously, reinforcing, counteracting, and in various ways modifying each other.' If the political economist 'declines to avail himself of any other path than that of strict induction, he may reason till the crack of doom without arriving at any conclusion of the slightest value.' He must employ the 'method of deduction' 'incomparably, when conducted under the proper checks, the most powerful instrument of discovery ever wielded by human intelligence.'

This deductive method was assailed vigorously by the writer whose work we have now to examine. THOMAS EDWARD CLIFFE LESLIE was, like Cairnes, an Irishman by birth. He was born in 1825, and educated, first by his father, then by a clergyman at Clapham, and finally at King William's College in the Isle of Man. But, when he was only seventeen years old, he entered Trinity College, Dublin, where Cairnes was also at this time a student. After the conclusion of his college course he studied law at Lincoln's Inn, attending the lectures of Sir Henry Maine, to whom he confessed his indebtedness for the knowledge of that 'historical method of investigation,' which he carried over from the special sphere of jurisprudence, to which Maine had applied it, into that of political economy. He was called to the English Bar, but in 1853 was appointed Professor of Jurisprudence and Political Economy in Queen's College, Belfast. He visited Ireland from time to time to discharge the duties of his chair; but he continued to live in London, making frequent journeys to the Continent for purposes of economic observation, and contributing largely to the periodical press on economic subjects. For some years he suffered from a painful malady, which occasioned his death in 1882, at fifty-six years of age. He had apparently planned a systematic treatise on English economic and legal history; but the manuscript was lost in 1872, and his contributions to economics consist almost entirely of two volumes of collected essays, one of which was published in 1870 on the *Land Systems and Industrial Economy of Ireland, England, and Continental Countries*, and the other in 1879, under the title of *Essays on Political and Moral Philosophy*. The latter of these two volumes has been since reissued, with the omission of some of the more general essays, and the addition of others on topics strictly economic.

The work of Cliffe Leslie was negative rather than

positive; and, in spite of the acuteness and vigour with which he assailed the deductive method and the abstract reasoning of the so-called 'orthodox' school of economists, his criticism can scarcely be considered destructive. He argued that the economic view of man and society can only be parted by an arbitrary separation from the other aspects from which man and society are regarded. The present state, as the future condition, of any particular country is the outcome of a long process of historical evolution, in which moral, political, legal, and economic forces have acted and reacted in inseparable union, and combined to produce indistinguishable results. The motives influencing the conduct of men are many and varied, and are ambiguously described by economists as the 'desire of wealth.' The 'average rate of profits and wages' is a misleading expression, and should be replaced by a detailed inquiry into the many different actual rates.

'Political economy,' he writes, 'is not a body of natural laws in the true sense, or of universal and immutable truths, but an assemblage of speculations and doctrines which are the result of a particular history, coloured even by the history and character of its chief writers.' The 'abstract, *a priori*, and deductive method' 'throws' 'hardly any light on the nature of wealth,' of which 'there is a multitude of different kinds' 'differing widely in their economic effects.' 'The desire of wealth is a general name for a great variety of wants, desires, and sentiments, differing widely in their economical character and effects. 'In every country instead of an average or common rate of wages there is a great number of different rates, and the real problem is, "What are the causes which produce these different rates?"' 'The truth is, that the whole economy of every nation, as regards the occupations and pursuits of both sexes, the nature, amount, distribution, and consumption of wealth, is the result of a long evolution.

in which there has been both continuity and change, and of which the economic side is only a particular aspect or phase. And the laws of which it is the result must be sought in history and the general laws of society and social evolution.' 'Every successive phase of social progress presents inseparably connected phenomena to the observation of the economist, the jurist, the mental, the moral, and the political philosopher.' 'Political economy is thus a department of the science of society which selects a special class of social phenomena for special investigation, but for this purpose must investigate all the forces and laws by which they are governed.' 'Political Economy has not reached the stage of a deductive science,' 'the fundamental laws of the economic world are still imperfectly known,' and 'can be fully known only by patient induction.'

The positions thus adopted by himself and Cairnes on the question of the appropriate method of economic investigation were diametrically opposed. Unlike Cairnes, he examined the rise of prices by a separate investigation of detailed facts in different countries and districts; and he conducted on similar lines an inquiry into the 'movements of agricultural wages.' But later study seems to have proved that there is room for both methods. There are departments of Economics, where the arrangement and collection of facts are specially appropriate, and Sidgwick has shown¹ that the production of wealth has usually been treated by an inductive method comparing and generalizing from observed facts. It is in the department of the distribution and exchange of wealth that a different method has been adopted; and it is difficult to see how it could with advantage have been otherwise. Bagehot said² that, 'if you attempt to solve such problems' as the 'facts of commerce' present 'without some apparatus

¹ *Principles of Political Economy*, Introduction, ch. iii.

² *Economic Studies*, p. 10.

of method, you are as sure to fail as if you try to take a modern military fortress—a Metz or a Belfort—by common assault ; you must have guns to attack the one, and method to attack the other.’ And he showed that in other sciences than Political Economy progress had been made by considering the ‘effects of one particular set of causes by themselves,’ by imagining hypotheses, and deducing the results of these hypotheses. It is true that the hypotheses should be carefully framed to correspond as closely to facts as possible, and that the results deduced from them should be constantly compared with the results of actual experience, and the divergence clearly exhibited and diligently examined. But, without the aid of theory, it is impossible to proceed ; for, as Marshall argued,¹ ‘facts by themselves are silent.’ It is precisely because many different objects of many different desires are embraced, as Cliffe Leslie stated, under the term ‘desire of wealth,’ that the assumption made by economists of the universal character and unlimited extent of the ‘desire of wealth’ in general is broadly true, though it would be untrue of each particular desire for each particular kind of wealth. It was because Cairnes considered the action, and deduced the results, of an isolated cause, while Cliffe Leslie started with the detailed examination of a multitude of facts, that the former exhibited the rise of prices occasioned by the increased supplies of gold in a luminous and intelligible order, and the latter seemed scarcely to ‘see the wood for the trees.’

But the inductive and historical method has its place and value. It tests and corrects the foundations and the conclusions of the abstract deductive method. It shows that the theories of the older economists were sometimes stated too universally, at any rate by more extravagant followers, and that they require modification when employed as explanations of actual fact. Cliffe Leslie maintained that

¹ *Principles of Economics.*

some of Cairnes' speculative predictions respecting the depreciation of gold had not been exactly verified by subsequent experience; and he laid stress on the obstacles which limit in practice the complete attainment of an uniform average rate of profits or wages. Cairnes, although he recognized that an economic 'law' was nothing else than the statement of what would follow from certain assumptions,¹ was perhaps inclined to underrate the advantage of bringing the results of these laws to the test of comparison with fact; and Cliffe Leslie supplied the needful corrective of reference to actual experience.

But he proceeded to the opposite extreme; and sometimes he almost denied the possibility of an economic 'law,' or the benefit of a working hypothesis. Nor is that interdependence of social phenomena, on which, following Comte, he insists, very helpful in the absence of an 'unified social science.'² Social phenomena may, as he shows, be connected together; but the progress of scientific inquiry has been mainly due to a separation of the problem into its component parts, and a distinct investigation of each. The economist should undoubtedly have regard, as he urges, to the other sides of society, and to its influence as a whole; but he may advantageously isolate, for the purposes of inquiry, the material and industrial side, and consider chiefly the motives determining the action of individuals. The work of historical economists has called attention to these other aspects, and to the influence of special historical antecedents and social surroundings on the complexion of facts and the formation of theories; and Ricardo and the economists of his time were inclined to generalize unduly from the character of the 'city' men they themselves knew. They thought that man was invariable and unchangeable; and the historical method offers a needful caution against applying conclusions based

¹ See below, Chapter VIII. p. 187.

² Cf. below, p. 266.

upon men, as they are at one time, under one set of circumstances, to men as they are at another time, under another set of circumstances.

It has been of especial use in mitigating the condemnation which might otherwise be passed on the mistaken theories of bygone ages. By the very importance, which it tends to give to facts, it shows how a different set of facts may have given rise to a different set of theories. Facts which are now prominent may have been then in the background, and facts which are now in the shadow may then have been in the light. With modern knowledge and experience, for example, we thought it foolish and mischievous to prescribe a legal maximum rate of interest, beyond which no one might legally lend or borrow. We argued that the effect of such a law was, not to prevent the needy man from borrowing at a higher rate, but to make him pay still more, to compensate the lender for the risk which he ran of being detected by the law, and losing both interest and principal. We pointed to the means by which such laws could be evaded, and contended that it is better to leave matters to the ordinary market influences, making stringent provisions, and devoting our efforts to the enforcement of these provisions, against violence and fraud. And so we passed unqualified condemnation upon the Usury Laws.

But if, with such an historical economist as CUNNINGHAM in his *Growth of English Industry and Commerce*, or ASHLEY in his *Introduction to English Economic History and Theory*, we go back in imagination to the state of mediæval society, and supply the circumstances of historical fact amid which these laws were enacted, we begin to qualify our condemnation. We see that there was no such opportunity for the investment of capital as there is now, and that the possessor of a large sum of money could scarcely apply it to any productive enterprise or use it himself in such a way as to realize a profit. If, then, he lent it, and the

security were good and the money repaid, he rendered a service to another man, but he himself sustained no loss. Nor was it the prosperous who would borrow, but the poor in distress, to relieve whom was the Christian duty of the rich. To ask, then, for more than the simple repayment of loans appeared to be extortion, and plainly immoral.¹

In this way the historical method conduces to a more tolerant judgment on the 'exploded' theories of the past; and the facts which its advocates generally examined have largely been distant facts. So far as the analysis of the present is concerned the quarrel between the abstract, or deductive, and the historical, or inductive, economists does not appear to be based on any enduring foundation, and it has subsided. Cliffe Leslie himself observed of Roscher, the most distinguished of those German economists whose method 'is the investigation of the actual course of history, or the historical method,' as opposed to the English method 'of proceeding by deduction from certain postulates or assumptions,' that the 'difference between Ricardo's work on the *Principles of Political Economy* and Roscher's lies rather in the amount of historical research in the latter than in fundamental diversity of doctrine,' and that 'so far as doctrine is concerned the difference is for the most part one more of tone than of principle, and often makes itself felt chiefly in the absence of dogmatic formula, and of the use of rigorous and infallible logic affected by Ricardo's school.' When the difference was reduced to this narrow compass a fitting summary of the whole question might perhaps be found in Bagehot's remark² that 'rightly conceived the Historical method is no rival to the abstract method rightly conceived.'³

¹ Recently, by a new law, reverting to older attitude, discretion has been given to the judge to pronounce irrecoverable an exorbitant rate of interest charged by a moneylender.

² *Economic Studies*, p. 15.

³ Cf. Chapter IX. below, 'B. Economic History,' and Chapter XI.

CHAPTER VI

WALTER BAGEHOT. 1826-1877

THE MONEY MARKET

A Difficulty of Political Economy—Bagehot as (1) a Man of Business and (2) a Student—His Writings—His Imaginative Powers—His Phrase-Making—His Descriptive Ability—His *Lombard Street*—The Era of the 'Great Commerce'—The English Banking System—(1) Its Power—*Lombard Street* as a 'great Go-between'—(2) Its Delicacy—The Bank of England as the Keeper of the One Cash-Reserve—The Reasons for its Pre-eminence—Different Origins and Functions of Banks—(1) Negotiating Loans—(2) Supplying Good Money—(3) Remitting Money and (4) Issuing Notes—(5) Receiving Deposits—Danger of the English System at a Time of 'Commercial Crisis'—Differences between Old and Modern Trade—The Elasticity of Credit—The Urgency of the Demand for Cash—The Bank Charter Act—A 'Panic must not be Starved'—An Escape from the Dilemma—The Effects of Raising the Rate of Discount—Conflicting Interests of the Bank Directors—Subsequent Changes—Position after the War of 1914-18—Mr. Withers' Comments

THE author, whose contributions to the development of economics in England will occupy our attention in this chapter, remarked in a passage of his writings that political economy had one 'inherent difficulty,' 'which no other science' 'presents in equal magnitude.' 'It is an abstract science which labours under a special hardship'; and that hardship consists in the circumstance that 'those who are conversant with its abstractions are usually without a true contact with its facts,' and 'those who are in contact with its facts have usually little sympathy with and little cognizance of its abstractions.' It is an 'analysis' of the world of business; and economists were seldom

themselves men of business, and had to obtain their facts second-hand, while men of business, who knew the facts, seldom, if ever, reasoned about them, or at any rate did not reason precisely. They acted by instinct more than by argument, and they would be sorely puzzled to put into scientific language the origin, the course, and the results of their action. 'And so the "theory of business" leads a life of obstruction, because theorists do not see the business, and the men of business will not reason out the theories.'

But Bagehot himself might be quoted as an instance of an economist who combined in his own person these desirable qualifications. He was a man of business and a student; and it is probably for this reason that he sketched with a surer hand than perhaps any other writer the connexion and the distinction between economic theory and the facts of everyday life. In his *Economic Studies* he has shown that the theory is limited in its application, that it starts from certain assumptions which should be tested by reference to fact, and that, reasoning from these assumptions, it reaches conclusions which should be brought to a similar test. But he has also urged that the theory is necessary, because we could not without its aid arrange the 'complex' facts of the business world in any intelligible order, or prepare practical problems for wise and reasoned solution.

He was, then, a man of business as well as a student. He was a man of business by descent, connexion, and occupation. He was born at Langport, in Somersetshire, in 1826, and was the only surviving child of a father who, Richard Hutton stated,¹ was 'for thirty years Managing Director and Vice-Chairman' of Stuckey's Bank, and, before he retired from his post, 'the oldest joint-stock banker in the United Kingdom.' His mother was the niece of the founder of the bank, Mr. Samuel Stuckey; and

¹ In a Memoir prefixed to Bagehot's *Literary Studies*.

Bagehot himself, abandoning the idea he had entertained, after concluding his course of study at University College, London, of practising at the Bar, succeeded his father as Vice-Chairman of the Bank ; and maintained to the end of his life that 'business' was 'much more amusing than pleasure.' His marriage in 1858 to the daughter of Mr. James Wilson, the founder of the *Economist* newspaper, resulted in his becoming editor of that paper ; and in this position he had to keep in close and constant touch with 'city' men and 'city' talk.

To this editorial connexion we may perhaps ascribe two consequences. It made him cultivate a habit of writing in such a way as to be understood by plain practical 'city' men ; it made him select with this object the most appropriate and striking language, even if it was sometimes almost ungrammatical ; it made him determine to be at all costs interesting. And it also led him to devote attention to the working of the Money Market, his description of which we may choose for especial consideration, as forming his most complete contribution to economics. As a banker he had already been forced to study it on its practical side ; and now as the editor of a financial newspaper he was compelled to inquire into its theoretic bearings. Giffen declared¹ that he seemed to know by 'instinct' 'what the business man would do' ; and, although to the end of his life he could not bring himself to deal with *minutiae*, to add up columns of figures, or to correct printers' proofs, he is said to have possessed in a remarkable degree what has been aptly called a 'quantitative sense.' He knew how far the business man would go on a certain line of conduct, and at what point he would be likely to stop.

But he was also a student ; and in many respects he had more of the student in him than of the man of business.

¹ In an article in the *Fortnightly Review* in 1880 on *Bagehot as an Economist*. Giffen was Assistant-Editor of the *Economist* under Bagehot. Cf. below, p. 243.

His success as an economist was largely due to the knowledge which he brought from outside to bear on his economic writings ; for he was a student with a considerable range of study. The titles of his books illustrate this. Besides his economic writings, which comprised a little book on the subject of an *International Coinage* or *A Universal Money*, some articles on the *Depreciation of Silver* reprinted from the *Economist* in 1877, some essays, partly fragmentary, on the nature and limits of political economy and the characteristics and work of the early English economists, and a description of the Money Market in a book entitled *Lombard Street*, he left behind him an account of the *English Constitution*, in which he examined its character and working with keen insight and graphic force. He had also written some *Essays on Parliamentary Reform*, which were republished before a new extension of the franchise ; his *Literary* and *Biographical Studies* furnish abundant evidence of wide and appreciative reading, and acute and discriminating criticism ; and his book on *Physics and Politics* was described by himself as a collection of ' thoughts on the application of the principles of " natural selection " and " inheritance " to political society.' So Hutton maintained that his ' most original writing,' as an economist, ' was due less to his deductions from the fundamental axioms of the modern science, than to that deep insight into men which he had gained in many different fields.' In his own nature the ' man of business and the financier ' fell within ' sharp and well-defined limits ' ; and ' he knew better than most ' economists ' where their special weakness lay, and where their special functions ended.' Giffen declared that he was not ' primarily an economist,' but ' primarily a man of letters of strong genius and imagination, who happened amongst other things, and subordinate to other things,' ' to take up with Political Economy.'

This description of him as a ' man of letters of strong

genius and imagination' brings into deserved prominence what was perhaps his most striking characteristic; and it was a characteristic which contributed greatly to his interesting, and almost fascinating, treatment of economic subjects. 'He always talked, in youth, of his spirits as inconveniently high'; and throughout his writings the reader feels that he is in contact with a 'buoyant' and 'subtle' imagination. His conversation is described as 'racy'; and his phraseology is habitually and instinctively vivid. One of the chapters in his book on *Lombard Street* bears the title: 'Why Lombard Street is often very dull and sometimes extremely excited'; and it is scarcely possible to read a page of his writings without coming across some apt and striking phrase which lingers in the memory. His definition of a 'constitutional statesman' as 'in general a man of common opinions and uncommon abilities,' his description of 'savages' as 'playing' the 'game of life with no knowledge of its rules,' and his account of the Cabinet as the 'hyphen' joining the 'legislative part of the state to the executive part,' are some among many examples which might be quoted.

To this vivid imaginative power, which betrayed itself alike in his high spirits, his racy conversation, and his incorrigible habit of phrase-making, we may ascribe two qualities of his writing. To his nature 'the commonest things often seemed the most marvellous, and the marvellous things the most intrinsically probable.' His vivid imagination rendered him also an admirable describer of concrete phenomena. His strength, indeed, seems rather to have lain in description in 'bold and broad' outline than in elaborate reasoning or exhaustive analysis. But his work as a describer was of a high order, for he possessed in an eminent degree the quality of 'detachment of mind.' And Hutton declared that this quality was so marked in him that it 'tended to give the impression of' 'intellectual arrogance,' and that he was comparatively inaccessible to

the 'contagion of blind sympathy.' But it was owing to the same quality that he showed himself to be a cool and critical observer, and an accurate and impartial describer ; and he preferred to describe in the concrete wherever he could. There are traces of observation of the 'actual world of politics' in his *English Constitution*, there is evidence of insight into men and manners in his *Physics and Politics*, and similarly his *Lombard Street* is described as being as 'much a study of bankers and bill-brokers, as of the principles of banking.'

It has been said that this last book is perhaps the most finished in form of Bagehot's writings. He wrote it not long before his death, which occurred suddenly from disease of the heart in 1877, when he was only fifty-one years of age. In some respects his powers were at their best when he composed the book, and throughout its composition he kept steadily before his mind two aims which he was specially fitted to realize. He endeavoured to impress both men of business and literary students ; he wrote alike for the practical man and the theorist.¹

In his *Physics and Politics* he called attention to the changes which had passed over the complexion of society during the previous fifty years, and to the 'new world' of 'inventions' and 'ideas' which had 'grown up' during that period. It was especially to the facts of this new world, and, in a less degree, to the circumstances of English economic history during the whole period which had elapsed since the occurrence of the great industrial changes at the close of the eighteenth, and the opening of the next century, that, in his opinion, the science of political economy was strictly applicable ; for it was the 'science of business, such as business' was, 'in large productive and trading communities' like England. It was 'an analysis of that

¹ Cf. for later estimates of Bagehot's economic writing, two reviews in the *Economic Journal* for 1914 and 1915 by Nicholson and Mr. J. M. Keynes of his *Life* and his *Collected Works*.

world so familiar to many Englishmen—the “great commerce” by which England had ‘become rich.’ And one of the characteristic features of that world, as it was one of the most necessary parts of the mechanism of that ‘great commerce,’ was the Money Market, as it is described in *Lombard Street*.

It was, he maintained in his *Economic Studies*, possible to go back to a ‘pre-economic age’ long previous to that ‘great commerce,’ and long before Ricardo or Malthus or Adam Smith, when the assumptions of political economy would be untrue to fact. In such an age one of these assumptions would be untrue, because there was, speaking generally, no ‘transferability of labour’ from the less to the more advantageous employment. There were no ‘employments’ between which labour could move, for the structure of early society was rigid and ‘uniform.’ There was no ‘strong government’ to preserve domestic peace, or prevent foreign attack; and the institution of slavery, like that of caste, hampered man’s freedom of choice. Nor would another assumption of modern economics be true to the facts of early society, for the ‘transferability of capital’ would not then be realized. There were no ‘trades’ in which profits could be made, or between which capital could move, and there was no money-medium, by means of which profits could be compared, or capital ‘held in suspense.’

But, in the world of the ‘great commerce,’ on the other hand, there was, he maintained, transferability of labour, and, in a higher degree, transferability of capital. There was the ‘loan-fund of the country lying in the hands of bankers and bill-brokers which’ moved ‘in an instant towards a trade’ ‘unusually profitable, if only that trade’ could ‘produce securities which’ came ‘within banking rules.’ There was a ‘great speculative fund,’ ‘composed of the savings of men of business’ and others, ready to flow into promising undertakings; and there was, lastly,

the 'obvious tendency of young men starting in business to go into the best-paying' and most likely business.

Of these three agencies, tending to withdraw capital from the less and bring it into the more profitable undertakings, the first and, in a smaller measure, the second, are perhaps the most effective and wonderful; and it is in England that they were brought, as Bagehot showed, to the greatest perfection in the development of the banking system. This it is which is the most conspicuous and necessary part of the mechanism of the 'great commerce'; and it is one of those common things which to Bagehot seemed the most marvellous, and of it he gives an account in *Lombard Street*.

He begins his book by describing Lombard Street as 'by far the greatest combination of economical power and economical delicacy that the world has ever seen.' Money,¹ as every one will admit, is 'economical power,' and England was the 'greatest moneyed country in the world.' 'It has much more immediately disposable and ready cash than any other country.' We had abandoned the idea that 'any undertaking likely to pay, and seen to be likely, can perish for want of money'; and it had been said that 'any foreign country can borrow in Lombard Street *at a price*'—possibly high or possibly low.

That this is so is the result of our banking system. Englishmen are accustomed to keep a banking account, but they do not often concern themselves to ask what it is that the banker does with their money. He keeps, it is true, a portion ready at hand to meet the ordinary daily demands of his depositors, and, by dint of long experience, he can ascertain with tolerable assurance what that portion should be at different times. But the rest of the money he lends out at interest, it may be to merchants and manu-

¹ He here uses 'money' in one common acceptation of the term to denote what might be more accurately termed 'borrowable capital'; another is to denote merely coin or bank-notes.

facturers, or it may be to landlords and farmers; and in this way he assists the general industry, and promotes the commercial prosperity, of the country.

But, as Bagehot pointed out, if the district in which he lives is 'purely agricultural,' he may be unable to employ with advantage all the money deposited with him, which he can safely lend out. And so he hands over the disposal of the money he cannot himself employ to his London agent, or a London bill-broker, and they in their turn lend it to the great industrial centres. It is in this way that the deposits in the different banks constitute a great 'loan-fund,' and that the controlling centre of this fund is to be discovered in Lombard Street, where some of the chief London bankers and bill-brokers have their places of business. Lombard Street is, as Bagehot phrased it, the 'great go-between.' 'It is a sort of standing broker between quiet saving districts of the country and the active employing districts.' It is the locality where, in an especial degree, we may say that the most powerful and delicate part of the mechanism of the 'great commerce' is situated, for it is the home of the Money Market.

London is thus a place where money is always obtainable. It is through the agency controlled in Lombard Street that capital moves rapidly in England from the less to the more profitable trades, that a new and active trader acquires the control of the capital which enables him to compete successfully with the old and established trader, who works with his own, and not with borrowed capital, and that English commerce and manufacture are marked by a 'democratic structure' and a ceaseless activity. It was owing to the same agency that 'all *sudden* trades come to England,' where there is this means of getting 'new' men and 'new' capital into a trade, and that England retained her command over 'old' trades, to which she might seem less naturally suited than other countries. And hence it followed that all theories of the overthrow

of her commercial and manufacturing supremacy required revision in the light of these circumstances.

But the mechanism is as 'delicate' as it is 'powerful,' and Bagehot wrote his book to show that it had its special dangers as well as its peculiar advantages. He pointed out that besides the ready cash, which the country banker finds it necessary to keep by him in actual coin or bank-notes in his till, in order to satisfy the ordinary daily demands of his depositors, he generally has somewhere or other a 'reserve,' on which he can draw with ease and rapidity should he have to face some unusual demand. Most of the money deposited in his hands is deposited 'at call,' or 'short notice,' that is to say, it can be demanded at once or after a brief delay; and there may be occasions when people will not rest content with anything else but actual coin, or legal tender of the realm, and will look askance at such paper-promises to pay as are furnished in cheques and bills of exchange. And so somewhere or other in the banking system there must be a cash-reserve.

Under our system this reserve is kept in the Bank of England. The country bankers keep their cash-reserve with their London agents, and the London bankers keep theirs at the Bank of England. 'It may be broadly said,' Bagehot writes, 'that no bank in London or out of it holds any considerable sum in hard cash or legal tender (above what is wanted for its daily business) except the Banking Department of the Bank of England.' 'The same reasons which make it desirable for a private person to keep a banker make it also desirable for every banker, as respects his reserve, to bank with another banker if he safely can'; for 'the custody of very large sums in solid cash entails' of necessity 'much care and some cost.' And hence it is that the Bank of England is the 'Banker's Bank.' It keeps the cash-reserves of the London banks and bill-brokers, and also, directly or indirectly, of the country banks of England, Scotland, and Ireland; and it

has even become, to some extent, 'the Banker's Bank' of Europe.

In a country town cheques drawn on a local banker are accepted in payment of debts, and in London those drawn on a London bank are taken, while the London banks themselves settle any difference, which may be found at the 'Clearing House' between the cheques in their possession drawn on some particular bank and the cheques drawn on themselves in the possession of that particular bank, by a cheque drawn on the Bank of England. And, as Bagehot went on to show, foreign countries resort in their turn to London for money; and London, receiving more than any other place, and paying more than any other place, on account of the extensive sale of English manufactures abroad, and the considerable purchase of foreign goods by England, became the natural financial centre of Europe, and the Bank of England keeps to some extent the cash-reserve of Europe. Thus the proportion of cash to the liabilities resting upon it becomes 'exceedingly small'; and a kind of hierarchy is established in the banking world, with the Bank of England in the position of pre-eminence. The mechanism controlled in Lombard Street is as 'delicate' as it is undoubtedly 'powerful.'

But these considerations suggested the question: Why had this pre-eminence fallen to the lot of the Bank of England? Bagehot answered it by giving an account of the origin and development of banking. The English banking system, familiar and common as it might seem, was in reality one of those common things which were 'most marvellous.' No such developed system existed in any continental country; and the original motives, which had led to the foundation of banks, were in many cases unlike the later uses to which they were applied.

The early banks of Italy, where the name seemed to have originated, were simply 'finance companies,' started

to effect loans for the governments of the medieval republics. And this was the original function of the Bank of England itself; for it was started by the Whig government of William III in order to obtain money from the subscribers to carry on the war with France. The government of the Restoration undermined credit, and destroyed confidence, by suddenly failing to repay the advances made to the Exchequer by the goldsmiths. They were the bankers of those times, and, together with other services, anticipating later forms of modern banking, undertook the safe custody of valuables. In 1694 the credit of William III's government was so low that it could not 'borrow any large sum'; and a plan was accordingly devised by which, as Macaulay stated, some twelve hundred thousand pounds were to be 'raised, at what was then considered the moderate rate of eight per cent,' and the subscribers were to be incorporated under the name of the 'Governor and Company of the Bank of England.'

It was in more 'curious' fashion that the great banks of the north of Europe originated. Adam Smith described how, at the time of the commercial supremacy of the Dutch, the 'extensive trade of Amsterdam' brought to that city a 'great quantity of clipt and worn foreign coin,' and the value of the currency fell some 'nine per cent below that of good money fresh from the Mint.' He told how, in 'order to remedy' the 'inconveniences' and uncertainty which were consequent upon this, a 'bank was established in 1609 under the guarantee of the city,' which 'received both foreign coin, and the light and worn coin of the country at its real intrinsic value in the good standard money of the country, deducting only so much as was necessary for defraying the expense of coinage, and the other necessary expense of management. For the value which remained' 'it gave a credit in its books'; and 'this credit was called bank money,' and 'represented

money exactly according to the standard of the mint.' All bills above a certain value had by law to be paid in this 'bank money,' and every merchant, therefore, was compelled to 'keep an account with the bank.' Its function, then, was primarily to provide good money; and this function may also be said to belong, in a sense, to the Bank of England, which acts as the agent of the Mint in the receipt of bullion and the issue of coin.

A third and 'most important' function of early banks was that of 'remitting money' from place to place; and in these various ways they acquired the confidence of those with whom they had transactions. They came to be known and trusted, and men were ready to deposit their money in their hands. But there was a yet more important way in which they brought themselves under the notice of a wider circle; and that was the supply of a paper currency, such as the bank-notes issued in England. Bagehot declares that this seems to have been the chief means by which banking develops and bankers become known, and are trusted with the deposits of others. Nor is the reason, he thinks, far to seek; for a bank can issue notes more easily than it can obtain deposits. 'To establish a note circulation, a large number of persons need only,' he writes, '*do nothing*. They receive the banker's notes in the common course of their business, and they have only *not* to take those notes to the banker for payment.' But an 'effort' is needed in the case of deposits, and the action of the depositors is no longer passive. And hence it is that in banking history the issue of notes has generally formed the prelude to the receipt of deposits. It encourages deposits; for, 'when a private person begins to possess a great heap of bank-notes, it will soon strike him that he is trusting the banker very much, and that in return he is getting nothing. He runs the risk of loss and jobbery just as if he were hoarding coin. He would run no more risk by the failure of the bank if he made a deposit

there, and he would be free from the risk of keeping the cash.'

Now, the Bank of England, Bagehot proceeded to argue, owed its pre-eminence partly to the fact that it was closely associated with the Government, which gave it the 'exclusive possession' of its balances, and the humbler citizen was content to follow the example of the Government which must know better than himself. And, again, it was partly owing to the circumstance that it 'had, till lately, the monopoly of limited liability in England,' and its directorate was joined by 'many quiet and careful merchants,' 'who certainly would not have joined any bank where *all* their fortunes were liable, and where the liability was not limited.' But, over and above these undoubted advantages, it had the especial 'privilege of being the sole *joint-stock company* permitted to issue bank-notes in England'; and the clause in the Act of 1742, which conferred this privilege, was for some time construed as if it carried with it the exclusive right of receiving deposits. In this way the Bank of England acquired the monopoly of the note-issue in the metropolis of a country which, unlike most continental countries, had enjoyed a long period of exemption from the danger of invasion or revolution, and had therefore had time for a note-issue to become trusted and popular. 'Inevitably it became *the* bank in London; all the other bankers grouped themselves round it, and lodged their reserve with it.' That was the history of the banking hierarchy, and the reason why in England, unlike America and other countries, there was one instead of several cash-reserves.

And now that the system had grown up it was difficult to alter it. But the pre-eminence of the Bank carried with it a serious responsibility; and it was Bagehot's opinion that, whatever might, or might not, be the 'practice' of the Bank directors, in 'theory' at least they did not recognize this responsibility. It was true that in

ordinary times the duty, which devolved upon them, of administering the cash-reserve was not so grave and onerous ; but it was when a panic had arisen, and when a commercial ' crisis ' was at hand or in progress, that the duty became critical and absorbing. To explain why this was the case he wrote perhaps the most important and interesting chapter of his book : ' Why Lombard Street is often very dull and sometimes extremely excited.'

There may, broadly speaking, be said to be two main differences between trade, as it was conducted before the modern era of the ' great commerce,' and trade as it is now carried on. Before that time the producer of commodities was more generally known to the consumer, and more frequently met his demands as they arose. Now the consumer may be at one side of the globe, and the producer at the other ; and errors may arise regarding the kind and amount of particular commodities for which there is at any particular time a real demand. Too much of one or of several commodities may be produced, and too little of others ; and thus some industry, or group of industries, may be depressed. And it may hand on part of this depression to other industries, or groups of industries. Their products it consumes. For there is, as Bagehot termed it, a ' partnership ' in industries. In brisk times one industry communicates its briskness and prosperity to another ; and in seasons of dullness and depression one industry ' propagates,' through a variety of others, its dullness and depression. And all this takes time : the full effects of the ' calamity ' cannot be experienced at once, and the recovery from it is slow and gradual. Hence it is that trade ebbs and flows, and flows and ebbs ; and there are alternating periods of prosperity and adversity, of brisk trade and dull trade, of ' good times ' and ' bad times.' At one period the industrial and commercial mechanism is in perfect order, and is working with the

maximum of speed ; at another that speed is slackened, or the machine thrown out of gear.

All these effects are intensified by the presence in modern industrial society of an element at once wonderfully effective and marvellously delicate, which was comparatively unknown before the era of the 'great commerce.' That element is credit. A great amount of trade is now carried on by means of borrowed capital. The deposits in the bankers' hands constitute a large 'loan fund' ready to move in any direction where there may be favourable openings. A banker becomes a 'kind of "solvency meter,"' showing what men may be trusted with borrowed money, and how far that trust may go ; and a 'very great many of the strongest heads in England spend their minds on little else than on thinking whether other people will pay their debts.'

In brisk times the expansion of credit is at once a sign and a promoting cause of the briskness. There is a more active spirit of confidence abroad. Trade is said and felt to be prospering : prices are reported to be rising. And so people are encouraged to spend and buy, and sellers are ready to trust for payment at a future date. Merchants are willing to 'draw' and 'accept bills,' bankers and bill-brokers are ready to 'discount' them, and to use the capital placed at their disposal by their depositors to supply the merchants or manufacturers who draw, and the merchants or manufacturers who accept, the bills with additional capital. And thus a vast system of credit is built up on a slender basis of actual cash. People are ready to lend, and speculators are anxious to borrow. Prices rise, and especially the prices of articles which form 'fixed capital,' like machinery and buildings, railways and ships, which are urgently needed to help in producing and carrying to the consumer the goods so urgently demanded, and cannot be at once supplied.

But this very activity is likely to set in operation forces

which tend to produce depression. Fixed capital takes some time to yield a return, speculation is carried to excess, bubble companies are started, speculators are forced to sell and thus lower prices; and a feeling of discouragement begins to spread. Some one perhaps at this juncture fails to meet his engagements, and discharge his paper-promises to pay. He is ruined; and a feeling of distrust follows on that of discouragement. These feelings are very contagious; and the characteristic feature of such a commercial crisis is that credit contracts as rapidly as it has previously expanded.

For at such a time people want hard cash, or 'legal tender' of the realm, and they will not be content with paper-promises to pay that hard cash or legal tender. They want something that will discharge debts, or that has intrinsic value of its own, or that can be at once converted into something possessing intrinsic value. Bankers are chary of discounting bills, depositors are tempted to withdraw their deposits, merchants and manufacturers are disinclined to sell goods on credit, speculators are unwilling to invest. The one thing wanted is hard cash, or legal tender; and the only place where it can ultimately be obtained under our banking system is the Banking Department of the Bank of England. It is there that the cash-reserve of the nation is kept, and that the real basis of the fabric of credit is to be found. If the country banker anticipates a 'run,' or fears that the demands of his depositors for coin or notes will be more than usual, he tries to strengthen his cash-reserve, and calls on his London agent to help him. But that London agent cannot meet an unusual demand from his own resources, for he keeps his cash-reserve at the Bank of England; and so the drain ultimately comes upon the Bank of England. If a foreign country, again, wishes to withdraw part of the reserve it keeps in London, its demand must ultimately be met from

the same source ; for that is the only cash-reserve of the nation.

It was, as Bagehot pointed out, in the Banking Department alone that it can legally be met. By what is known as the Bank Charter Act of 1844, the Bank of England was separated into two distinct departments, of which the Banking Department was to carry on the ordinary business of a banker, and the Issue Department was to issue bank-notes alone. The Act was passed with the intention of guaranteeing the convertibility of bank-notes into gold ; and the Issue Department was allowed to issue notes up to fourteen millions, and two-thirds of the lapsed issues of country banks, on the basis of government securities, part of which was formed by the debt of the Government to the Bank. This sum was supposed to represent the amount of notes, which would normally remain in circulation, and not be presented for payment ; and beyond this amount the department was only to issue notes on the basis of actual bullion deposited in its cellars. Its action in the matter became automatic, giving gold in exchange for notes, or notes for gold ; and all that the Banking Department can legally obtain from it in seasons of pressure is one form of legal tender in exchange for another. It cannot increase its reserve of legal tender by drawing on the bullion in the cellars of the Issue Department ; nor can it strengthen its position by the sale of government securities, for they are not what people want. By whatever road we travel, we are brought back to the conclusion that the pre-eminence of the Bank of England carries with it a serious responsibility, for it is the sole custodian of the only remedy which is effective at critical junctures. As Bagehot put it, 'on the wisdom of the directors of that one joint-stock company it depends whether *England shall be solvent or insolvent.*'

The gravity of the situation was, he pointed out, enhanced by some further considerations. As a panic

arose from men thinking that there would not be sufficient cash for all, and that they must anticipate others in securing some for themselves, if they were to avoid ruin, the surest way to increase a panic was to occasion an idea that the amount of cash available was less than had been thought, and the only means of arresting it was to create an impression at an early stage that it was larger. A panic was, in fact, 'a species of neuralgia, and according to the rules of science you must not starve it.' The holders of the cash-reserve must be ready to advance it freely in times of panic. They must lend to merchants, manufacturers, bankers, and bill-brokers, "to this man and that man," whenever the security is good.'

It would seem, then, as if the Bank directors were impaled on the horns of a dilemma. A sufficient supply of ready cash is the one thing needful, and yet those who have the control of the single cash-reserve must be prepared to diminish it. They must, it would appear, be ready to cut away the ground beneath their own feet. But there is a means of escape from the dilemma. The reserve must be replenished before the panic comes; and the alarm which then prevails is, as Bagehot shows, often so unreasoning, that it may be allayed in a manner which might seem to be as unreasonable. It is only needful to lend a little at an early stage to create the impression that money is, and always will be, available. And that little may be lent at a high rate of discount; for all that is wanted is to 'diffuse' the notion that, 'although money may be dear,' it 'is to be had.' The panic of 1836 subsided 'after a day or two' of lending on the part of the Bank, and the panics of 1847 and 1866 were arrested by the rumour that the Chancellor of the Exchequer had given power to the directors to suspend the Bank Charter Act, and to issue an additional number of notes.

But this does not absolve the Bank from the duty of watching its reserve in times of prosperity, and strength-

ening it when it is likely to be needed. The greater part of the deposits in banks is held on 'short notice,' if not on 'demand,' and 'the owners could ask for it all any day they please.' But the amount of cash compared with the fabric of credit which rests upon it is far from great, and the natural consequence follows that the diminution of the reserve will awaken the gravest apprehensions, if it is frequently allowed to become very small.

The Bank directors had, as Bagehot pointed out, an effective means of replenishing the reserve. They could advance the rate of discount, and raise the terms on which they were willing to lend money. By this course of action they diminished their liabilities at home and abroad. They induced foreigners to send money to reap the benefit of the high rate of discount at which it could be lent; and they occasioned a tendency to a fall in prices by discouraging speculation, and increasing the difficulty of borrowing. Foreign countries would, therefore, prefer to send bullion here rather than goods, and to take goods from here rather than bullion, as money was worth more, and goods could be purchased cheaper.

But, although it was the actual practice of the Bank directors to replenish their reserve in this way, yet, Bagehot argued, they did not recognize the maintenance of a sufficient reserve as part of their bounden duty, and on the three occasions when the Bank Charter Act was suspended—in 1847, 1857, and 1866—the suspension was considered necessary because the Banking Department was practically empty, and the directors had allowed the reserve to be drained away.

Nor was this, in his opinion, unnatural. The directors were not, and did not consider themselves to be, government officials. They were not even bankers by profession; for no banker as such could sit on the directorate, although a bill-broker might. Nor were they pecuniarily much interested in the fortunes of the bank, for their liability was

limited. They were simply 'rich City merchants,' chosen with great care. And they were the representatives of shareholders, who would suffer in their pockets by a diminution of the discounting business of the Bank, and were placed at a disadvantage compared with other joint-stock banking companies, which kept their reserves at the Bank of England and avoided the trouble and expense of keeping reserves of their own. Nor had those shareholders any fear of impairing the credit of the Bank by diminishing the reserve, for it was the common idea that the Bank could not fail.

The Bank directors were then placed in such a position that the influences, which might naturally be supposed to have weight in their deliberations, would lead them to diminish rather than maintain the reserve. But at that time they possessed one recognized advantage. The rate of discount was settled by the action of demand and supply in the money market, and money was a 'commodity subject to great fluctuations of value' caused by a 'slight excess' or 'deficiency of quantity.' The Bank of England occupied the position, no longer indeed of a 'predominant,' but still, in Bagehot's day, of a 'most important dealer in money,' for part of what it could alone supply was necessary. And so the rate of discount at which it was willing to lend settled the maximum, and influenced the general rate.

Afterwards, the general rate moved away from its control. Private banks diminished in influence and number and joint-stock banks grew. And then, more recently, amalgamation was pushed so far that the 'big five,'¹ as they are called, got more, and perhaps it should be said much more, than the 'lion's share' of English banking custom. Small private partnerships had vanished from the scene or were swiftly leaving; and even banks of medium

¹ Barclays, Lloyds, the Midland, the National Provincial, and the Westminster Banks.

size were merged in the huge combinations. This process, it has been suggested, may result in substituting more rigid general rules on the grant of advances for the personal knowledge that once enabled the small individual banker to assist opportunely the promising though struggling small trader. At any rate, the leading London banks were put on an equality with the Bank of England.

They lent their surplus cash, swollen as it was in quantity, to the bill-brokers, although, it seems, the habit also developed of temporary direct accommodation given to the members of the Stock Exchange. And thus, the bill-brokers and the great joint-stock banks regulating the demand for money, the power of the Bank of England over the rate of discount tended to be less effectual. But it did not cease to be the real trustee of the cash-reserve ; for neither bill-brokers nor joint-stock banks kept habitually any large reserves. Acknowledging no such duty, they saved its cost, and still depended for cash in emergency on the Bank of England. Responsibility was in this way divorced from power, and the characteristic danger of the London Money Market, to which Bagehot had drawn attention, became even more alarming.

Mr. HARTLEY WITHERS, whose handling of finance and banking affairs entitles him to wear Bagehot's mantle, on account alike of transparent lucidity and captivating verve, introducing in 1915 the fourteenth edition of *Lombard Street*, brought out dexterously the grim irony of the new situation. On the other hand, the Bank of England had more than recognized the duty laid on it by Bagehot ; and in that sense his case had made good to the hilt. For his suggested minimum cash-reserve in its Banking Department of ten million pounds double that figure had become normal ; and it equalled about a half of its total banking liabilities instead of the third deemed by him to be ' by no means adequate.' On the other hand, the cheque had quite displaced the note in the monetary transactions of

the business world of England, and the mass of banking liabilities were based primarily now on the cash holdings of the other banks. Disquietude and agitation had shifted to prolonged debate on the proportion of their reserves to their liabilities. Producing an improvement from six to fifteen per cent in the interval between 1857 and 1914 they were not laid to rest. For those reserves, it must be borne in mind, included their balances at the Bank of England; and that was no longer the 'most important factor' in the Money Market at 'ordinary' times. It had ominously ceased to be true that there was not money enough in Lombard Street to discount all the bills without taking some from the Bank of England. In 'ordinary' times, on the contrary, the rate at which the great joint-stock banks lent to the bill-brokers 'made the price of short loans,' and the rate at which they discounted bills directly 'made the discount rate' in London. Between those rates and the 'official rate' of the Bank of England there was only a 'slender shadowy' connexion due to the fact that the rate allowed to their depositors by the joint-stock banks was usually one and a half per cent below Bank Rate.¹

But in 1930 Mr. Withers brought out a new edition of his own admirable *Meaning of Money*—the *Lombard Street* as it may be called of his generation—and another turn had by then been given to the wheel. Anxiety about deficiency in the cash reserves of the joint-stock banks was relieved. Some of their number had betrayed more concern about keeping, and making it known that they kept, larger reserves against their liabilities. And, as Mr. Withers wrote, the 'consolidation' of banking had meant the 'absorption' of the 'goats' by the 'sheep.' And—what was more important—the task of maintaining the reserve of the Bank of England itself, which continued to be the fount to which eventual recourse must be had, was eased. This was partly due to the forging, that he had

¹ Since the War it was reduced to two.

urged, of a 'link' between the Bank and the market rate of discount. That was done through recognition of and agreement with its lead in the matter by the influential banking members of the London Clearing House. But it was also partly owing to the extraordinary situation following the War of 1914-18.

For, it should be noted, it would appear that the second weapon of defence against threatened depletion of the cash reserve of the Bank of England was latterly invoked more commonly by the Directors; and its potency was intensified by the trend of circumstance. It also received the preferential choice of some expert banking critics and monetary authorities. Apparently, too, it was chiefly used as the defensive arm under the Federal Reserve system of the United States, that played, or was assigned by economic observers, an important, if not, as we shall see, the chief, rôle in currency and credit affairs after the War. This instrument is distinguished in City parlance as 'open market dealing.' The Bank by buying or selling securities tries to vary, as circumstances prompt, the amount of credit available in the Money Market, some times contracting and sometimes enlarging it. This aim has been achieved, and its success can be connected partly with the outcome of the War.

The War indeed demonstrated the stability of English banks. It gave a striking exhibition of the high quality of the banking system and also of the inherent strength and rare calibre of the London Money Market. Anything in the nature of serious crisis vanished speedily after the first sudden alarm of a lack of legal tender wherewithal to discharge debts. The machinery of the money market was with bold deftness started once more, if some consequences of the extraordinary action taken then remained behind and, as later observers have seen, may have occasioned in part at least the over-issue of paper money. The huge business of financing the War was surprisingly

accomplished. Reasonable apprehension happily did not mature. The fear just mentioned was rapidly allayed with the supply of additional currency. No 'run' occurred afterwards. Nor was there such 'flight' then from the pound as there was from the German mark and the French franc.

The War, however, brought about, or was accompanied by, a very considerable augmentation of the quantity of notes circulating in the country, or at least issued to the banks and kept in their tills or used as reserves, without a gold backing. They were some time after placed under the ægis of the Bank of England instead of resting with the discretion of the Treasury. The behaviour of the Government in the whole affair did not remain free from doubt of their wisdom or suspicion of their candour. It was, we shall see later,¹ sharply criticized. Onerous risk was incurred if, as it was pleaded, that was run unconsciously. And certainly the consequences were those that history has shown, and theory supports, inevitably dog the heels of the over-issue of inconvertible paper.

In the ultimate result the 'fiduciary' quota of the note issue was greatly and, it is not improbable, permanently enlarged. At the beginning of 1931 it was nearly fifteen times as much as it had been just before the War, and the highest peak reached was considerably above that figure. Some power, too, of temporary increase of the fiduciary portion, behind which there are only securities and not gold, was given to the Bank, to be exercised with the consent of the Treasury, when the Treasury notes were transferred and became bank-notes. It seems ancient history now to refer to the view mentioned by Mr. Withers as prevalent in the City before the War. He cited the opinion that the note might well cease to be fiduciary at all and become a mere 'bullion certificate.'

It was believed, though not officially stated, that the

¹ Cf. below, p. 273.

backing consisted mainly of Treasury bills. At any rate, those Government 'IOU's,' as they may be called, were used copiously to provide the 'ways and means' of the War, and considerable quantities remained behind when it was over as a disturbing factor among the securities in the London Money Market. They might, it was also noted, be a controlling instrument. For they could be looked upon as handy tools by the Bank Directors co-operating with the Treasury authorities in the 'management' of the price of credit in the money market. At any rate, they could be regarded as augmenting rather than lessening the capacity of the defensive arm wielded through 'open market dealings.'

Two other 'post-war' incidents have a bearing on Bagehot's description of the status and machinery of the English Banking System and the London Money Market. The convertibility of the note into gold coin for internal circulation was suspended, while the 'gold standard' was restored so far as convertibility for export in bullion of certain quantity was concerned. This was curiously tantamount to the introduction of the 'economical and secure currency' which Ricardo recommended after the Napoleonic War. It was adopted in the Act of 1819 for the resumption of cash payments, but did not then come into practical operation. It manifestly effected considerable economy at least of the wear and tear of gold.

The other significant fact was that London, in contradiction of some fears, and also of some hopes confidently advanced, regained a prominent position as a financial centre. Primacy indeed promised apparently to be restored fully or at any rate in no despicable measure. That expectation could be cherished in spite of the significant consideration that the United States with their banking system, that had formerly been crude and liable to become clogged, remodelled after the English pattern, amassed large stores of gold during the War and were a

creditor instead of a debtor country. In lieu of the arrangement here, by which, as Bagehot showed, the single Bank of England stood alone as head of the hierarchy, twelve Federal Reserve Banks were set on a similar platform of supremacy and control in the United States.

Much influence for good or for ill to the world at large, it was argued, rested after the War with the discretionary management by the American Federal Reserve Board of the supply of credit facilities and their use of the vast proportion of the total store of gold at their disposal. For some of their action at some junctures they received approval, while from other quarters, and at other times, they were blamed. But it should be added that it was also alleged¹ that owing to the circumstances of the American money market, with the nature and amount of negotiable securities available, their capacity for regulating credit and affecting the consequent fluctuations of prices was confined within narrower limits than had been contemplated by their admirers or censors.

In any case, whatever might lie hid in the womb of the future, for the ease or malaise of the world, or the gratification or the reverse of the United States, it remains true that the practised skill, with its long, fine ancestry behind it, and the bolder, safer enterprise which had become an instinctive trait, of the 'City' of London, obtained frank recognition of superiority from the informed, if jealous, opinion of expert bankers in New York. That would, we dare affirm, not have surprised, though it might have pleased, the author of *Lombard Street*.²

¹ Cf. J. S. Lawrence, *Stabilization of Prices*.

² The gold standard itself, as restored above, was again suspended perforce (for the time at least) in 1931.

CHAPTER VII

WILLIAM STANLEY JEVONS. 1835-1882

STATISTICS

Jevons' Youthful Aspiration—His Combination of Qualities—The Misuse of Statistics—Owing to (1) the Recent Date of their Scientific Treatment—(2) The Difficulties of the (1) Collection—and (2) Handling of Figures—Jevons' Life and Characteristics—His Power of Observation—His Shyness and Reserve—His Intellectual Training—Statistical Nature of his Books—His *Investigations in Currency and Finance*—The Importance of his Inquiries into Periodic Fluctuations of Prices—His Use of the Graphic Method—Curves of Prices—The *Monthly* Variation in the Bank Accounts—The *Quarterly* Variation—The *Autumnal Pressure* in the Money Market—The Recurrence of *Commercial Crises*—The Sun-spot Hypothesis—The Handling of such Movements—The *Rise and Fall in the Value of Gold*—The *Index Number* of the *Economist*—Its Supposed Defects—The Effects of Changes in the Value of Gold—The Practical Bearing of Jevons' Inquiries—Later Developments of Index Numbers and Price Fluctuations—The Monetary Standard

THE economist, whose work we are now about to consider, refers in one of his letters to an ambition felt in early life. 'If there were one thing,' Jevons writes, 'I should wish to be, it would be a recognized statistical writer.' This youthful aspiration was fulfilled. A competent judge of his statistical writings declared that the 'pure honesty' of his 'mind, combined with his special intellectual fitness for the work, made them models for all time.'¹ It is true that he is not known merely for his statistical studies; for he was a logician of a high order,

¹ Marshall in the preface to Jevons' *Investigations in Currency and Finance*.

and an economist of great and varied ability. But it is also true that, on the one hand, the logical build of his mind combined with his extensive knowledge of general economic subjects to produce his excellence as a statistician, and, on the other, that the part of his work seems to have presented the greatest attractions to him, which lent itself the most easily to treatment of a statistical nature.

He became a statistician of the first rank; and his qualities were such as to ensure this result. The reader of his *Theory of Political Economy*, in which in 1871 he explained, and applied to the theory of value, the conception of final utility,¹ must be sensible that, bold as is his theoretical reasoning,² he owed much of its exactitude to a keen appreciation of fact. If, on the other hand, we turn to that book on *The State in Relation to Labour*, which was published in 1882, or to those essays on the *Methods of Social Reform*, which were collected in a volume after his death, we recognize that his wise and sympathetic treatment of such practical problems as the 'amusements of the people,' the employment of 'married women in factories,' and the advantages of a 'state parcel post,' was due, in some measure at least, to his very firm grasp of theory. FOXWELL maintained³ that 'in his union of high speculative ability with the greatest reserve and sagacity in the treatment of practical problems,' he was a 'conspicuous example of the truth' of the defence of theoretical study made by the French economist Cournot, who urged that 'those who are most concerned for the precision of their principles will be most sensible of the limits of their application, and therefore the least unpractical in their treatment of real questions.'

¹ Cf. above, p. 103.

² Cf. also *The Principles of Economics: A Fragment of a Treatise on the Industrial Mechanism of Society*, published after Jevons' death, with a preface by Mr. H. Higgs.

³ In the preface mentioned.

It was this combination of qualities which rendered him so able a statistician. A reproach is frequently levelled against statistics, which is summarily expressed in the statement that 'figures will prove anything'; but it is justified only by their misuse, and this may be traced in a large measure to an unnatural divorce of theory from facts, or facts from theory. The assertion 'simply means,' as GOSCHEN stated,¹ that 'figures, which never tell untruths, may be so handled as to present untruths.' There can be little doubt, however, that the view of statistics, which is commonly prevalent, is unsatisfactory; and GIFFEN also remarked² that in 'journals of the highest standing there are the wildest blunders of the schoolboy order.' This misuse and misrepresentation may perhaps be ascribed to two main causes, one of which is the comparatively late date of any scientific treatment of the subject, and the other consists in the very serious difficulty which attends such a treatment.

It is true that in one sense, as the French statistician and economist M. Block has observed, statistics 'have existed ever since there were States.' The name seems to have referred originally to 'inquiries into the condition of a State'; and Achenwall, who has been called the 'father of modern statistics,' regarded³ them as a 'survey of the customs, laws, and forms of government, by which one nation differed from another'—as history, in short, with the uninteresting details, as they seemed to him, of the names of monarchs, the changes of dynasties, and the issues of wars, left out. He did not dwell so much on their numerical as on their descriptive character; but

¹ In his inaugural address as President of the Royal Statistical Society in 1887. Goschen was the author of a work on *The Theory of the Foreign Exchanges*, which passed through many editions.

² *Economic Inquiries and Studies*, vol. i. p. 283. Cf. below, Chapter X.

³ See Dr. Guy's paper in the *Jubilee Volume of the Royal Statistical Society*. Achenwall lived from 1719-72.

they are now generally understood to mean collections of facts capable of expression in a numerical and, if possible, tabular form. This was once known as 'political arithmetic'; and SIR WILLIAM PETTY,¹ two and a half centuries ago, described his essays at this 'arithmetic' as the use of a 'method' 'not yet very usual,' which, instead of employing 'only Comparative and Superlative words and Intellectual Arguments,' enabled him to 'express' himself in 'Number, Weight, and Measure.' In similar language Jevons characterized a series of statistical papers, which had been collected by him, and were published after his death under the title of *Investigations in Currency and Finance*, as an 'attempt to substitute exact inquiries, exact numerical calculations, for guess work and groundless argument.'

Even in this latter meaning of 'political arithmetic' statistics have an ancient origin. It has been said that almost the first act of a regular government would be to number its fighting men, and the next to ascertain the amount of taxation which could be raised from the rest of the community. But it is apparently² only within the last three or four hundred years that systematic scientific use has been made of such information; and it is more recently that statistics have been brought into close connexion with political economy. There were 'bills of mortality' in England in the reign of Henry VIII; but the first census was taken in 1801, and did not extend to Ireland, while the project of taking it at all was met by stubborn superstitious objections. Adam Smith had 'no great faith in political arithmetic'; and the trustworthy geographers of the eighteenth century were considered to be those who did not attempt to estimate the population of their own European countries. Malthus seems

¹ Petty also wrote on general economic subjects.

² See the article on 'Statistics' in the *Encyclopædia Britannica* (ninth edition).

to have been almost the first professed economist of real eminence who made any extensive use of statistics ; and he stated that the ' science may be said yet to be in its infancy.'

The scientific treatment, then, of figures is comparatively modern ; but they are full of pitfalls for the unscientific. ' Statistics,' Giffen wrote, ' are almost always difficult,' and ' no ' statistical ' table almost can be used without qualification and discretion.' ' Figures themselves,' Goschen remarked, ' never lie, but every one must admit that there is no sound and accurate material which can be so easily handled for the special purpose of the compiler as statistics can.' It is, then, in the handling of figures that mistakes and abuses arise ; and they may occur either in the collection of the figures or in their arrangement and interpretation.

The sources of information may be misleading and inadequate, and it may be impossible to draw any certain conclusions from the figures which have been collected. The sources may, indeed, be so many in number that the error proceeding from one is neutralized by that proceeding from another ; or, if the method of collection in different cases be uniform, the resulting error in each case may be also uniform, and neglected for the purposes of comparison. But these methods of eliminating error are not always possible, and the evidence of figures is often tainted by a vicious or defective mode of collection.

Nor does the liability to error end at this stage ; for the arrangement and interpretation of figures, which have been industriously and intelligently collected, require a high degree of judicial and vigilant discrimination. It is, for instance, a common practice to compare the growth in the trade of different countries by a standard of *percentages*. But this method of measurement, as Giffen once showed, may mislead, in consequence of the different amounts on which the *percentages* are reckoned. ' The

increase from zero, or all but zero, to an appreciable amount of trade, makes an enormous change ' in the ' percentages ' ; and the only safe plan is to state the original amounts on which the *percentages* have been reckoned as well as the *percentages* themselves. Nor, again, is it so easy a task as it may appear to strike an *average* correctly,¹ and more than one different method, yielding different results, may be employed.

The execution of statistical work of real value is thus a matter of difficulty ; and the requisite qualities are by no means the natural inheritance of all men. The ability and success of Jevons were due to some remarkable gifts, which were strengthened by education and training.

He was born at Liverpool in 1835 ; and, as a boy, he was said to be ' thoughtful ' and ' eager to acquire information.' He himself declared that he ' often felt a positive pain in passing any object which ' he ' could not understand the construction and meaning of.' He had, then, that first qualification for statistical work, which consists in a habit of keen and pertinacious observation. And this habit was strengthened by his very deficiencies. His shyness and reserve rendered him somewhat solitary in his play in childhood, and were shown by his fondness for long walks by himself during his life in London at University College School in 1850 and 1851, and afterwards as a student of the College from 1851 to 1854. They appeared again during the years as assayer of the Mint in Sydney, which followed from 1854 to 1859, in his abstention from society, and during his later life as Lecturer and then Professor at Owens College, Manchester, from 1863 to 1876, and afterwards at University College, London, from 1876 to 1880, in the difficulty he seems to have experienced in expressing himself at first in speech or writing. They may have led him at times into unhealthy self-examination ; but they undoubtedly encouraged his habits

¹ See below, p. 172, etc.

of reflection and observation of fact, and threw him back on his own unaided powers and resources.

Again, his early intellectual training familiarized him with the theoretical methods of scientific investigation ; and his ' favourite study ' during his first period at University College, London, was ' physical science.' At the age of eighteen he was offered the post of assayer at the Mint in Sydney with an annual salary of some seven hundred pounds ; and, although he accepted the offer with reluctance, and the full intention, from which he never swerved, to return as soon as he could to England, the post must have afforded him leisure for independent study, which he might not otherwise have been able to pursue, and accustomed him to habits of precise investigation and measurement. It was after he had passed through this preliminary training that, on his return to England, and the resumption, at the age of twenty-four, of his studies at University College, he felt attracted to mental and moral philosophy. He had already acquired, as he himself said, a ' capacity of seeing the sameness and the difference of things ' ; and, although he was conscious of possessing little power of memory, and less of imagination, he believed that he could ' seize ' upon ' one or two ' thoughts, and ' develop them into something symmetrical.' This faculty had its dangers ; and, in his statistical work, it occasioned one notion at least which has been considered fanciful,¹ just as in that part of his writings which was more generally economic it led him perhaps to form an exaggerated estimate of the influence of utility in the determination of value.² It also resulted in a treatment of almost every subject, or branch of a subject, which he took up, which was so original in conception, and independent in execution, that it tended to create an impression of a wider divergence than seems to have really

¹ See below, p. 168.

² See above, p. 113, and below, p. 205.

existed between his work and that of preceding writers. But the faculty was unquestionably of great value in the performance of statistical work, and it was eminently calculated to incline the possessor towards statistical study.

It was, then, little wonder that almost his first literary project of any magnitude was a *Statistical Atlas*, and that the pamphlet, which he wrote in 1863 on a *Serious Fall in the Value of Gold*, attracted the complimentary notice of some of the older living economists. His book on the *Coal Question*, which was published in 1865, with the object of drawing attention to the 'probable exhaustion of our coal mines,' was based on statistical data, and confessedly influenced Gladstone, who was then Chancellor of the Exchequer, in making provision for the more speedy reduction of the National Debt. His little treatise on *Money and the Mechanism of Exchange*, published ten years later, contains statistical facts as well as an exposition of monetary theory; and his sudden death in 1882, while bathing at Bexhill, left behind an impression that it was not only a logician and economist, but also, in a very special degree, a statistician, who had been removed in the prime of his intellectual powers at the early age of forty-six. He possessed a large measure of the two qualities which, it seems, should be combined in the person of the successful statistician; for he united great theoretical ability with keen observation of salient fact.

His statistical studies were collected together under the title of *Investigations in Currency and Finance*. He had himself formed the collection; but it was not published until after his death. The papers, of which it consists, 'fall into two groups,' one of which deals with the periodic fluctuations of prices, and the other with currency questions. In the latter group are included discussions on 'bi-metallism,' and 'an ideally perfect system of currency,' together with the results of a statistical inquiry into the

'condition of the gold coinage of the United Kingdom.' But it is perhaps in the former group that his statistical ability is more conspicuous; and the different papers, although written at different times, furnish the successive stages of a connected inquiry.

The value of such an inquiry as that which is here conducted into the fluctuations of prices is very considerable. The elaborate researches made by JAMES E. THOROLD ROGERS¹ into the *History of Agriculture and Prices in England* illustrate the importance of records of prices as evidence of the economic conditions of the past; and it is sometimes said that the greatest economic evil of the present is irregularity of employment. That irregularity is connected with changes in prices, whether they are due to speculation, or to 'freaks' of fashion demanding one kind of goods, and ceasing to demand another, or to miscalculations of the future; and the establishment of 'greater industrial stability,' is, as Foxwell cogently said,² a question of diminishing 'price fluctuations.' But the first step towards providing a remedy is to diagnose the disease; and such statistical investigations as that of Jevons into the periodic fluctuations of prices are one means of discovering their nature and causes.

In this investigation he made considerable and effective use of what is known as the 'graphic method' of statistics. That consists in invoking the aid of the eye to assist the brain, by representing numbers, and the relations between them, by means of graphic processes. A French statistician³ once pithily said that such a method is to figures what in a drama the action is to the story. The method may take several forms. An ingenious American writer⁴ employed

¹ Cf. below, Chapter IX.

² In a lecture on 'Irregularity of Employment and Fluctuations in Prices' contained in *The Claims of Labour*.

E. Levasseur in a paper in the *Jubilee Volume of the Royal Statistical Society*.

⁴ Edward Atkinson in his *Industrial Progress of the Nation*.

lines of different length to represent numbers of different magnitude. The eye is able to grasp the differences and the similarities in a number of lines with greater rapidity and ease than the brain can display in dealing with a number of figures ; and the lines may remain imprinted on the memory when the figures have passed away. Another variety of the method is to construct a diagram, say, of rectangular shape, to represent the population of the British colonies, and to break this up into smaller rectangles representing the population of the colonies of other nations, and other rectangles representing the population of those nations, and of the United Kingdom. The eye can take in the meaning of the diagram almost at a glance ; and it can interpret with similar rapidity the significance of a map, which is coloured, or shaded, differently to represent different degrees of density of population.

The line, the diagram, and the shaded or coloured map, are thus varieties of the graphic method ; and, although it is easily liable to misuse, and should be employed with discretion, it undoubtedly conduces to the easier and more effectual understanding of figures. But the special variety which Jevons employed was that of the curve. A curve is drawn to exhibit the fluctuations in price of a certain commodity during a certain period of time. Two lines are drawn at right angles to one another, one in a horizontal and one in a perpendicular direction. The horizontal line is divided into different spaces indicating days, or weeks, or months, or years ; and the perpendicular line is similarly divided into spaces showing the pence, or shillings, or pounds, or tens or hundreds or thousands of pounds, for which a certain quantity of the commodity sells. The curve of price starts from the point in the perpendicular line which indicates the price at which it is selling at the beginning of the period under consideration. At the end of one of the divisions of that period the price may have altered ; and, if it has done so, two lines are drawn at

right angles respectively to the perpendicular and the horizontal line, starting from the point in the former which marks the present price, and from that in the latter which indicates the end of the old and beginning of the new division of the period of time. These lines intersect one another, and the curve is continued until it cuts the point of intersection. And so it inclines upwards or downwards as the price rises or falls, and the eye is enabled to comprehend at a glance the meaning of several figures.

The method of curves has further advantages. Several curves may be drawn representing respectively the prices of different articles; and examination may disclose similarities in the inclinations of the different curves, which point to the probability of the same, or a similar, cause, affecting the prices of the different articles. Or, again, though one part of a single curve may be higher or lower than another, careful observation may detect a similarity between the changes at the higher and those at the lower level; and this similarity may indicate the operation of the same, or a similar, cause on different occasions. It was his power of detecting these similarities which enabled Jevons to employ so effectively the method of curves; and he himself believed that he possessed a 'capacity of seeing the sameness and the difference of things.'

He conducted an examination into the published weekly accounts of the Bank of England, of which a complete series existed since the passing of the Bank Charter Act in 1844. He drew statistical curves showing the variations in the circulation of bank-notes, and in the amounts of bullion, and of private and public deposits, and securities, in different weeks. He discovered a *monthly* variation, which occurred about every fourth day of the month, and was due to the fact that bills were generally settled on that day. There was also a *quarterly* variation, which was due to the payment of the dividends on the National

Debt, and the 'general custom of settling rents and other accounts at the quarter-days.' And there was a curious further variation which recurred with regularity in the autumn. There was what he called an '*autumnal pressure in the money market*,' when the harvest was being gathered in, and large money-payments were due. The rate of discount, or the terms on which money could be borrowed, rose; for money was urgently needed. The rate of bankruptcy increased; for more people failed to meet their monetary engagements. The prices of wheat and of consols fell; for the harvest was being gathered in, and investment was less desirable than cash in hand.

There is, in short, as the *Economist* stated, a 'sort of *tide* in the cash transactions of the country which periodically empties and fills the Bank till. At the close of every quarter there is a strong outgoing current'; for the 'non-banking classes' 'get their money.' Salaries, wages, and small dividends are paid. But, besides this *quarterly* variation, there is, as Jevons showed, an *annual* autumnal drain, which renders October and November the most critical period of the year regarded from a monetary standpoint. In agricultural industry and other outdoor employments, in pleasure-seeking and in travelling, a great amount of money is 'dispersed' in wages and other payments throughout the summer months; and many of the recipients have no banking accounts, and keep the money by them in hard cash. The country banks are the first to feel the drain which is thus occasioned, and they pass it on to their London agents, and, through them, to the head of the banking hierarchy, the Bank of England.

Bringing next under consideration the prices of ordinary commodities, Jevons detected a variation which recurred at longer intervals. Every ten years or so a *commercial crisis*¹ seemed to take place. There had been one in 1825, another in 1836, another in 1847, and another in 1857,

¹ See above, p. 143, etc.

and yet another in 1866. At such a time prices rapidly declined from the point which they had reached in a previous period of commercial activity, and every one was eager to obtain cash, and distrustful of credit. The state of trade, to quote the words of Lord Overstone, 'revolves apparently in an established cycle. First we find it in a state of quiescence—next, improvement—growing confidence—prosperity—excitement—over-trading—convulsion—pressure—stagnation—distrust—ending again in quiescence.'

Jevons saw that this cycle seemed to occupy with remarkable uniformity periods of about ten years in duration; and he noticed that the beginning of speculative activity and growing prosperity often appeared to coincide with favourable harvests. If, then, the weather, on which the 'success of the harvest' certainly depended, could be brought into any causal connexion with the 'solar period'—with that 'periodic variation of the sun's condition which was first discovered in the alternate increase and decrease of area of the' so-called 'sun-spots,' and was 'also marked by the occurrence' of storms and 'other meteorological disturbances'—it did not seem entirely fanciful to suppose that the ebb and flow of the tide of commerce had some connexion with the alterations in the spots on the sun. Nor was there much doubt that the rainfall was 'more or less influenced' by the 'changes in the sun's condition.'

This theory was criticized and even ridiculed as far-fetched. But some years afterwards Jevons' son, who was also an economist, returning to his father's speculation, believed¹ that it could be confirmed. He put the variations in the harvests as recurring at intervals of three years and a half—a third of the decennial period taken by his father. This was the result of inquiry in the United

¹ Cf. his *Future of Exchange and Indian Currency*, and also some articles by Sir W. Beveridge in the *Economic Journal* for 1920.

States; but figures of the harvest in the great countries during the forty years before 1914 yielded strong 'presumptive evidence' that the total agricultural production of the world was in accord with the periodic variation ascertained for North America.

At the other end of the causal chain the 'rhythmic succession' of the trade cycle came round at intervals of seven and ten years, which were, in statistical language, the principal 'modes,'¹ and there were also, it seemed, 'subsidiary maxima' at the fourth and the thirteenth year. The connecting links were tolerably easy to adjust. For good harvests would stimulate industrial activity by raising the demand for manufactures and augmenting and cheapening the supply of raw materials and food. Furthermore, Professor H. S. Jevons declared that the investigations of meteorologists in England and America had confirmed his father's 'basic idea,' while in the United States the statistics of harvests and industrial activity showed the close dependence of the latter on the former. What might be conceived to be the sequence was something like this. The first recurrence of good harvests might awaken trade from lethargy, and then, after a temporary set-back which would check rather than stop recovery, the second cycle culminating three and a half years afterwards would apply a powerful additional stimulus, and the complete movement up and down might fill a full ten years.

This careful and supported resuscitation of earlier conjecture must be allowed to be interesting and impressive, if it does not convince. But whether the fresh evidence be or be not deemed conclusive, and however the duration of the trade cycle be measured—by ten years or by a longer or a shorter period—its reality and importance have been put beyond serious question. The atten-

¹ The 'mode' is defined by Professor Bowley as 'that value of the graded quantity (wages, years, etc.) at which the instances are most numerous.'

tion given since the elder Jevons wrote has displayed it as a determining factor of economic welfare, so unmistakably indeed that he who runs may read. Much time and pains have been bestowed on searching scrutiny into its causes and effects; and not a few suggestions of possible and promising, preventive or remedial or alleviating action have been forthcoming.

Some discovered the root of the mischief in the inherent instability of credit and its tendency to overreach itself. Others traced the malady to ineradicable impulse firmly planted in human nature, with attendant liability to alternating infirmity. It has been generally agreed that in its present manifestations at least the disease is the product of conditions peculiar to the modern world of business that have obtained since the Industrial Revolution. It also seems to have been fairly established that prolonged depression rather than sudden financial crash, with panic in the money market and draining of the banking cash reserve, is likely for the future to accompany the passing of the boom of trade. It has, too, been suggested that recent development of such combinations of business as Trusts is calculated to offer greater resistance to the jolts and shocks of industrial fluctuations, which, it should be added, sometimes affect one country alone and sometimes are spread over a larger area and may even embrace the entire commercial world.

Such reflections, which tend to multiply, have become of no small moment. They emphasize the fundamental and significant fact. For that there are an ebb and a flow in the tide of trade and industry, that these movements recur with appreciable regularity, and that the influences which cause the one have a tendency to set in operation influences which in their turn produce the other—all this is admitted commonplace. It follows that a curve of prices would indicate such fluctuations by motion up and down, over and above movements occasioned by those fluctua-

tions, which occurred at more frequent intervals and lasted for a shorter period of time, or were due to special causes affecting particular commodities.

The last periodic fluctuation in prices, which Jevons noticed, stretched over a yet longer period. Besides the smaller variations in the curve, it might take a general sweep upwards or downwards, according as the value of gold fell or rose, and the precious metal became more or less abundant compared with the work of exchanging which it performed. The direction given to the curve by this influence was, like that caused by alternating periods of commercial prosperity and depression, ascertained by means of an average of prices; and the method of obtaining this average which Jevons followed was one variety of what is known as the method of *index numbers*.

A certain number of articles of ordinary consumption are selected; and the average wholesale price for a period of time and a district of country, or, it may be, the selling price prevailing in a particular representative market on a certain representative day, is ascertained in the case of each separate article. The average price prevailing at the time from which the investigator starts, is regarded as equivalent to 100, and, therefore, the price of all the articles selected—say, twenty-two in number—is equivalent to 2200. He then ascertains in each succeeding period of time, in the same way as he did in the first, the average price for each of the twenty-two articles, and discovers how large is the percentage of advance or decline which their new prices exhibit when compared with the old. He adds these percentages to the original 100, or deducts them, as the case may be, and then adds together the numbers separately obtained for each of the twenty-two articles into one grand total, and, measuring the rise or fall of general prices by the extent to which this number exceeds or falls short of the original 2200, draws his curve accordingly.

This method of selecting twenty-two articles, and comparing their prices, had been adopted for a series of years by the *Economist* newspaper.¹ But it could be contended on various grounds that the average obtained was not trustworthy. Some critics urged that the articles, which were selected, were not representative of general consumption. They consisted largely of raw materials, and it is a well-known fact of economic experience that the cost of transforming raw materials into manufactured commodities tends to decrease relatively to the cost of procuring the raw materials themselves, as civilization advances. If, then, the *index number* obtained from the prices of the twenty-two articles exhibited a fall, the fall might be greater if the prices of manufactured commodities had been included; and, as they are concerned in a larger number of transactions, their omission was misleading, and the resulting average was an inadequate representation of the changes in the purchasing-power of money.

Again, it was argued by some critics that the *index number* of the *Economist* did not include a sufficient number of articles to make it certain that the result was not unduly affected by circumstances which were peculiar to some one or two. The more articles are included, the more likely it is that some special circumstance peculiar to one article, and acting in one direction, will be counteracted by another special circumstance peculiar to another article, and acting in the opposite direction. But the number of twenty-two was insufficient; and cotton goods, which were affected by a special scarcity during the American Civil War, entered largely in some form or other into the articles selected.

Thirdly, and lastly, it had been said that the twenty-two articles were not all equally important. Some are more,

¹ This *index number* was due to WILLIAM NEWMARCH, who also edited and continued the *History of Prices (1782-1857)* commenced by THOMAS TOOKE.

and others are less, generally consumed, and therefore some are more, and others less, frequently exchanged against money. To find, then, the changes in the average purchasing-power of money greater weight should be given to the former than to the latter. This may be done in various ways ; but, if it is not done, the average is not trustworthy.

Jevons was aware of such objections when he wrote his pamphlet on a *Serious Fall in the Value of Gold*. He used himself, by preference, a 'geometric average'¹ of prices, instead of simply adding together the figures obtained for the separate articles ; and he included in the scope of his inquiries a larger number of articles. His pamphlet, which was reprinted in his *Investigations in Currency and Finance*, was an endeavour to trace the effects of the discoveries of gold made between 1848 and 1850 in California and Australia.² In consequence of these discoveries the curve of prices took an upward, while later it appeared to take a downward, direction. This bend of the curve could be detected in a diagram covering a series of years. It rises and falls, as the tide of commerce flows and ebbs ; and it rises and falls, beyond these fluctuations, as the value of gold grows less or greater. The lowest and the highest point of one tide of commerce are lower or higher than those of another, or, at any rate, the average level of the curve during one tide is lower or higher than during another, according as the value of gold is rising or falling, and prices are declining or advancing.

These changes in the value, or purchasing power, of gold affect different classes of the community in different ways and degrees. Jevons pointed out that those who received 'fixed incomes,' and made 'fixed payments,' were un-

¹ 'To take the geometric mean of two ratios we must multiply them together and extract the square root of the product.'

² Cf. p. 120.

affected; for, if the money was worth less when they received it, it was also worth less when they paid it away, and *vice versa*. Nor were those persons affected whose receipts and payments both varied with the variations in the value of gold. But persons who received 'fixed incomes,' and had to make 'variable payments,' suffered by a rise and benefited by a fall in prices, and persons who received 'variable incomes,' and had to make 'fixed payments,' were situated in the reverse position. When the value of gold fell, and the prices of commodities rose, debtors benefited at the expense of creditors, for the money went further in the purchase of commodities at the time when they contracted the loan than it did when they had to repay it. In the opposite condition of affairs creditors benefited at the expense of debtors. The burden of national debt is lessened at a time of rising, and increased at a time of falling prices; and those engaged in trade, who have generally borrowed money, are rendered more cheerful by rising, and more despondent by falling prices. If they are manufacturers, they may have bought their raw material, and made their contract for wages, at a time when prices were at a higher, or lower, figure than that at which they stand when they sell their manufactured commodities. In the former case they lose, and in the latter they gain. It is, then, little wonder that they make their voices heard in rejoicing or complaint, while the wage-earning classes, whose wages do not rise or fall as fast as prices, are generally, for the time at least, gainers when prices fall, and losers when they rise.

With the treatment of this great fluctuation Jevons' inquiries reached their final stage. Their value as contributions to the development of speculative theory is evident, but they are scarcely less valuable in their relation to practical affairs. Before any approach can be made towards that greater steadiness of prices, which on many grounds appears desirable, a knowledge of the nature and

causes of their fluctuations must be acquired. But, if the true meaning of the past can be interpreted correctly, prediction of the future becomes less impossible; and prevision may mean precaution. The knowledge that the autumn is the critical season of the financial year, and that there is, in the nature of things, likely to be a drain on the cash-reserve of the Bank of England at that time, was calculated to lead the directors to make provision for anticipating the drain and replenishing their reserve. The knowledge that there is an ebb and flow in the tide of commerce may lead men to see danger ahead, to interpret the signs of the times, to observe and understand the commercial weather-glass, to avert, or protect themselves against, the coming storm. The knowledge that the curve of general prices falls or rises as the value of gold rises or falls may lead to the study, and possibly to the improvement, of monetary systems in order to diminish price-fluctuations, and to such adjustment to these changes of long bargains at least as to avoid apparent, or real, injustice.

The Great War of 1914-18, and its aftermath, with the swift, extensive movements of prices that occurred, dislocating the foreign exchanges and playing havoc with not a few business dealings at home, could properly be judged to have enforced the need, as they might reinforce the usefulness, of the statistical inquiries of which Jevons' important book was in a sense the pioneer and the exemplar.

Much attention has been given since his day to the study and improvement of 'index numbers.' Among other applications they were used for regulating wages according to the cost of living. Their employment certainly eased a troublesome situation that arose, after the Armistice especially. But when prices began again to move down instead of up, dissatisfaction replaced content; and the make-up of the index number, based as it was on the retail prices of certain constituents of the household budget of

working-class families in 1914, was adversely criticized, not least loudly by civil servants, whose standard of livelihood and necessary expenditure were differently composed. It should be noted in this connexion that the *Economist's* index number of the wholesale prices of twenty-two commodities was altered more than once, after Jevons wrote. In 1929 the list of goods was raised to fifty-eight, the year 1927 was taken as the base, and the 'geometric mean' was substituted for the arithmetic which, it will be remembered, is the simple average ordinarily understood. The former was considered a more accurate representation.¹

A reasonable chance of increased steadiness in the monetary standard, and a cherished hope of controlling the movement of the 'credit cycle,' became prominent questions of the day. Of pressing urgency, they were searchingly examined. Plans too were actively discussed. It has been seriously thought, and confidently suggested, that, as improved banking may already have removed altogether, or lessened materially, misgiving about the smooth continued working of the elaborate but effective mechanism by which business bargaining has come to be settled in this country, when the tide of ebullient speculation and excited over-leaping enterprise has turned, so it is not visionary to imagine that at an earlier stage judicious handling by the banks, and the Bank of England at the head of the hierarchy, resting on accumulated data and guided by intelligent anticipation, could stop credit from running to extremes, and thus check or limit those price-fluctuations up or down which, disrupting trade, bring unemployment in their train.

Even bolder schemes have been formed; and they may yet be brought to trial and to fruition. It has been conceived that, as the value of gold itself could be steadied on the side of demand for monetary use at least, the

¹ Cf. above, p. 173, and also the present writer's *Money and its Relations to Prices* (new issue).

monetary standard based on it might be made to approximate more nearly to the stability recognized as essential, and secured, to other authorized measures like the yard or the ton. These hints and surmises may fittingly conclude with the emphatic utterance in 1926 of an economist and statistician of the front rank, who was also a business expert. Sir Josiah Stamp then used these plain words: 'I do not hesitate to say that the greatest single evil of our time is the instability of the monetary unit as a measure of real values.'¹

¹ Cf. *The Christian Ethic as an Economic Factor*. Cf. also Professor Irving Fisher's *The Money Illusion and Stabilizing the Dollar*.

CHAPTER VIII

HENRY FAWCETT. 1833-1884

ARNOLD TOYNBEE. 1852-1883

SOCIAL REFORM

Political Economy and Social Reform—Fawcett as a Theoretical Economist—His Practical Qualities—His Courage and Independence—His Blindness—His Criticism of Indian Finance—His Common Sense—His Generous Sympathy—His Individualistic Attitude towards Social Reform

Toynbee's Life—His Writings—His Personal Influence—The Practical Aims of his Theoretical Study—The Relations between Economic Theory and Practical Social Reform—Cairnes' Argument—Its Value—Its Defects—The Historical Method—Toynbee's Review of the Older Economists—The Wages-Fund Theory—Newer Theories of Wages—The Limitations of 'Natural Liberty'—Education—Factory Legislation—The 'Gulf' in the Theory of *Laissez-faire*—Toynbee's Moderation—His Approval of Theory—His 'Radical Socialism'

POLITICAL economy has been sometimes represented as condemning uniformly all schemes of social reform, and supporting the rich and powerful classes, who are prone to be content with the existing order, in their opposition to the poor, who fondly imagine that any change cannot fail to improve their own condition. Such a conception is indorsed by popular opinion. It was found on the pages of such novels as Besant's *Children of Gibeon*, it formed the theme of the passionate denunciations of Carlyle, and it furnished grounds for the distrust, which prompts the feeling that, 'if Political Economy is against the working man, it behoves the working man to be against Political Economy.'

And yet, on a broad view of the history we have been examining, such a conception appears erroneous; for most English economists felt and expressed a wish to improve the condition of society, and their sympathies generally inclined to the side of the poorer and weaker members. They have, indeed, been anxious to effect a real and no imaginary improvement, and to attack the disease of poverty at its roots rather than procure a temporary mitigation of its outward symptoms; but, although their heads may have been hard, their hearts have usually been tender. Adam Smith may have committed error in thinking that there was a 'Scotchman inside every man';¹ but the direction of his sympathies was unmistakable, and he was very eager to secure for the workman the free disposal of his 'most sacred and inviolable property' in the labour of his hands. Malthus was impatient with fanciful schemes of ideal societies, but his interest in the poor was real and practical. Even the abstract Ricardo was evidently anxious to improve the condition of the wage-earning classes. 'The friends of humanity,' he writes, 'cannot but wish that in all countries the labouring classes should have a taste for comforts and enjoyments, and that they should be stimulated by all legal means in their exertions to procure them.' Nor could the enthusiasm of Mill for the advancement of society be doubted, while Cairnes in his *Slave Power* exposed the misery caused by the institution of slavery, and in his *Leading Principles* was manifestly oppressed by the fear of a deterioration in the condition of the labourer. The *Methods of Social Reform* of Jevons are proof of his interest in the promotion of social reform.

But the two economists, whose work we are now to notice, supply perhaps the most convincing refutation of the popular idea of political economy as a 'dismal science' opposed to social reform. Both were true social

¹ See above, p. 10.

reformers, although they approached the matter from different standpoints; and both also brought their theoretical principles to bear on their practical action.

We have already seen how one English economist displayed remarkable fortitude in the endurance of physical pain.¹ But the courageous resolution of Cairnes was paralleled by that of HENRY FAWCETT. Immediately after his death, in 1884, Gladstone stated to his father that ² 'there had been no public man of our day whose remarkable qualities had been more fully recognized by his fellow-countrymen and more deeply imbedded in their memories.'

It would be incorrect to say that he made any considerable contribution to the development of economic theory.³ His *Manual of Political Economy* was for the most part, as it was intended to be, a summary of Mill's larger work. His book on *Free Trade and Protection*, which was published in 1878, expounded the orthodox principles of the subject, so far as it was theoretical. But his strength seems to have lain rather in the domain of practice. Those chapters of his *Manual*, in which he dealt with the practical facts of the Poor Law, or of Co-operation, were the more original; and his work as administrator of the Post Office, and as critic of Indian finance, was marked by practical qualities of a high order. He kept, in fact, always before him the practical aims of theoretical inquiry, and he consistently conformed his practice to his theory.

The feature of his character, which made perhaps the most indelible impression on the public mind, was his indomitable courage and independence. At a most promising period of life, when he had completed his academic career at Cambridge by attaining high mathematical honours, and winning a Fellowship at Trinity

¹ See above, p. 116.

² Cf. Leslie Stephen's *Life of Henry Fawcett*, p. 465.

³ See above, p. 114.

Hall, he suddenly met with a grave physical calamity. At the age of twenty-five he was deprived of his eyesight by an accidental shot from his father's gun. 'It was a blow to a man,' he said, addressing a meeting at Brighton in after years, 'but in ten minutes he had made up his mind to face his difficulty bravely,' and to adhere to his old pursuits as far as possible. And face it accordingly he did. His first words on reaching home were purposely intended to cheer his relations; and visitors to the house during the following days remarked that his father seemed more distressed than himself. He did not abandon his rowing, riding, skating, or fishing. Nor did he swerve from that intention to enter Parliament, to which he had given expression when a boy at school. He fulfilled this intention; and even rose to be Postmaster-General in Gladstone's administration of 1880. So much, indeed, did he accomplish that his infirmity was almost forgotten, and he 'claimed tacitly to have no allowance made' for it.

This courageous independence was shown in his attitude on political questions, and it coloured his economic thought. It intensified that fear and abhorrence of the degrading effects of pauperism, and that admiration for the independent spirit and self-reliant efficacy of co-operation, to which he gave expression in two little books on the *Economic Position of the British Labourer* in 1865, and on *Pauperism: its Causes and its Remedies* in 1871. It also characterized his action in Parliament in connexion with *Indian Finance*, on which, in 1880, he published some articles. He offered stubborn resistance to all the official attempts made to stifle his inquiries, and he compelled the thorough investigation of his arguments before Parliamentary Committees. He insisted that India was essentially a poor country, and that extreme caution and fairness were needed in the management of its finances, because its sources of revenue were 'inelastic,' and its expenditure was elastic and increasing. The revenue derived from the

land-tax, which was fixed for long periods in some districts, and in others in perpetuity, did not admit of substantial increase. The revenue derived from opium was precarious, and that derived from salt was a tax on a prime necessity of Indian life, while the proceeds arising from the other sources of customs, excise, and stamps, were inconsiderable. But the expenditure on the other hand was elastic. The 'military expenditure' and the 'cost of administration' were continually growing, the loss occasioned by the 'fall in the exchange' of silver for gold was increasing, and the Indian Government had to make larger remittances to England in payment of debt, while the interest due on account of such public improvements as railways and works of irrigation, which the Government undertook or assisted, was becoming greater. There was consequently no surplus to meet such recurring emergencies as those occasioned by famine.

Fawcett's criticism of Indian finance disclosed a second quality of his nature; and that was the possession of shrewd common sense. After his accident he deliberately set himself to learn to smoke, and to improve his taste for music, because such occupations would help to pass the time independently of the attention of others. In his administration of the Post Office he was ready to consider and adopt improvements, however unimportant they might seem, if they only tended to the greater convenience of the public. And, similarly, in Indian affairs he addressed himself from the outset to finance alone, with which his economic knowledge and training qualified him to deal. Above all things he endeavoured to secure the correct keeping of accounts, and he insisted on the paramount importance of good finance to the interests of the Indian people. Throughout his life he always proceeded on a few broad simple principles; and, while this habit rendered him a clear and forcible expositor, both in his writings and in his lectures as Cambridge Professor of Political

Economy from 1863 to his death in 1884, it sometimes tended to make him neglect difficulties, or omit qualifications. But it was an advantage rather than a drawback in connexion with Indian finance ; for it was only broad simple principles which could be made intelligible and interesting to the English people.

A third characteristic of Fawcett's nature was his generous sympathy for the oppressed, and his abhorrence of mean or dishonourable conduct. He endeavoured to secure the preservation of commons in England on behalf of the agricultural labourer. He tried to encourage the thrift of the poor by affording, through the medium of the Post Office, increased facilities for saving. He defended the interests of the unrepresented Indian peoples in Parliament, and earned the title of 'Member for India.' He required an account of the partnership which existed between England and India ; and, although he may have been accused sometimes of exaggeration, his advocacy was inspired by generosity, and directed by common sense, and he succeeded in effecting a change in the general tone and temper with which Indian affairs were treated and discussed.

While he was thus led by his generous sympathies to give practical effect to his economic theories, his independence of character combined with his appreciation of plain broad principles to produce a profound distrust of the interference of the State with individual liberty. He opposed any scheme which might, by substituting collective for individual action, tend ultimately to weaken the independence and self-reliance of individuals ; and he relied for the improvement of society mainly on the stimulus of individual interest and intelligence. He was not indeed averse to the action of the State, if, as in the case of the Post Office, it was directed to assist the thrift of the poor, and to elicit self-help ; but he had a wholesome dislike, which he did not conceal, for gigantic schemes of improvement, which, proceeding by the easy method, as

it appeared, of using the resources and machinery of the State, discouraged the voluntary and independent experiments of private individuals, and perhaps imposed an increasing burden of taxation on those who were just struggling to keep themselves from pauperism. His social reform was strongly individualistic.

ARNOLD TOYNBEE inclined in the opposite direction. His life was very brief ; but his influence survived. From his father, who formed many projects of improvement, he seems to have imbibed an early tendency towards social reform. He himself felt an attraction for the army ; and it is not altogether fanciful to ascribe to this inclination the abhorrence, amounting to pugnacity, which he seems to have entertained for social injustice and oppression. For two years he resided at a military college ; but then, thinking his choice mistaken, he abandoned it. Eighteen years of age found him passing a year in solitary study of the philosophy of history in a retired Dorsetshire village ; and in this plan we may perhaps detect the genius and purpose of a social reformer. Two years afterwards he went to Oxford, where he passed under the influence of the inspiring associations of that ancient and beautiful seat of learning, which were especially calculated to awaken a response in his sympathetic imaginative nature. He began to exercise the magnetic influence, which was perhaps his most conspicuous gift ; and, in the congenial companionship of intellectual friends, he formed noble ideals and aspirations. 'As to position in life,' he wrote, 'the position I wish to attain is that of a man consumed with the thirst after righteousness.' He was prevented by the ill-health, which dogged his career, from reading for honours ; but, not long after taking his degree, he was appointed tutor to the probationers for the Civil Service of India then residing at Balliol College.

He devoted himself especially to the study of political economy ; and he kept continually before his mind the responsibility involved in the training of future administrators of Indian government. It was partly at least for this reason that he sought, with the aid of the ' historical method ' of inquiry, to show the circumstances amongst which the doctrines of the older economists had originated, and to emphasize the relative nature of their application to other countries and times. But his economic studies were also directed and stimulated by the eagerness with which he looked forward to social reform in England itself. He spent some time in lodgings in Whitechapel, to render himself acquainted with the conditions and feelings of the poor ; and, discovering that he had a capacity for speech, he delivered popular addresses on economic topics to audiences of working men and employers in Bradford and other manufacturing towns. The strain of these extemporaneous addresses combined with the multiplicity of his other interests and labours to exhaust a constitution which was always frail ; and, after two lectures in London in 1883 on Henry George's *Progress and Poverty*, he was attacked by an illness, of which he died within seven weeks.

He was only thirty years old, and this consideration must affect any judgment passed on his writings. They did not have, in most cases, the benefit of his personal revision, although they were edited with loving and attentive care. They are fragmentary, and contain apparent inconsistencies, which more mature thinking might have removed. But they form some of the most attractive pieces of economic literature ; and they are full of an inspiring, yet reasoned, enthusiasm. They consist of an essay on *Ricardo and the Old Political Economy*, some lectures, which give the title to the book in which his writings are collected, on the *Industrial Revolution in England* of the eighteenth century, and three popular

addresses on the subjects of *Wages and Natural Law*, *Industry and Democracy*, and *Are Radicals Socialists?* together with some minor fragments.

But his personality exercised an influence of which his writings afford an inadequate idea. A keen but kindly judge remarked¹ that the 'really interesting and striking thing in his life was not what he actually produced, but Himself, that is to say, his simplicity and disinterestedness, his sweet and lovely example, his unlikeness to anybody else.' Marshall described² him as the 'ideal modern representative of the medieval saint; strong every way, but with all other parts of his nature merged and contained in an earnest and tender love towards God and man.' It is in part at least to his memory that those university and school 'settlements' were due, which have been established in the poorer districts of some of our great cities, to promote sympathy and intercourse between the members of different classes, and to extend the influence and advantages of intellectual culture. At any rate, it was thought that to no name could the first of those settlements be more fittingly linked than that of Toynbee.³ He was essentially a social reformer, to whom the practical improvement of society was the end and motive of all his theoretical study.

This relation between economic theory and practice has been sometimes misconceived; and, to avoid this misconception, Cairnes contended⁴ that the appropriate attitude of political economy in the matter of social reform was that of neutrality. He maintained that political economy was 'a science in the same sense in which Astronomy,

¹ Benjamin Jowett, the Master of Balliol, in a memoir prefixed to the *Industrial Revolution*, p. xviii.

² In a preface to the present writer's *Industrial Peace*, p. viii.

³ i.e. Toynbee Hall, in Whitechapel.

⁴ In an essay on 'Political Economy and Laissez-faire,' in *Essays in Political Economy: Theoretical and Applied*, pp. 252, etc.

Dynamics, Chemistry, Physiology are sciences.' The 'object' of the 'recognized physical sciences' was 'not to attain tangible results, not to prove any definite thesis, not to advocate any practical plan, but simply to give light, to reveal laws of nature, to tell us what phenomena are found together, what effects follow from what causes.' In the same way political economy 'expounds' the 'laws' of 'wealth.' It 'stands apart from all particular systems of social or industrial existence,' 'and is moreover absolutely neutral as between all.' It contributes 'data towards the formation of a sound opinion'; but, while these data may 'go far to determine our judgment,' 'they do not necessarily, and should not in practice always do so. For there are few practical problems which do not present other aspects than the purely economical—political, moral, educational, artistic aspects—and these may involve consequences so weighty as to turn the scale against purely economic solutions. On the relative importance of such conflicting considerations, Political Economy offers no opinion, pronounces no judgment,' thus 'standing neutral between competing social schemes,' 'as the science of Mechanics stands neutral between competing plans of railway construction, in which expense, for instance, as well as mechanical efficiency, is to be considered.' 'It supplies the means, or, more correctly, a portion of the means for estimating all; it refuses to identify itself with any.' 'It has nothing to do with *laissez-faire* any more than with communism; with freedom of contract any more than with paternal government, or with systems of *status*.' 'It has no more connexion with our present industrial system than the science of mechanics has with our present system of railways. Our existing railway lines have been laid down according to the best extant mechanical knowledge; but we do not think it necessary on this account, as a preliminary to improving our railways, to denounce mechanical science.' And

yet 'some social reformers, whose ideal of industrial life involves a modification of our existing system, have thought themselves called upon to denounce and deride economic science, as forsooth seeking to stereotype the existing forms of industrial life, and of course therefore opposed to their views.' 'But this is a complete mistake.'

This argument, which was perhaps more clearly and forcibly stated by Cairnes than any other writer, is, as Toynbee recognized, important and suggestive. It lays a needed stress on considerations which are often forgotten or neglected. It shows that the 'laws' of political economy are theoretical statements of the relations between certain facts, and not practical precepts enjoined in the imperative mood. If the facts on which the laws are based undergo change, the condition of the laws continuing to be valid is that they should be submitted to a corresponding alteration; and, with the lapse of time and progress of knowledge, the experience of facts, on which many economic 'laws' are grounded, may be extended and changed, as man himself is not a 'constant' invariable phenomenon. The argument also established a distinction between the science of economics and the art of statesmanship or philanthropy, which is instructive in showing that other than purely economic considerations may enter into the determination of a practical problem. But it is open to the danger of pushing the distinction between theory and practice too far, and of underrating the influence exercised by our speculative opinions on our practical action. 'The maintenance of this neutrality is,' Toynbee remarked, 'practically impossible.'

Hence probably it was that he insisted on the importance of forming our theories as carefully, and testing their conclusions as constantly, as the nature of the case may admit. There is, he thinks, 'no real opposition' between the Deductive and the Historical Method of inquiry.¹ The

¹ See above, Chapter V.

apparent opposition is 'due to a wrong use of deduction : to a neglect on the part of those employing it to examine closely their assumptions and to bring their conclusions to the test of fact.' The Historical Method supplies the needful corrective. It 'examines the actual causes of economic development and considers the influence of institutions, such as the medieval guilds, our present land laws, or the political constitution of any given country, in determining the distribution of wealth.' 'And not only does it investigate the stages of economic development in a given country, but it compares them with those which have obtained in other countries and times.' It is of 'value because it makes us see where economic laws and precepts are relative.' 'Abstract propositions are seen in a new light when studied in relation to the facts which were before the writer at the time when he formulated them. So regarded they are at once more vivid and less likely to mislead.'

In this spirit Toynbee reviewed the teaching of the older economists. He traced the course of the 'Industrial Revolution,' which was effected in England at the close of the eighteenth and the opening of the next century. He showed how Adam Smith,¹ living on the eve of this revolution amid the relics of the routine and regulation of an older period, and imbued with a desire to restore the original simplicity and freedom of 'nature,' and a confidence in the power and disposition of God to cause the individual, freely seeking his own interest, to promote, consciously or unconsciously, the common weal, advocated with passionate earnestness the removal of artificial barriers and the full establishment of 'natural liberty.' That seemed to be the paramount need of his time ; and he did not live to witness the distress, which accompanied free competition, in the years which succeeded.

He was followed by Malthus,² who was not so thorough

¹ See Chapter I.

² See Chapter II.

a supporter of 'natural liberty.' But at the time when he wrote diminishing returns seemed to be affecting English agriculture with alarming reality, and population was increasing. The share, which the poorer classes could obtain of the wealth of the country, became less and less, and wages tended downwards to a bare subsistence. Yet, bad as was the condition of affairs in England, it was better than abroad; and the explanation seemed to lie in the greater amount of her accumulated wealth, or capital. And so, putting two and two together, Malthus suggested—for he was, Toynbee maintained, the 'founder' of the theory, though later economists may have been its immediate exponents—that wages were dependent upon the capital, which had been previously accumulated, and that the only methods of raising them were to increase the capital, or diminish the numbers of the population. This was the origin of the 'wages-fund' theory.

Malthus was contemporary with Ricardo,¹ who saw around him, when he wrote his *Principles of Political Economy and Taxation*, a busy, restless world, and based his theories on the universal prevalence of competition, according to which rent would rise, wages 'remain about the same,' and profits fall, as population increased.

All these economists were led by facts, which were especially prominent in their own time, to construct theories based upon this prominence; but other facts have since come into prominence, and the theories require alteration. The Ricardian theory of rent stands in need of qualification before it is applied to fact. Since the 'wages-fund' theory was propounded, a fresh continent has been peopled in America, where, as F. A. Walker clearly showed,² there was originally no accumulated store of capital, but there was a virgin soil, which yielded increasing rather than diminishing returns. No means existed of paying wages in advance, but ultimately higher

¹ See Chapter III.

² In his book on the *Wages Question*.

wages could be given. And so the point of view was shifted. It was seen that, although wages might be advanced out of capital, the employer, whose functions as distinct from those of the capitalist have been brought into a prominence, which their separate importance deserved, by later economists,¹ would regard the prices which his goods were likely to fetch, and would offer wages accordingly. It was seen that an increase of population might be so far from trenching on the capital from which wages were paid, and diminishing the share of each labourer, that it might bring about an increase in that share by augmenting production by means of improved division and organization of labour. It was seen that a similar result might follow from an increase in the efficiency of the labourer himself. He would not, indeed, be content, any more than in former times, to receive in the long run less than would enable him to live with his wife, and bring up his children, according to the 'standard of comfort' to which he was accustomed. Nor would he in the long run receive more than left sufficient to give the capitalists, and the employers, the interest of capital, and the earnings of management, without which their co-operation would not be forthcoming. But both these limits were elastic; and within them wages might vary according as the sympathy of public opinion, the removal of legal restriction, the support of legal protection, or the resources of combination, might from time to time render the one or the other party the stronger. On these lines Toynbee showed how, led by the influence of facts, we have departed in our theories of wages from the comparatively inelastic conception of a 'wages-fund.'

Thirdly, and lastly, he pointed out that we may examine in a similar manner Adam Smith's advocacy of 'natural liberty'; and it is here especially that the historical

¹ See above, p. 100.

method has an important bearing on social reform. Later knowledge and inquiry seem to have shown the necessity, or at any rate the advantage, of some limitations of individual liberty. There are men, and at least there are women and children, engaged in industry, who suffer from disadvantages, which no economic forces seem of themselves likely to remove; and that free competition, which is suited to equal industrial competitors, may be fraught with mischief, when it prevails among those who are unequally situated. We must endeavour to secure for each individual the opportunity for full and free development; and this may imply legislative protection and assistance, as well as the removal of legislative restriction. We do not believe that men always know, and always seek, their true, permanent interests. They may be blinded by the passion of the moment, or they may be ignorant and weak. Nor do we think that the interests of the individual will always coincide with the interests of the community, for he may not reap the ultimate consequences of his action.

If, for example, we take the question of education, we may ask whether we can safely rely on the interest of parents in the education of their children. Can we be sure that, where parental affection is weak, the pecuniary advantages that may possibly result from the increased ability of the children to earn their living at an earlier age will be sufficiently real to the parents to make them incur certain and immediate expense? Can we be sure that, where they are ignorant and poor, they will be able to discern, and to satisfy, the interests of themselves or their children in a good education? Such considerations as these suggested the advisability of national compulsory education; and they met with the approval of Fawcett as well as Toynbee. But, while Toynbee might have viewed with favour proposals for 'free education,' they would have aroused the distrust, and encountered

the opposition, of Fawcett, as tending to weaken individual responsibility, and discourage voluntary effort.

Again, the influence of passion or prejudice, or the immediate concerns of the moment, may cause men to shut their eyes to the recognition of their true permanent interests. Honesty may be the 'best policy' in the long run; but we do not cease to hear of adulteration and jerry-building. The children, who were overworked in the factories during the early part of the last century, might have proved more efficient workers in the end, had they received more humane and considerate treatment. But, apart from the fact that the masters, who showed the kindness, might not themselves have reaped the benefit, because the children might have gone to other factories, the pressing needs of the times, and of their own personal and immediate interests, led them, and the parents also, to neglect the permanent interests of the children, and the nation as a whole. Such considerations have prompted our elaborate code of Factory Laws; and, while Toynbee approved, Fawcett disliked and opposed, their extension to adult women, for fear that it would undermine individual independence.

But there is, as Toynbee saw, a 'chasm to be bridged' in a theory of *laissez-faire* between the interests of the individual and those of the community, and between the existence and recognition of those interests. 'This chasm,' Cairnes declared, 'has never been bridged. The advocates of the doctrine shut their eyes and leap over it.' The interference of the State is sometimes needed to secure the permanent interests of the whole community, to incur present outlay for future benefit, and to help the weak and ignorant members to obtain the opportunity for that full development which, being for the ultimate benefit of all, might be sacrificed to the immediate interests of the few. This work of the State might, Toynbee held, be increased in the future; and he even went so far as to

say: 'The era of free trade and free contract is gone, and the era of administration has come.'

This seems, however, to have been pardonable extreme of emphasis; and he was by no means willing to pass to the full length of 'continental socialism.' 'We shall have to carry out these measures,' he remarks, 'without undermining that old independence, the habit of voluntary association of which we are justly proud; for if we undermine that—that pride which has made the English workman sacrifice everything to keep himself out of the workhouse, which has made workmen bind themselves together in Friendly Societies, and Trades Unions, and Co-operative Societies, if we undermine that, then it would be better to leave our work undone.' 'Competition is neither good nor evil in itself. It is a force to be studied and controlled.'

Nor, with all his eagerness for practical improvement, did he disdain theoretical inquiry. He could not, it is true, endure the hard, unemotional attitude, which some economists seemed to him to have adopted. They appeared to talk of matters involving suffering, if not death, to human beings, as if they were only specimens of the correctness of a theory. They seemed to regard the enactment of human dramas, concerned with the joys and the sorrows of men, from the standpoint of cool, critical spectators. If a man was thrown out of employment by a freak of fashion, they spoke glibly of the mobility of labour. If a woman or child was overworked in a factory, they complacently argued that such a course of action would in the end injure the employer, and he would not continue to pursue it. But Toynbee's nature was intensely sympathetic. He knew and felt that men, women, and children had passions and feelings, sympathies and antipathies, and that they could not with advantage be discussed like bales of wool, to be carried hither and thither, wherever they could earn a penny more.

But his sympathy was none the less tempered by sobriety. He recognized that without care, patience, and knowledge social reform might produce more mischief than benefit. He dwelt on the evils of a lax Poor Law with as much earnestness as Malthus himself. He condemned the extravagances of democratic revolutionary Socialists with as much vehemence as an economist of the strictest school. He exposed the fallacies of Henry George in the lectures which he delivered; and in one of his popular addresses he analysed the different causes affecting the rate of wages with patient exhaustiveness. He wanted more rather than less economic study; but it must be study which, without being soulless or passionless, took into consideration the varied interests of human life, and issued in practical action. He inclined, it was true, in the direction of increased interference on the part of the State with individual liberty, and so far he was socialistic; but his socialism might be more correctly described as the complement than the opposite of that individualism to which Fawcett inclined.

'The Radical creed, as I understand it,' he remarks, 'is this: We have not abandoned our old belief in liberty, justice, and self-help, but we say that under certain conditions the people cannot help themselves and that then, they should be helped by the State representing directly the whole people. In giving this State help we make three conditions: first, the matter must be one of primary social importance; next, it must be proved to be practicable; thirdly, the State interference must not diminish self-reliance.' 'We differ from Tory Socialism in so far as we are in favour, not of paternal, but of fraternal government, and we differ from Continental Socialism because we accept the principle of private property, and repudiate confiscation and violence.' 'To a reluctant admission of the necessity for State action, we join a burning belief in duty, and a deep spiritual idea of life.'

PART II

POSTSCRIPT AND SEQUEL DEVELOPMENTS IN VARIOUS DIRECTIONS

CHAPTER IX

A. INTRODUCTORY

EDWARD CARTER KERSEY GONNER. 1862-1922

WILLIAM SMART. 1853-1915

B. ECONOMIC HISTORY

JAMES EDWIN THOROLD ROGERS. 1823-1890

WILLIAM CUNNINGHAM. 1849-1919

WILLIAM JAMES ASHLEY. 1860-1926

LILIAN CHARLOTTE ANNE KNOWLES. 1870-1926

GEORGE UNWIN. 1870-1925

Jevons' Declaration in 1876—Subsequent Developments of Economic Study in Various Directions: (a) Economic History, (b) Statistics, (c) Economic Theory—A Parting of the Ways is Consistent with General Advance—Illustration from Diversified Work of Gonner and Smart—Gonner's Various Writings—He was no Specialist—His *Common Land and Inclosure*—His Life—His Administrative Work during the War—Smart's Career—A Business Man turned Economist—His Writings—His Translations of the Austrian Economists—One Aspect of the Theory of Value—His *Economic Annals*—His Connexion with Ruskin.

Attainment by Economic History during the Period of Distinct Status—Drawbacks of a New Study—Correction of Earlier Narratives and Changes of Emphasis—Absorption in the Problem of the Origin of the Manorial System, implying Hypothesis and the Use of the Trained Imagination—Division of Economists on

Tariff Reform between Theorists and Historians—Thorold Rogers as a Pioneer—A Theory upset by Subsequent Research—His Life and Writings—Summary of his *First Nine Years of the Bank of England*—Cunningham's Great Book—Its Failings and its Merits—His Life and Characteristics—A 'Creator' of the Study in England of Economic History—Outline of the Plan of his *Growth of English Industry and Commerce*—His Other Writings—Ashley as Economic Historian—A Clear Expositor with an 'Axe to Grind' in the best Sense of the Words—His Other Writing and his Busy Career—Summary of his *Bread of our Forefathers*—Mrs. Knowles' Characteristics and Writings—A Brilliant Lecturer—Breaking of New Ground—Stress laid on Transport and on Colonial History—Unwin's Writings and Characteristics—His Account of the Gilds—His Defects as a Book-Planner—His Objections to Earlier Historians—An Assiduous Researcher—A General Political Philosopher

A. INTRODUCTORY

IN 1876, in an introductory lecture¹ opening the session at University College, London, Jevons discussed a notable dinner of the Political Economy Club, founded in 1821 by Ricardo, Malthus, Tooke, James Mill, and others.² That feast marked the centenary of the *Wealth of Nations*. Lowe,³ Chancellor of the Exchequer a little while before, observing that the 'great work' in the subject had 'been done,' said there that he was not 'sanguine' of the likelihood of 'any very large' or 'startling development.' Jevons, on the contrary, held that, while the most considerable 'reforms' of which economists could 'point out the need' had been secured, an 'indefinitely great sphere of useful work' remained, 'if their science were adequate to its duties.' For that end he urged that it would 'no longer be possible to treat

¹ On the Future of Political Economy, reprinted in *Principles of Economics*, pp. 187, etc.

² Cf. Centenary Volume of the Club, compiled by Mr. Henry Higgs in 1921.

³ Afterwards Lord Sherbrooke

Political Economy' as a 'single undivided and indivisible science.' And he opened some directions in which, with 'division of labour, different paths might advantageously be followed. Henceforth, he concluded, it 'must be looked upon as an aggregate of sciences,' although, a hundred years ago, Adam Smith was 'very wise to attempt no subdivision.' At a second centennial celebration of the immortal book it might well be found that the 'disrupted fragments' into which study appeared at this time to be 'falling' would have 'proved themselves the seeds of a new growth of beneficent sciences.'

These remarks may, with some adjustment of the perspective, form the text of the discourse in this and the following two chapters. For the last generation of English economists have been engaged, to fruitful purpose, on various lines of research and thought. Nor is it presumptuous to infer that, like the principle invoked, as a German critic¹ underlined, commenting on Adam Smith, 'co-operation' of the parted workers has been no less beneficial than their 'division.' Happily the broad truth has emerged that harmonious amity, or at least accommodating agreement to differ, can replace the needless irritant of stiff acrid controversy on competing plans of choosing and setting the seed and tending and developing the plant of economic knowledge.² Refreshing vigour can be got from generous application in all quarters of Marshall's³ stimulating rule that, as the changing situation prompts, economists should employ in turn every instrument that the exploring wit of man has found apt and adequate for connecting cause with effect. Animated in increasing measure by this spirit, three directions of study especially—economic history, statistics, and theoretical analysis—have had their conspicuous and able representatives, who

¹ Carl Bücher in *Industrial Evolution*, ch. viii.

² Cf. Chapter V.

³ Cf. *Principles of Economics*, ch. iii.

have wished, more and more noticeably, to aid and use rather than bar or thrust aside the work of one another.

Before inspecting in detail the growth of these particular branches of economic study, it must be repeated that their timely parting and judicious spreading out need not cause careless fracture of the connecting limbs or damage to the trunk or roots of the tree. General progress could concurrently be sought and it might be guaranteed by discreet, deft gardening. It is significant that Cliffe Leslie, challenging champion of the historical school,¹ reviewed favourably² the early result of Marshall's analytical prowess in the little book,³ appearing in 1879, under joint authorship with his wife, and that afterwards that hailed chief⁴ gave many years to what⁵ was most obviously an inductive, almost microscopical, exhibit of the concrete facts of monopolistic tendencies viewed together with what would since be called 'rationalization' of industry through 'standardized' 'mass-production' by amalgamated enterprise. Nor is the ironical sequence devoid of illuminating meaning that brought Thorold Rogers from precluding his monumental history⁶ with a 'school manual'⁷ to his being pictured⁸ in the end by Ashley, himself also an economic historian, as 'occupying throughout' on general economic theory and economic policy the strait coign of the 'Manchester School' termed, commonly, 'orthodox.' The dislike and mistrust of Ashley for the chains of abstract

¹ Cf. Chapter V.

² *Essays in Political Economy*, ch. ix.

³ *Economics of Industry*.

⁴ Cf. below, p. 281.

⁵ *Industry and Trade*.

⁶ *Of Agriculture and Prices*.

⁷ In this text-book Rogers claimed to have departed from traditional views on certain subjects. Though largely cast in a customary mould, some unfamiliar features were introduced, with more historical illustration than had been usual before.

⁸ In Palgrave's *Dictionary of Political Economy*.

deductive reasoning favoured by the old English economists, who were labelled masters of that school, shown elsewhere with less restraint, and cherished without repenting of his part in ancient controversy until the finish of his career,¹ were, no doubt, responsible for a suspicious attitude towards the 'rehabilitation of Ricardo,'² though it was joined to appreciative respect, when he confronted Marshall's main but never wholly completed work—the epoch-making *Principles*. Nevertheless, they became clemently diluted³ after academic intercourse in both hemispheres of the world⁴ and intimate contact with business men at a representative centre.⁵ Sharp angles could not but be rounded or reduced by this varied experience. And complimentary editing in 1909 of the similarly famous book of Mill, which had reigned⁶ over a preceding period, was compatible. 'A great treatise,' Ashley called it, 'conceived and executed on a lofty plane and breathing a noble spirit.' 'On some topics,' in his opinion, there was 'nothing better in the English language: on others Mill's treatment' was 'still the best point of departure for further inquiry.' Lastly, Nicholson, in a systematic general treatise on the same grand scale,⁷ following Mill and differing from Marshall in arrangement, took⁸ from Rogers, with an indispensable caution added,⁹ a number of the historical examples that he deliber-

¹ Cf. *Commercial Education*, p. 151. He added that the 'controversy' is 'not so necessary now' (1926).

² Cf. *Economic Journal* for 1891.

³ A Presidential Address to the Economic Science and Statistics Section of the British Association in 1907, marked by strong bias, might be contrasted with an address in 1926 to the Economic History Section of the Anglo-American Conference of History Professors and Teachers.

⁴ At Oxford, Toronto, and Boston (Harvard University).

⁵ At Birmingham.

⁶ Cf. above, p. 112.

⁷ Cf. below, p. 269.

⁸ Cf. Book iv of his *Principles*

⁹ Cf. below, p. 216.

ately introduced. On the ground, too, of his vivid portrait¹ of John Law, who played so dire a part in French finance, and of his scrutiny² of the exact position of the Corn Laws in English agriculture, he could rank as economic historian.

Further illustration of mutual exchange of co-operating service might be given. We might cite the variegated contents of the *Economic Journal*, published for the Society founded in 1890, which was for long, wholly or in part, under the editorship, thoroughly catholic in spirit as in act, of Edgeworth, who himself sought such refinement of economic theorizing that, remaining, so to say, 'caviare to the general,' it must daunt the 'man in the street.'³ The council of the Society was constituted on a basis similarly broad to 'represent the various shades' of opinion, as the Journal has been designed to form the 'organ of all schools.'⁴ The *Economic Review* that lasted for more than a score of years from the same starting date of 1890 proceeded avowedly from the Oxford University branch of the Christian Social Union, but it was comprehensive in admitting articles and it cast its net wide in gathering reviewers. The *Dictionary of Political Economy*, under the editorial captaincy of INGLIS PALGRAVE, practical banker and expert statistician, was another vessel launched smoothly, carrying a large varied cargo.⁵ But the position can be clinched with notice of the versatile authorship of two economists contributing in no niggard measure to the good results of this linked association. They were SIR

¹ In his *Money and Monetary Problems*.

² In the *History of the English Corn Laws*; cf. also his other two Gilbey Lectures on *Rates and Taxes as Affecting Agriculture* and the *Relations of Rents, Wages, and Profits in Agriculture*.

³ Cf. below, p. 277.

⁴ The Economic Society publishes every year an extra number devoted to economic history. The Economic History Society also publishes a special *Review*.

⁵ Fresh editions of the three volumes of the *Dictionary* were subsequently brought out under the editorship of Mr. Higgs.

EDWARD CARTER KERSEY GONNER (1862-1922), Professor at Liverpool for thirty years, and WILLIAM SMART (1853-1915), who held until his death the Glasgow chair named after Adam Smith and founded in his memory in 1896.

In an obituary notice¹ the former was described as 'belonging to the period before the high specialization of Economics' and 'working in many different fields.' A list of his writings backs this estimate. In economic theory an edition of Ricardo's *Principles*² in 1881 can be placed together with a little book, published fifteen years after, on *Interest and Saving*. That was subtle perhaps, and somewhat elusive in its subtlety; but it was acute and original. A discriminating but not hostile review on a small scale of various aspects of the *Socialist State* in 1895 was followed in 1899 by the full critical examination of the *Social Philosophy of Rodbertus*. Rodbertus, though little known to the world at large compared with Marx, of whom he is deemed the forerunner as the parent of so-called 'scientific' socialism, was more considerable and meritorious a thinker as he was less provocative and slim an arguer.³ This book, parting sympathetically the wheat from the chaff, might be classed as a contribution to economic history in the important subdivision in which the

¹ By Sir W. Beveridge in the *Economic Journal* for 1922.

² After Gonner's death an edition, with an introduction by him, of Ricardo's *Economic Essays* (containing most of that economist's smaller writings) was published (1923). Dr. J. Bonar described the introduction as marked by 'ripe wisdom' (in the *Economic Journal* for 1923).

³ It is a strange mischance that Marx should have become and continue to be so influential, as he left, by his own admission, a yawning gulf in the logic, blindly followed, of his dialectic. It was subsequently shirked rather than bridged by himself and his friend Engels, and by others since. According to the theory of 'exploitation' in undertakings where there was more labour and less machinery, profits should have been higher than in the reverse case, whereas in fact they tend to an equality or certainly are not so proportioned. Cf. above, p. 68.

evolution of thought by successive thinkers is pursued. But the complete investigation of *Common Land and Inclosure* in 1912 came under what is more generally considered the main business of economic historians—the diligent collection, that is, careful scrutiny and digested understanding record of past facts of an economic nature. It was the author's largest achievement and exhibits his high quality. Readers will soon discover that the just balance and sharp insight, which a man of affairs might command, have been busy here guiding the exact inquiry and fit ordering of the trained student. On a vexed topic, lending itself to highly coloured,¹ if not perversely biased, treatment, Gonner's sure impartial handling is likely to give this book a permanent place as the most trustworthy authority. We will take two points alone on which he corrects other writers. He shows that the inclosure of common land was a continuing movement, and that it is misleading to sever sharply what occurred in Tudor times from what happened towards the end of the eighteenth and at the beginning of the nineteenth century. He also shows that at the later date the intention, and actual procedure, had not the injustice ascribed often to the agents, and that where there was loss or suffering, aggravating sorely in the sombre picture drawn the travail of the Industrial Revolution, it was in pursuance rather than in breach of the law. The position may be put thus. It was throughout, as Gonner proved in detail, that common land belonged, not to the public at large, nor to late-coming squatters with questionable deserts for charitable compassion, but to defined limited classes of commoners legally entitled to certain prescribed rights. Inclosure itself varied much in method and in effects as in its pace and scope in different districts at different times.

To this contentious matter Gonner applied thus the common sense of the man of affairs, and it is curious that

¹ e.g. *The Village Labourer, 1760-1832*, by J. L. and B. Hammond.

his life ran on parallel lines with that of Smart, although the order of the phases was reversed. Smart, starting with a business training and experience, passed gladly to the teaching of Economics. Gonner, after long familiarity with the quiet passage of the uneventful incidents of a regular academic career, formed one of the band of University dons who, in the tremendous upset of the War from 1914 to 1918, were enlisted in the public service. He was Economic Adviser and Director of Statistics at the Ministry of Food and an arbitrator of industrial disputes. It is noteworthy that the writer of the obituary to whom we have referred, himself an experienced civil servant of high rank, observed that Gonner was one of the 'men of academic training who most conspicuously made good in practical administration' at that testing time. He was much appreciated by his chief, Lord Rhondda, who was no mean judge, as his own large business enterprise had reaped resonant reward.

SMART, by contrast, might be said to have realized the ideal combination, the lack of which was mourned by Bagehot,¹ though he himself was supplying the defect. Smart, born in the atmosphere of an industrial establishment, was first an actual worker in, and then one of the directors of, a business undertaking. During this period his education had formed at the outset, as Cannan writing at his death affirmed,² that of a 'double-timer,' divided between desired study and imperative thread-manufacturing. In 1884 he was able to begin the lecturing and professorial moiety of his life. Thus, after 'true contact' with the 'facts' of business practice, accompanied by proved capacity of dealing with them, he became 'cognizant' of the 'abstractions' of the 'theory of business,' as Bagehot defined Political Economy; and he had, moreover, both much 'sympathy with' and great willing-

¹ Cf. above, p. 129.

² In the *Economic Journal* for 1915.

ness to 'reason out' those abstractions. His early service was that of translation, or editing of the translation, of treatises of the Austrian School, written by Böhm Bawerk¹ and by Wieser.² In a little book³ under his own authorship he summarized in 1891 their theory of value. That, like the independent revelation by Jevons in England of what has come to be regarded as the core of economic theorizing, stressed, it may be too exclusively, what was nevertheless a very important, and perhaps primary, aspect. It gave rule and reason for the action of the force governing the behaviour of the buyers, or consumers, or users, of goods and services in markets. The conception, though abstract, was not divorced from fact. The operating motive was, in its origin, 'subjective,' revealed by psychology, actuating the individual man, whose desires tended to grow less urgent with the increase of available supply, until a point was reached when the 'margin' of desirability of the particular good or service would be passed, if the price asked were raised, and other goods or services would be preferred. This 'subjective' 'utility,' or desirability, would find 'objective' expression, or 'resultant,' in the average prices tending to be reached in concrete markets by numbers of individuals bargaining with or against one another. And the Austrian School brought the consideration of supply, and the motives prompting and restraining sellers, and the producers behind them, under the same dominant idea of subordination to the fundamental influence of 'marginal utility.' They regarded their action as secondary to that of the buyers. By familiarizing English students with this foreign reasoning that had been

¹ On *Capital and Interest* and the *Positive Theory of Capital*. Böhm Bawerk advanced that conception of interest as the payment for the exchange of a present for a future good which has found wide acceptance.

² On *Natural Value*.

³ *An Introduction to the Theory of Value on the Lines of Menger, Wieser, and Böhm Bawerk*.

carefully elaborated, with a 'scientific nomenclature' that may or may not have been, on balance, a strong recommendation, Smart rendered opportunely potent aid to the advance in England of economic theory.¹

But at the close of his life, after sitting from 1905 to 1909 on the Poor Law Commission and preparing seven historical memoranda for that body, the Majority and not the more ambitious and advertised Minority report² of which he signed, he turned to a huge effort in economic history. He proposed to present the *Economic Annals of England during the nineteenth century*: and he succeeded in covering three decades, arranging with 'prodigious industry'³ a mass of detail gathered from the records by Hansard of the proceedings in Parliament, supplemented by other official publications. These two varieties of work give the measure of Smart's range. Other books of an essay type—*Studies in Economics* (1895), the *Distribution of Income* (1899),⁴ the *Taxation of Land Values and the Single Tax* (1900), and the *Return to Protection* (1904), testify to active concern both with theory and with practical policy.

It should be noted as a component part of his personality that he had been a disciple of Ruskin; and the heretical author of the finely written *Unto this Last* was, we might have expected to hear, shocked by his admirer's wish to teach the 'contemptible science.' Signs of this influence endured, however, in the nice format of print and paper bestowed on most of his books. It may, too, have contributed to the pleasantness of his composition on what is sometimes called 'dismal' and represented as being of

¹ Cf. below, p. 288.

² Signed by Mrs. Sidney Webb and others.

³ Thus Cannan wrote. The risk of want of proportion in attaching so much weight to a particular class of evidence is obvious.

⁴ Cannan pronounced this 'perhaps' his 'best and most characteristic work.'

necessity severely hard. The flattering testimony of one of his pupils,¹ in the appreciation prefixed to the *Second Thoughts of an Economist* published after his death, declared that 'Smart never wrote a paragraph which is not intelligible to a layman.' That last product of his attractive pen sheds illumination on his temper and attitude.² A genuine anxiety is shown for the provision of more wholesome surroundings for those compelled to earn their daily bread by monotonous attendance on machinery—'repetitive' work, as it has been called—although that soulless instrument relieve degrading strain on mere brute strength. But it is accompanied by recognition of a vast improvement wrought in the distribution of wealth, despite the growth of numbers and the enlarged appetite for comfort or even for luxury of the working population, and by insistence on sane, moderate, practicable reform. We can well believe that one who could venture on the following assertion was both a zealous student and a stimulating teacher of what Ruskin petulantly scorned as a vain idol. 'I thank God every day,' Smart wrote with engaging candour, 'that it has fallen to me to be an economist. There is a bigger past to dig in, a bigger present to understand, and a bigger future to work for than any of our colleagues have.'³

B. ECONOMIC HISTORY

By common recognition, between 1883⁴ and 1924,⁵ the study of economic history reached in England distinct high status. Three names stand out in this advance. PROFESSOR JAMES EDWIN THOROLD ROGERS, M.P. (1823-

¹ Mr. Thomas Jones.

² Cf. a review by the present writer in the *Oxford Magazine*.

³ i.e. at Glasgow University.

⁴ The death of Toynbee.

⁵ The death of Marshall.

1890), ARCHDEACON WILLIAM CUNNINGHAM (1849-1919), and SIR WILLIAM JAMES ASHLEY (1860-1926) could be described as veteran commanders of a growing army of recruits. Their lives stretching about the normal span saw the fruition of their labour. To their names may be appended as, so to say, chiefs of the staff, those of LILIAN CHARLOTTE ANNE KNOWLES (1870-1926) and GEORGE UNWIN (1870-1925), who, prematurely cut off in their prime, had proved their calibre. Before reviewing some of their characteristic work separately a few general considerations will not be amiss.

The systematic pursuit of economic history, like the methodical statement of economic theory,¹ had been foreshadowed by fragmentary anticipation. Besides some special essays of earlier date prominent economists were not averse to seize opportunity for historical discussion. Adam Smith's long chapter upon Colonies² falls under this head which would also cover the whole third book³ of the *Wealth of Nations*. The second and succeeding editions of Malthus' *Essay* were, we have seen,⁴ an amalgam of history and statistics. Yet with regard to general economics the active connected study of economic history was comparatively late, originating in the breach that opened in the hot conflict on the right method of approach.⁵ In its relations to general history its youth is no less marked. For it is not so very long ago that historians⁶ fixed their gaze on other than economic incidents and forces; and it is but yesterday that, in greater measure perforce as they draw near to more recent periods, they

¹ Cf. above, p. 2.

² Book iv, ch. vii.

³ On the different progress of opulence in different nations.

⁴ Cf. above, p. 38.

⁵ Cf. above, p. 128.

⁶ The attitude and conduct of Goldwin Smith in his *Political History of the United Kingdom* and of Green in his *Short History of the English People* may be instructively contrasted.

have felt the advantage or compulsion of expending here the pains hitherto bestowed elsewhere—on wars, diplomacy, the details of constitutions, and the motives and intrigues of kings and politicians. In consequence it can be observed that English economic historians have suffered from drawbacks that detract from young study. Where, as in their case, the material to be investigated is so varied and the field of research so large, some records must be examined before others which were not known at first, or have not been accessible hitherto, or as yet approached or ransacked. The probable or necessary sequel is the upset of earlier accounts by later narratives, or at any rate revision, with some change of emphasis, as the quantity or quality of the data alters. Or it may be that too much attention to particular periods or to special localities or groups has meant the neglect altogether or the scant consideration of other classes, places and times, persons and things, or the postponement of their full close recognition. This error or defect of proportion was in one matter a curious unintentional outcome of the circumstances of origin.

The quarrel on the mode of study between defenders of an abstract deductive method and the assailing champions of the concrete inductive method acted, we remarked, as a summons to economic history. It made this appeal because the latter instrument had been predominantly used in historical inquiry, to which it was obviously appropriate. However suitable the other logical tool might have been thought or proved for the formation and development of economic theory, the superiority of the alternative was then in turn invoked to recommend the abandonment, or reconstruction, in the light shed by induction on the present from the past, of the ambitious structure raised before—insecurely it was urged—by deduction. Yet, such is the capricious irony of fate, at the outset and for a long lap afterwards a vast amount of

pains and much ingenuity were applied in English economic history to the obscure antiquarian question of the origin of the manorial system of land ownership and cultivation. That beckoned or roped fertile imagination to deal with the dearth or ambiguity of the evidence forthcoming, and dexterous use was made of plausible hypothesis so sternly reprobated a little while before. As MAITLAND, a cautious but courageous venturer on this dim treacherous ground, pithily put the situation,¹ 'A result is given to us; the problem is to find cause and process.' No less instructive than the plain proof furnished by disproportionate toil spent on this baffling puzzle of the compelling fascination for the human mind of inquiry, offering scope and presenting need for the theorizing exercise of the disciplined imagination, was the successive replacement of different hypotheses as the result of fresh unearthing or new grasping of available material. Briefly it may thus be summed. Alternative theories that the manorial tenants originally free gradually became serfs of the lord, or that once serfs they then acquired freedom, gained or lost currency as research, or speculation, was pushed back from the first accepted picture of the village community or 'mark' of Anglo-Saxon institution to the account advanced by SEEBOHM² of inferiors subservient to a superior in the *coloni* of the Roman *villa*, and then to the further more distant recall by VINOGRADOFF³ of the influence of Celtic arrangements prevailing before and lasting through the Roman occupation of Britain. Nor in this discussion, reviving an old relationship between Political Economy and Jurisprudence, does emendation seem likely to cease.⁴

¹ In *Domesday Book and Beyond*.

² In the *English Village Community*.

³ In the *Growth of the Manor*.

⁴ Cf. an article dealing with a later stage, in the *Economic History Review* for 1931, on the Hundred Rolls of 1279-80 as a source for English Agrarian History, by Professor Kosminski.

More instances could be adduced, and some will meet us later, of the disturbing effect of new 'finds' of evidence; and we shall also have occasion to note the changed stress laid on the investigation of different periods. We may now mention one other significant sequel that may be treated as following naturally from the conditions surrounding the onset of the study in England of economic history. It concerned most of the historians whose work we are going to review. When the question of 'tariff reform' was raised at the opening of the new century by Joseph Chamberlain, a severance occurred among economists broadly corresponding to the distinction of economic historians from analytical theorists. With some notable exceptions the former were not averse to the mooted shift of fiscal policy back towards Imperial preference, while, again, though not universally,¹ a manifesto for the conservation of Free Trade² was promoted and signed by those who would probably be considered primarily expositors of analytical theory. At any rate Ashley and Cunningham lent their pens to Chamberlain's support in the *Tariff Problem* (1903) and the *Rise and Decline of the Free Trade Movement* (1910) and the *Case against Free Trade* (1911).³ Unwin⁴ indeed—at one time secretary to Leonard (afterwards Lord) Courtney—himself an economist of repute⁵ and a signer of the manifesto, who was extraordinarily tenacious and outspoken in his opinions, whether

¹ e.g. dissent of H. S. Foxwell, known especially for his writings on banking and his collections of economic books and pamphlets, such as the Goldsmiths' Library at the University of London.

² Free imports might perhaps be substituted for Free Trade. Cf. above, p. 34.

³ Chamberlain wrote a preface to this. Cf. also *The Wisdom of the Wise* (1906).

⁴ Thorold Rogers also would, as the French say, be regarded as a Free Trader *pur sang* or *sans phrase*.

⁵ He was at one time Professor of Political Economy at University College, London.

popular or not, and was, if any man was, a 'convinced' Free Trader, betrayed marked anxiety in his writing to press argument against the attempt of past English Governments to guide the trade and industry of the country along chosen channels, and he went out of his straight way¹ to handle thus such controversial questions. By contrast Mrs. Knowles, in what may seem to many readers the chapter² most vividly composed in Cunningham's history—frankly acknowledged to have come from her—depicted sympathetically the aims and methods of Burleigh's policy of control—'state-interference,' as hostile critics might censoriously call it. In her own books she traced, with manifest approbation, the reversal towards the close of the nineteenth century of the indifferent regard for economic or other bonds with the 'over-seas Dominions' evinced by followers of Cobden, like Goldwin Smith in Canada, and some prominent politicians in the Mother Country.

The *pros* and *cons* of Free Trade and of Protection are divers and tangled; but in such summary as is possible here thus much may be said. When Smart argued³ that Free Trade was the 'economist's policy,' and 'from his point of view it seems as if there were no question' between it and Protection, he could get corroboration from the facile logic leading from the customary assumption of individual competition and free exchange as the base of familiar economic theory to adoption of Free Trade in fiscal practice. On the other hand, historians had the memory behind them of the long sway of the Mercantile System in its prime, under which, if not because of which, English trade at least grew from infancy to manhood. They could appreciate criticism, like that of the German

¹ Cf. the chapter on Protection and James I. in his *Industrial Organisation in the Sixteenth and Seventeenth Centuries*.

² VI., part ii.

³ In the *Return to Protection*.

List,¹ passed on the individualism, and cosmopolitanism, of Adam Smith, although, as Nicholson showed afterwards,² that economist had also urged the overruling claim of national defence and propounded a 'Project of Empire.'³ They were unlikely to harbour any vulgar prejudice against the supposed heretical taint of Protection or to raise Free Trade to the absolute authority of gospel valid for all times and in every country. More probably they would regard attentively capacity for production and strength to resist competition, as gauged by the character and state of industries and the volume and direction of movement of trade. In such attitude they might fairly be represented as resuming a position like that taken at the start of their study, when particular historical fact was set in diametrical contrast to general abstract theory.

In their histories Rogers, Cunningham, and Ashley tackled boldly the big task of surveying a long stretch of time. *Six Centuries of Work and Wages* (1885) was the title given by the first to a popular condensation from his larger history that covered eventually the period between 1249 and 1703. Cunningham's first outline of the *Growth of English Industry and Commerce* (1882) became magnified into three volumes containing a 'connected comprehensive view of English economic development,' which began with 55 B.C. and ended at A.D. 1850. Ashley's *Introduction to*

¹ List laid stress on productive power and urged that a different fiscal policy was appropriate to different stages in a nation's growth. His argument, like that of Mill, in defence of import duties to encourage infant industries, could be applied towards maintenance as well as development, e.g. to protection against dumping.

² Cf. *A Project of Empire: A Critical Study of the Economics of Imperialism with Special Reference to the Ideas of Adam Smith* (1909).

³ Adam Smith also said that a coward—a man incapable of defending or revenging himself—was 'mutilated and deformed' (quoted by Nicholson in an address to the Economic Society on *Political Economy and Journalism* (1894)).

English Economic History and Theory (1888 and 1893) broke off at the close of the Middle Ages and was not completed, although in his *Surveys Historic and Economic* (1900) he supplemented it, dealing not only with some fresh medieval agrarian and urban topics, but also with later matters like the Tory origin of Free Trade policy. In republished lectures, delivered at Hamburg, he supplied an *Outline History of the Economic Organization of England* (1912), difficult to surpass for the judgment, lucidity, and sustained interest of the broad narrative. So wide and necessarily rapid a sweep across the centuries as these works attempted was appropriate and inevitable at the beginning; and it has been followed since by more intensive studies made by a host of writers.¹ As one result the period between the Elizabethan age and the Industrial Revolution has received notice that was comparatively lacking before, and the immediate antecedents of the Industrial Revolution and the Revolution itself have been more closely examined.² The dark, previous colouring of its attendant ills has been relieved; and reaction here may in its turn be pushed too far. But it was certainly to be expected that with the lapse of time, and the discovery and scrutiny of fresh material, the accounts given in other sections of their histories by the three writers named would be added to, and possibly also, in the case of some detailed particulars, subtracted from. Amendment or replacement could not but befall some of the conceptions they were bound, although historians and not

¹ Professor W. R. Scott's *Joint-Stock Companies to 1720* (1910-12) is an outstanding instance. Professor H. Heaton's *The Yorkshire Woollen and Worsted Industries from the Earliest Times up to the Industrial Revolution*, is an illustrative example of a number of studies of the history of different industries and trades.

² Cf. M. C. Buer, *Health, Wealth, and Population in the Early Days of the Industrial Revolution*; W. Bowden, *Industrial Society in England towards the End of the Eighteenth Century*; L. W. Moffitt, *England on the Eve of the Industrial Revolution*, among other books.

theorists, to frame and put forward when they tried, passing beyond bald chronological narration, to interpret what they were recording, or even to understand it fully so as to present it in clear order. No discredit attaches to them on that account; and none the less assuredly may it be affirmed that they laid down the broad lines of the highways to be travelled, if the by-passes and cross-roads and country lanes and bridle and foot-paths required more exploration than they could give. With ampler means at disposal the chief thoroughfares themselves might also afterwards demand some straightening or deflection, or some relaying of the surface or change in the canting, or even consolidation or improvement of the foundation.

ROGERS in particular was, as both Cunningham and Ashley said, a pioneer. He cannot now be robbed of the high credit of initial impulse. As a variant of the military metaphor used at the beginning of this section¹ he might more properly be compared in position to a scout at an outpost. In time, at any rate, he anticipated rather than belonged to the main advance. The dates of his birth and death explain much of what has happened to his writing. For he has suffered the hard destiny that menaces the first handlers of new work. Not merely have many or most of his favourite conclusions been questioned or damned, but his store of material has called for replenishment. The result has been not so much to reinforce as to invalidate labour that could be eulogized as herculean.² A conspicuous instance is the real effect of the Black Death in the middle of the fourteenth century on the Manorial System and its precise relations, together with the Peasant Revolt of 1381, to the commutation for money-payments of services in kind due from the villeins

¹ Cf. above, p. 208.

² From manuscript and original sources he collected for the years between 1259 and 1583 nearly 30,000 entries of cereal prices alone (cf. Ashley in *Economic Journal* for 1921).

to their lords. Rogers had a neat welded theory that, agreeing with a sympathetic attitude towards popular agitation for reform, did not conflict with hostile sentiments vaunted against landlords as a class. Their fore-runners, he pictured, faced by the scarcity of workers due to the mortality and backed, though ineffectively, by ill-tempered Statutes of Labourers, with their ban on escape to freedom in the towns and their veto of higher wages, stopped commutation. This provoked the revolt that ended villeinage. The chain of the argument snapped and the links parted asunder under the pressure put by subsequent research. Commutation, it was found, was not so prevalent before the pestilence, and the movement went on after. Other causes contributed to the revolt, and villeinage lasted beyond it. Rogers was, it would appear, a rapid as well as tireless worker,¹ and he worked alone. He was confident of his opinion. The evidence he searched, though it might be less than what was needed, was not small in mass. It was mostly 'original' and in manuscript. Its investigator, in the language of one critic,² was not unwilling to find a 'handy weapon' with which to 'belabour' his 'political opponents'; and he held, robustly, dogmas of a Liberal or Radical type. In the severe words of another critic,³ friendly disposed, in his 'commentaries' which fell 'far short of the value' of the 'text,' 'he is often painfully inaccurate and even inconsistent.' With all these circumstances the conclusion can hardly be escaped that implicit trust will not rest on this base of English economic history.

Rogers' text derived much from documents found in the

¹ The present writer was so informed by an eye-witness of Rogers at home, so to say, with his original sources. The spectator cordially admired his familiarity with the documents and his swift practised skill in getting at their contents.

² Foxwell writing an obituary of Cunningham in the *Economic Journal* for 1919.

³ Nicholson in the *Principles* mentioned above, p. 200.

muniment rooms of Oxford Colleges, and saved by his intervention from impending doom in one instance at least. He held the Drummond Professorship in that University from 1862 to 1868, and again from 1888 until his death two years later. At one time a clergyman, he renounced his orders, being the first to avail himself of the Clerical Disabilities Relief Act which he was instrumental in securing. For six years he sat in the House of Commons, and besides editing Bright's speeches wrote a book on Cobden,¹ whose friend he was. Two courses of his later lectures, published under the titles of the *Economic Interpretation of History* (1888) and the *Industrial and Commercial History of England* (1892), reflect the assurance of his positive opinions as they 'complete his comments on the results of his long researches.'² His work can be sampled more agreeably in the *First Nine Years of the Bank of England* (1887). That has received the special praise of Cossa, the Italian historian of economic authorship,³ and the warm approval of the Greek writer of the first complete narrative of the Bank. Professor Andreades pronounced Rogers' book to be the single 'truly scientific' work that had appeared before his own approach. It has also received complimentary mention from two subsequent discoverers⁴ of much fresh material for banking history. It is an inquiry into a weekly record of the price of Bank stock from 17th August 1694 to 17th September 1703, contained in a statistical journal published by an apothecary, John Houghton, which Rogers discovered when he was preparing the fifth and sixth volumes of his *History*.

¹ *Cobden and Public Opinion* (1873).

² Cf. Thus Hewins wrote (*Economic Journal* for 1892).

³ Cf. *An Introduction to the Study of Political Economy*.

⁴ Dr. R. D. Richards in the *Early History of Banking in England*; and Dr. W. R. Bisschop in the *Rise of the London Money Market, 1640-1826*, although it was a 'defect' that Rogers could not use the Bank Records.

Supplemented by the pamphlet literature of the time and other evidence, he uses this to trace in three chapters the infancy of the Bank, the difficulties confronted and the victory won over Chamberlain's projected Land Bank, and opposition like that of the goldsmiths, who were in some degree its rivals, as they had been in part its fore-runners. The story is carefully planned, well documented, and luminously told without apparent surplusage or prejudice; and it shows effectively how figures of prices can be made both interesting and informing. Rogers places on his title-page the Latin motto,¹ which indicates how one may be plunged into deep water and yet emerge more comely than before; and in approbation of the conduct of the Bank he points out that, while errors were committed through the directors' confusion of 'credit of their stock' with the 'credit of their cash,' they nevertheless rendered the triple service of aiding the Government in moments of peculiar pressure, of assisting currency and credit, and of easing and smoothing the foreign exchanges. The story of the past thus told by him serves to throw light on the present excellence of the English banking system, which came securely through the severe test of the War of 1914-18, and still enjoys unique repute in the financial world.

The fault of CUNNINGHAM'S *magnum opus*—great work as his History cannot fail to be recognized as being—is different from that of Rogers; and, if it must be deemed a defect, it will also be excused as a defect of a high quality. In his industrious exhaustive survey he tried to be scrupulously fair and impeccably exact, and he was anxious to bring in all, even the latest, material that he could command. One result is that the crowded picture becomes somewhat blurred instead of standing sharply out, that the successive portions of the record seem occasionally jerky, or loosely knit, and that the book as a whole is awkward to grip and

¹ 'Mersus profundo: pulchrior evenit.'

not easy to remember. A reverent pupil hinted¹ that, being by nature combative, and liking to deal and ready to receive hard blows in the controversial fray,² Cunningham set himself to guard against this temptation when engaged on his *History*. That brought the consequence that by contrast with less neutral but more constructive presentations of his facts his description appears drab and dull.³ But it has the redeeming merit that it is both full and just, and it has got and held the exalted rank of being authoritative. Cunningham's honest toil, indeed, given freely through many years, was a chief factor in winning for his subject wide and high recognition; and he was properly styled one of its creators. That does not mean, of course, that his great book will stand for all time immune from correction; ⁴ and it was characteristic of its author that in the third edition, in the matter, for example, of the effect of the Navigation Act of 1651 on Dutch power, he promptly owned that his earlier impression, corresponding to the common view, must be discarded. Such frankness does not shake our confidence, and it remains true that since its appearance in its larger size Cunningham's *History* occupied the main field. As a whole, on its scale it has had no real rival among English writing.

Foxwell, indeed, describing⁵ it as an 'established classic,' declared that the author, interested in 'going

¹ Mrs. Knowles in a letter to the present writer.

² e.g. with Marshall in the *Economic Journal* for 1892.

³ Cunningham himself, replying to critics in the *Economic Journal* for 1894, stated that his book was intended to be a 'text-book for Honour students' rather than the 'general reader,' and he agreed that at that date a 'large number' of problems were 'still unsolved.'

⁴ Mr. E. Lipson, for instance, has given us instalments, dealing with certain periods, of a scholarly account of the *Economic History of England*, and Dr. Clapham, inspired by Marshall and Cunningham, has offered a monumental *Economic History of Modern Britain*.

⁵ In the obituary quoted.

direct to the original sources,' for that reason avoided rather than sought the 'generalization' that might be calculated to convey a neat, firm impression, and accordingly he appeared sometimes to be 'desultory' and 'unsystematic.' But, on the other hand, his 'fully documented' handling of men and things was, compared with that of Rogers, sympathetic and not prejudiced. And Foxwell quoted further from another critic,¹ no less competent, the suggestive commentary that, interested as Cunningham was rather in the 'history of economic opinion than in the material growth' of industry and trade and 'in policy and institutions first,' and in 'their business results only in a secondary sense' as tests of policy, he was yet a 'strong realist' with 'evident delight in the fact as such,' and no detail 'throwing light on character and motive' was too 'minute' for him. The pupil, to whom reference has been made, Mrs. Knowles, chose² as his chief characteristics his 'immense capacity for work of a high quality' and his 'intense interest in human beings.'³ Of his book he said to her, 'It will be altered and rewritten, but I have sketched out the scheme and laid the foundations'; and of the study, for which he did so much, he declared, 'Economic history teaching will always go on'—'my subject will never die.' He did not love economic theory, nor was his aversion hid; and he was a nationalist rather than an individualist or cosmopolitan.

The list of his books and articles on 'economical and social subjects,' compiled⁴ by him in old age, just exceeds

¹ Nicholson in the *Chronicle* of the Edinburgh Academy.

² In the *Economic Journal* for 1919.

³ In a preface to some addresses by Cunningham on *Making the Most of Life*, which were his last utterances, published after his death, the writer, also a pupil, states that the 'one characteristic of all he thought and said to be noted above all' was that 'every thing in history interested him; everything in life interested him.'

⁴ Cf. *Progress of Capitalism in England*.

a hundred, and his theological output must be added. In his later years he became Archdeacon, and averred that he was 'parish priest first,' and only then economist. He was the incumbent of the University Church, Great St. Mary's, at Cambridge, where he spent his life. We must now be content here to display the general plan of his great book and to mention some of his other economic writing. In the single first volume on the Early and Middle Ages, after an Introductory Essay on Scope and Method, he parts his treatment into five main sections, discussing successive periods under the heads of Early History, Feudalism, Representation and Legislation, Lancaster and York, and the Tudors. In the last division sub-sections are called Preliminary Survey, Accelerated Rate of Change, Shipping, the Gilds, the Land Question, and Changes in Opinion. In every one of the five main sections economic thought receives expository and interpretative handling. In the final sub-section of the fourth division, for example, medieval and modern ideas are contrasted. When Cunningham passes to the two volumes devoted to Modern Times, the Mercantile System is given the account merited by its long continuance and its achieved results in Part I, and on Part II embracing what is commonly called the Industrial Revolution (from 1760 to 1850),¹ the general title of *Laissez-Faire* was bestowed, thus bringing out the difference between prevailing opinion, together with corresponding action, and the thought and conduct that had obtained before under Mercantilist influence. That earlier system is portrayed as it was in the Elizabethan Age, where Burleigh's statesmanship fills a special section,² and then under the Stuarts, while to the final period the suggestive name of Parliamentary Colbertism³

¹ A separate publication was made of this part under the title of the *Industrial Revolution*.

² Written by Mrs. Knowles. Cf. above, p. 212.

³ From the French Minister, Colbert.

was applied. Stuart behaviour in economic affairs was set in a different light from that in which their political misconduct had hitherto been viewed, and in the remaining section it could be seen how consistent aims continuously pursued by a despotic Queen or an authoritative Privy Council tended inevitably to a breakdown with the haphazard vagaries and less direct more lax control of parliamentary legislation and divided administration. *Laissez-Faire* is treated under the successive headings of the Workshop of the World, the Introduction of Machinery in the Textile Trades, Aggravation of the Evils of Transition, Human Welfare, and Facilities for Transport, to which a Postscript of general remarks is added.

Besides the books already noted Cunningham reviewed *Western Civilization in its Economic Aspects*, in respect of ancient (1911) and medieval and modern times (1898, 1900), and he wrote another book on *Modern Civilization in its Economic Aspects* (1896). He discussed the *Use and Abuse of Money* (1891) and the *Christian Opinion on Usury* (1884), with which may be placed three books on *Christianity and Social Questions*. (1910), *Christianity and Economic Science* (1914), and *Christianity and Politics* (1916). They reflect, combined together, his double position and interests as clergyman and as economist. An account of *Alien Immigrants to England* (1897) is, like his joint authorship with Miss M'Arthur of *Outlines of English Industrial History* (1895), more representative of him as economic historian. In 1916 were published *English Influence in the United States* and the *Progress of Capitalism in England*. Such large activity in composition may well be called ¹ 'untiring' and 'ceaseless.'

As economic historian, ASHLEY can be contrasted both with Rogers and with Cunningham on different grounds. The trend of his bias, if such it was, was opposite to that

¹ As it was by Foxwell.

of Rogers on the crucial matter of fiscal policy. It also diverged generally¹ on economic theory, it would seem, despite of censure characteristically unrestrained passed² by Rogers in his later years on abstract hypotheses removed from real fact. Ashley was at any rate no adherent of the 'Manchester School.' He did not believe in the healing efficacy of *laissez-faire* whether in international trade or in industrial relations at home. But, while he brought more of the scholar and less of the politician than Rogers to the handling of his material, and commanded with impressive ease more profound and wider knowledge of what had been done before by research, especially in Germany, he never failed to give his readers clear definite impressions. Without alleging that they might with justice think that he had an 'axe to grind' in the usual depreciatory sense of that metaphor, he certainly could not be accused, like Cunningham, of being either 'desultory' or colourless. It has been said sometimes that an Oxonian is too prone to attach value to form, and that a Cambridge man is unduly liable to underrate it.³ And yet, though the matter of a book should be the dominant concern of the author, any negligence in its form must curtail the extent and sap the intensity of its influence. Users of Ashley's History, as of his other well-designed and well-produced performances, will be grateful for their

¹ Cf. above, p. 199.

² An illustrative instance is: 'The student who is anxious to go beyond the chatter of text-books and manuals will learn more and better political economy from Mr. Giffen's Essays (cf. below, p. 245) than he would if he browsed for ever on the thorns and bristles of abstract political economy' (from the *Economic Interpretation of History*).

³ The present writer may be allowed to recall that in correspondence with Marshall the Cambridge professor, who had also been a lecturer in an Oxford College, characteristically gave numerical expression to this comparison, stating it in percentages of excess and defect.

logical arrangement, their clear statement, and their pointed reasoning. He had the rare gift, it has been truly remarked,¹ of turning what was largely 'formless and voluminous' material into 'compact, interesting, suggestive' shape.

His History, we noticed,² was unfinished; and his writing was not limited to that subject. Besides the *Tariff Problem*, to which allusion has been made already,³ he examined the *Progress of the German Working Classes* (1903) under a fiscal policy of Protection; and the year in which these two books were issued saw also a 'study in the coal and iron industries of Great Britain and America,' with the title of the *Adjustment of Wages* (1903). The *Rise in Prices* and *Gold and Prices* (1912) were attempts of the essay type to popularize the scientific approach to an important recurring monetary problem. Its oversight or its misunderstanding have been the cause of untold harm. The discommoding aftermath of the War of 1914-18 brought back in another, less inevitable, shape,⁴ its significance, which Ashley duly emphasized, and deftly explained to newspaper⁵ readers a little while before. He was also the first Professor of Commerce in England; and in two little books on *Commercial Education* and *Business Economics* (1926) he gave an account of the place of, and means for, systematic preparation for business in this country, and an informing sample of how he considered that the subject should be approached and treated in an academic course of instruction. In such a curriculum it would seem likely and fit that Economics should have

¹ By Professor W. R. Scott, in a memoir in the *Economic History Review* for 1928.

² Cf. above, p. 214.

³ Cf. above, p. 211.

⁴ Cf. below, p. 273.

⁵ Notes originally written for the *Evening News* and the *Pall Mall Gazette*.

some share ;¹ and in fact this consideration has been recognized more or less fully where Faculties of Commerce have been set up in universities following Ashley's initiative. He himself held that in future a distinction would be drawn between Political Economy as ordinarily interpreted and taught hitherto and 'Business Economics.' That, largely 'concrete, descriptive, statistical, historical,' would consider the organization and financing of business concerns, their 'manufacturing, price, and labour policy, and so on.' Some of his sermons, too, were published under the title of the *Christian Outlook* (1925); and, starting as Nonconformist, he was in his later days a lay preacher in the Church of England. After his retirement from Birmingham University, of which he became Vice-Principal, he settled at Canterbury.² He had spent a busy life filled with varied interests; for in addition to his writings and his teaching he served on more than one Royal Commission or Committee, and contributed long memoranda to their reports.

Of his History, written before he was thirty-four, a competent judge—an economic historian both erudite and able³—said that 'few men have built so substantial and well-balanced a monument so early,' and that, 'together with Cunningham's weighty but less harmonious structure,' it 'marks' the 'conquest of a new field of learning.' 'Both its general lines and its detail,' Professor Clapham added, 'are extraordinarily little antiquated after a generation.' 'Far-sighted conjecture,' based by

¹ Cf. an article on 'Economics and Commercial Education,' by the present writer, in the *Economic Journal* for 1901. Cf. also Bagehot's definition, quoted above, p. 130, of Political Economy as the 'theory of business.'

² In a letter to the present writer Ashley mentioned that a Cathedral town was one of his requirements in choosing a place to live in, while the other was accessibility to London by a short railway journey.

³ Dr. Clapham, in an obituary in the *Economic Journal* for 1927.

Ashley on comparatively 'imperfect evidence,' has been often confirmed by the subsequent close documentary research of other inquirers. 'It will not,' he concluded, 'be superseded until a medievalist arises who can write as well' and 'move with something approaching Ashley's ease in the fields both of thought and act.' Such is the considered testimony of an expert witness; and those who consult the vivid informing pages of Ashley's History for themselves will constantly be sensible of the correctness and pertinence of this laudatory verdict. In accordance with the announcement on the title-page, 'theory' as well as 'history' is brought within the purview—in the sense, that is, of the past development of economic thought. Thus in Book I, from the eleventh to the fourteenth century, discussion of the Manor and the Gilds was followed by a chapter on Economic Theories and Legislation, and in Book II, from the fourteenth to the sixteenth century, the final chapter on Canonist Doctrine tells that instructive tale of successive changes in opinion to which reference has been made already¹ in this History. It shows luminously how glosses upon the previous authoritative text of theory met the altering needs and fresh usages of business practice with regard to the payment and receipt of interest, or its equivalent, on borrowed loans, or advances of capital. Earlier chapters deal with the supremacy of the towns, the crafts in the woollen industry, the agrarian revolution, and the relief of the poor. To the text of each chapter a full apparatus of notes of reference is appended and a list of authorities is prefixed.

At the close of his life Ashley returned from commercial economics and agricultural tribunals and committees on industry and trade to his first love; and this account of him may suitably end with notice of the *Bread of our Forefathers* (1928), published after his death. It is a representative sample of his mode of work, and in it by a

¹ Cf. above, p. 127.

curious coincidence he broke a lance with Rogers, who, he says, again and again repeated that 'our forefathers lived on wheaten bread.' 'Wheat was the ordinary food of the English people.' Ashley, pushing the inquiry successively further back, in these Ford Lectures,¹ never delivered, contends, on the contrary, that rye, not wheat, was the common food of the mass of the English people, like that of their continental neighbours. He promises, and fulfils his promise, that the road to be travelled in the investigation will not be dull. A large space of time, a wide range of evidence, and many features of English life, seen from a novel point of view, are characteristics of the story told. At the end of the eighteenth century the bread diet of the English, he admits, was undoubtedly wheat. But how long, he asks, had that been so? And then, in his first lecture, he appeals to anonymous tracts on corn of the year 1764, and to Gregory King, writing in 1696, supplementing them by statistics of the exports of wheat and rye between 1689 and 1788, the estate accounts of Holkham between 1731 and 1736, and the market returns between 1692 and 1703 of Houghton, the apothecary whose register of the prices of Bank stock was, we saw,² found and used by Rogers. In each of the following lectures the inquiry, with the supporting evidence, is carried a stage further back, crossing the centuries to as distant a date as 1189. The material utilized, displayed with scrupulous candour, is closely interrogated. At the conclusion the fascinated reader, spellbound by the author's luminous and forcible logic, must allow that a high degree of probability, if not absolute certainty, has been reached. A cool, experienced critic, who has given special attention to agricultural affairs, has pronounced³ for the 'acceptance of the main

¹ For the University of Oxford.

² Cf. above, p. 217.

³ Mr. R. V. Lennard, in a review in the *Economic History Review* for 1929. Mr. A. G. L. Rogers, the son of the historian, had de-

contention' of the book, which, he declared, was 'worthy' of the 'great and deserved reputation' of the author. Ashley sets out, it is manifest from the first, to prove a case. He does not hide the 'axe' that he would 'grind' if that can be justifiably warranted. But he is as fair and full as he is skilful and persuasive. In the best sense of the words his hands had not lost their cunning with the lapse of years. In the fourth lecture he comes to sharp, stern combat with Rogers. Ashley shows that the evidence brought in the first two volumes of the *History of Agriculture and Prices* for the period running back from the early part of the fifteenth to the middle of the thirteenth century is not conclusive within its range, and that must be widened to embrace other evidence pointing otherwise. Wheat may have predominated on the demesne land to which the bailiffs' accounts furnishing the data refer, but the preponderance was not so overwhelming as Rogers' language might suggest. The demesne land was about a third of the whole tilled soil of the country, and the monastic records indicate that the preponderance there was comparatively new. The assertion that rye appears never to have been extensively cultivated as an article of food in England is not justified. Throughout the Middle Ages, on the contrary, Ashley claimed to have established, it was a very important element in the rural life of the country, in the food of the people, and in the policy of the Government. His plea was a model of fine craftsmanship.

LILIAN KNOWLES, then Miss Tomm, obtained at Cambridge the double success of first classes both in the Historical and, what was then without precedent for a woman, in the Law Tripos. She was first in the former, and the only name above her in the latter was that of the Cape Dutchman, afterwards the famous General Smuts. She came,

murred to Ashley's first statement of the case (cf. the *Economic Journal* for 1921 and 1922).

her husband stated in his Memoir,¹ of a Cornish family of the small landowning class, and was an excellent horse-woman and keen rider to hounds as well as a constant prizewinner at school. Stories of action also appealed more to her than what she called 'problemey' novels, and the fame of her hats was as lively at Girton College as the memory of her 'double first.' Attracted at the outset to a legal career, she was 'probably the first woman to read in chambers'; but her lifework was decided by an invitation to assist Cunningham. For him, we have seen,² she felt the utmost admiration. He was to her 'always the greatest man' she 'ever met.' She became first a research scholar at the London School of Economics, and then 'one of the generation of teachers and writers whose co-operative labours' 'created its living tradition and built up its reputation as a centre of learning.'³ That School originated with Mr. Sidney Webb (afterwards Lord Passfield) and his wife. They devoted rare ability and tireless pains to inquiries, largely historical, into social and economic movements and institutions, among which their informing, though not quite impartial, *History of Trade Unionism*, and a comprehensive, exhaustive conspectus of the past of *English Local Government* stand out. The School, in its turn, has yielded a goodly crop of realistic studies, many of which have been additions to English economic history, especially in the more recent periods.⁴

¹ Prefixed to the second volume of the *Economic Development of the British Overseas Empire*.

² Cf. above, p. 220.

³ Cf. obituary notice by 'T. E. G.' (Professor Gregory) in the *Economic Journal* for 1926.

⁴ Among others might be mentioned *A History of Factory Legislation*, by B. L. Hutchins and A. Harrison; *A History of the Commercial and Financial Relations between England and Ireland from the Period of the Reformation*, by A. E. Murray; *English Taxation, 1640-1799*, by W. Kennedy; *Life in an English Village: An Economical and Historical Survey of the Parish of Corsley*, by M. F. Davies

For stimulus to, and guidance in, the preparation of such monographs the teachers there—Professors and Readers of London University as they became—have been responsible, and Dr. Knowles, as she became, was conspicuous among them.

'As a teacher, and especially as a lecturer,' we are told by one of her colleagues, 'she was superb. Her wit, her mastery of the subject and complete conviction of the rightness of her standpoint, her vitality and her physical presence, enabled her completely to dominate her audience.' 'But, while she did not pretend to be impartial,' and was frankly 'Imperialist and Protectionist,' 'she would state the other side as sympathetically as she could.' Dr. Gregory¹ pointed out that 'a strong character herself she was an admirable judge of character in others, and could weigh accurately and fairly temperaments and intellects with which she had nothing in common.' And he observed that in her writing, learning from Cunningham the lesson of 'constant unremitting toil and the patient study of authorities, she possessed to a much fuller extent than her master the power of imaginative generalization. Great knowledge of detail was subordinated in her presentation of a subject to certain leading ideas.' It would be hard to improve on this appreciation when we approach her books, which are unhappily few. Yet in her small *Industrial and Commercial Revolution in Great Britain during the Nineteenth Century* (1921), and in her large undertaking of the narrative of the *Economic Development of the British Overseas Empire* (1924, 1930), one volume of which, published during her life, dealt with the Empire as a whole and the British Tropics, and two more, treating of Canada, and of Australasia and South Africa, have been since that time forthcoming from the careful hands of her husband, proof

¹ Professor Gregory won repute for his writing on money and banking, among other subjects.

is fortunately available of her high quality as economic historian.

In the latter enterprise she broke new ground, not only because the material was, as she said, 'scattered and patchy,' but also because she had no predecessors. That, indeed, was a condition attendant on her study not alone in place, but in time as well. In her own words, when she began to teach, it was held, with some cause, by 'great authorities'¹ that English economic history could not be taught after 1846. She passed that barrier triumphantly; and, in her exploit, in another respect she went outside ground trod before. For she tried to stress the 'overwhelming importance' of transport, and of agriculture, no less than of colonial development.² She did this, too, in her smaller book, which stretched until and even beyond the close of the nineteenth century, and on that account alone it was a substantial addition to earlier ventures, despite of its limited size. Henceforth it could not be neglected by any serious student of the time. It had other shining merits; and, in fact, in her vivid comprehensive presentation of the outstanding points of what has seemed to many the most gloomy and disturbing epoch in the evolution of this country, she gave a convincing and illuminating picture that superseded prior attempts.³ The drawing was as firm as the colouring was sure. The latter was purposely not too dark or startling in its hue. For, as she says in her Preface, it is 'easy to exaggerate the social evils of the industrial transformation. There were

¹ e.g. Cunningham. Mrs. Knowles also mentioned the present writer, whose reason would be that the time was too close for detached inspection, and that, of course, is not an immovable plea.

² Dr. Clapham gives the sub-title to his first volume of the *Early Railway Age, 1820-50*.

³ Since then Professor C. R. Fay has produced an informing and interesting 'economic and social survey' of *Great Britain from Adam Smith to the Present Day*, and he had written previously on *Life and Labour in the Nineteenth Century*.

many compensations, and the progress of the change before 1830 was so slow that it allowed considerable time for readjustment. It was the newness of the cotton and coal industries which attracted attention and brought old-standing industrial evils to light.'¹

GEORGE UNWIN also broke new ground. Before his first book on *Industrial Organization in the Sixteenth and Seventeenth Centuries* (1906), the account of the chief guilds that had so big a place in English medieval life had been emended.² It was shown that the craft guilds had arisen from the need and advantage of division of labour. With the growth of distinct industries the many separate trades of a town could not be conveniently controlled or satisfactorily represented by a single merchant guild. A contest to the death for the government not only of the trade, but in some instances as a consequence of the town as well, might be true of the Continent or of Scotland, but it was not the usual incident of English industrial development. Unwin, taking up the story at a later stage, called attention again to the transforming influence of division and subdivision. Briefly summarized, though condensation is not easy,³ his narrative informs us how the craft guilds in their turn changed under internal and external influence. Capitalism grew in extent and power. Moneyed men came more to the front. The trading and commercial element conflicted with the industrial. The functions united once

¹ In a letter to the present writer about her book Mrs. Knowles stated that she wished to show, in contrast with some other pictures of the times, that then as now England was 'worth living for.'

² By Dr. Gross in his *Gild Merchant*. It may be noted that Ashley continued to lend some support to the earlier view.

³ This summary is taken from the present writer's *Short History of English Commerce and Industry*. It was made after reading and re-reading; but Dr. Clapham, extending his objection to a second book, said that Unwin was not successful in 'book-building.' Dr. Gras declared that he tested advanced students by their understanding of this book in two or three readings (cf. *Economic Journal* for 1928 and *Economic History Review* for 1929).

in the single person of the craftsman were divided or re-distributed among different classes and individuals. As traders or large dealers reduced the workers to dependence the small masters and the journeymen, or hired labourers, drew closer together, forming in their joint defence journeymen's associations, which were nevertheless in some subordinate connexion with the guilds, or their successors, the Companies, where the trading element was dominant. It must be admitted that this book is hard to grasp; and it seems that Unwin, in the teaching posts held afterwards at Edinburgh and at Manchester, where at the time he was appointed his Professorship was the only Chair of Economic History in the British Empire, was less successful as a lecturer than in informal intercourse with pupils. Also, it would appear, he stimulated the accomplishment of work by others rather than himself completed projected plans of authorship. Of these there were many. In his later book on the *Gilds and Companies of London* (1908), which, like the earlier, was the result of years of labour, undertaken first by him, in the archives of the Guildhall, the British Museum and the Record Office, the arrangement of material is less bewildering and the drift of the exposition more direct and clear. He himself considered it his best piece of work. All that he left besides, except papers, of which some were connected and some detached, that were brought together after his death,¹ was a book of no great size, in writing which others co-operated. *Samuel Oldknow and the Arkwrights* was the result of a fortunate 'find' of 'letters, papers, account-books, and other business records of every kind and size' in a dilapidated portion of a Lancashire cotton-mill. That material, in Unwin's words, afforded an 'unique illustration both of the final phase of the domestic industry and of the earliest phase of the factory system.'

The son of a railway clerk turned grocer at Stockport,

¹ *Studies in Economic History*, edited by R. H. Tawney.

and himself employed in the office of a hat-making firm,¹ Unwin is described by the editor of his collected pieces as having 'worked and read, read in the streets, the trams, and the park' of that industrial town. Scholarships won first at University College, Cardiff, and then at Lincoln College, Oxford, led to a first class in 'Greats'² and afterwards to the Bishop Fraser post-graduate research scholarship at Oriel College, which involved the study of economics in Germany and meant contact with the leading economic historians of that country. Admiration, however, of their learning blended with dissent from most of their theories, and, throughout, Unwin was not prone to swear readily allegiance in any quarter. Some time after he came back to England his secretarial work for Courtney, giving him time for continuance of research, acquainted him with the men and things of English politics. Of his chief he was laudatory. 'He is,' he said, 'an idealist, but no one has a keener sense of the practical necessities of life. Such a combination is what I most admire.' He had thus a varied experience as preparation for subsequent work; but, whether it was, or was not, due to this last association, he conceived a great dislike for the 'aggressive ignorance,' as he called it, of Imperialism at the time of the South African War, and in the later European War he did not hide some unpopular opinions.

The judgment passed by another pursuer of the same line of study that Unwin was the 'most original and probably the most learned' of the economic historians that England has produced may be the generous tribute of a sympathetic companion. It was expressed somewhat differently when his friend³ said that he 'combined minute investigation with daring speculation,' and other

¹ He dealt with the hat-making trade in his first book.

² The Final Honour School of Literæ Humaniores (i.e. philosophy and ancient history).

³ Professor Tawney has ably added to existing knowledge

light was thrown by the grim remark that he had an 'uncanny gift for stripping popular conceptions of their decorous drapery of resounding principles to reveal a satanical imp grinning horribly beneath the ermine and gold.' Commentary on this portrait may not be irrelevant or unfair in suggesting that he was not displeased to come forward as 'conscientious objector' to previous writing, if, as his friend declares, and Cunningham, it seems, admitted, he 'gave the *coup de grace*' to the traditional view which saw in Edward III a 'precocious Cobden.' He was, we are also told, something of a propagandist as well as a scholar—a would-be political philosopher interested in general ideas no less but rather more than an economic historian, pure and simple, gathering together detailed facts. His most characteristic contribution, his admirer concluded, was his emphasis on certain simple yet fundamental truths often forgotten. He would, in particular, transfer the chief stress from the policy of the State as a dominant factor in development to the enterprise of individuals and the rise of corporate associations of various types. He held, in contradiction of the verdict of some earlier historians, that the part played by State power in history has been very largely evil and not good.^{1 2}

on the *Agrarian Problem of the Sixteenth Century* and on *Religion and the Rise of Capitalism*. Contrasting in his view of the State with Unwin, he has not courted immunity from bias in a socialistic direction. Cf. below, p. 301, note 1.

¹ A somewhat different estimate from that quoted above of Unwin's merits as economic historian is that of Dr. Clapham in the *Economic Journal* for 1928.

² A posthumously published book by Mrs. Knowles is *Economic Development in the Nineteenth Century: France, Germany, Russia and the United States* (1932). Pieced together, partly, from lecture notes, the form lacks drive and finish. The matter, sometimes full, and generally informing, dealing with agriculture and transport, tariff policy and colonial expansion, as well as the "industrial revolution," is occasionally thin or scrappy. Her genius and talent, it would seem, are better sampled above (pp. 230-2).

CHAPTER X

STATISTICS

ROBERT GIFFEN (1837-1910)

CHARLES BOOTH (1840-1916)

The Connexion between Statistics and Economics—Difficulty of making Experiments under Isolating Conditions in Economic Theory—Possibility of Plurality of Causes and Composite Effects in History as well as in Theory—Observation as the Alternative to Experiment—Statistics as an Aid to Systematic Observation—Advantages of Numerical Data where they are Available—Larger Prospects have been Opened—The Quantitative Measurement of the Strength of Motives to Economic Action—The Realistic Study of Institutions and Human Behaviour in America—'Sampling' and 'Aggregated' Statistics—New Possibilities Suggested—Giffen's Career and Characteristics—His Journalistic Training and Instinctive Sense of 'Good Copy'—His Gift for Popular Statement and Exposure of Common Fallacies—His Mastery of Numerical Data apart from Later Developments of Statistical Technique and Elaborated Statistical Theory—His *Essays* as a Fount of Statistical Instruction—His Other Writings—Summary of his Paper on the 'Use of Import and Export Statistics'—Booth's Life—A Big Business Man and a Cool, Wise Social Reformer—His Successful Advocacy of Old Age Pensions—His Seventeen Volumes of *Life and Labour of the People in London*—Aiming at Exact Description—The Measurement of Poverty—Eight Classes Distinguished—The Starting of a New Survey—Points for Consideration in Comparison with Booth's Inquiry—Intensive and Extensive Investigation—The Method of 'Sampling'—The Drawing of the 'Poverty Line'—The Measurement of Nutriment by 'Calories'—Recent Rise of the Standard of Comfort.

AN adequate sketch of the study of economic history in England during little less than half a century should not be too closely circumscribed, because the subject

is as large as it was new and as many as five writers have needed notice. Statistics, to which we now turn, will take somewhat less space. They are, it is true, of great and growing importance, evoking interest from the public as well as from economists. Nor are the quantity and quality of the work of statisticians in government offices and elsewhere retreating. Conclusive evidence to the contrary could be furnished from the *Journal* of the Statistical Society, of which one of the men we shall consider was for long an editor, while the other contributed the paper starting the project by which he acquired fame. For our purpose, limited to those who are dead, we shall not refer to more than these two—SIR ROBERT GIFFEN (1837–1910) and the RIGHT HONOURABLE CHARLES BOOTH (1840–1916)—who represent what was tried and achieved. Of the first, his well-informed successor¹ in the department of the Civil Service, where the greater portion of his life was passed, declared that he was the ‘most popular, if not the ablest,’ statistician of ‘modern times.’ Of the second, his principal assistant,² who was qualified to judge, describing him as taking an ‘unique position’ in the ‘social history’ of his day, explained how, by his private enterprise in weighing that problem of poverty in the midst of wealth which troubles the minds and hearts of so many, he had ‘probably done more than any other man’ to ‘stimulate research on cognate lines’ and to ‘provide the community with knowledge on which constructive policies can be based.’

In a paper, to which further reference will be made,³ Giffen claimed that any study of Political Economy in its applications was impossible without statistics. Numerical expression of their material has certainly been

¹ Sir A. E. Bateman of the Board of Trade, in an obituary in the *Statistical Journal* for 1910.

² Mr. E. Aves in an obituary in the *Economic Journal* for 1916.

³ Cf. below, p. 246.

found useful, where it was feasible, by analytical theorists and also by economic historians. Malthus, we saw,¹ appealed to such figures as were available in his day in the revisions of his theory of population; and Rogers in his *History* invoked throughout records of prices and of wages. A glance at the reasons for statistical aid in economics will be in place. As the subjects of his investigation are in the main human beings, animated by likes and dislikes, and not the unfeeling matter which students of the physical as contrasted with the moral, political, and mental sciences submit, pretty much as they will, to testing isolating experiment, the economist is driven back on the alternative way of inquiry—that of observation—though he can, and probably does, venture on hypothesis as preliminary or consequent. Occasions arise when this can be established or overthrown by some sort of experiment instituted, probably, by others.

The perversity, whether wilful or unconscious, with which governments, pressed by war, try, avoiding unpopular taxation and straightforward borrowing, to replenish emptying purses by the inexpensive manufacture of paper money, to which they contrive to give currency for a breathing space at least, had in the struggle of 1914-18, and, especially after, the evil effects that monetary theory was able to foretell² and monetary history had frequently laid bare before. Nevertheless the uncertainty begot by the plurality of causes that besets the historian as, probing beneath the surface of events, he

¹ Cf. above, Chapter II.

² Cf. below, p. 272. The English Government in the War, 1914-18, maintained that the 'Bradburys' (as the paper-money, practically inconvertible, was called, from the signature of the Treasury official) were only issued in response to the demand for sufficient supply of currency to settle bargains for which the passage of money was necessary. The main issue was after the Armistice, (cf. the present writer's *Money and its Relations to Prices* (new issue, 1929)).

finds, as a rule, many influences co-operating or conflicting to produce a composite result, also attends the analysis of the theorist, who, if he can avail himself of an experiment, can rarely escape from disturbing circumstance. Human beings do not undergo such tests willingly with so stringent conditions. The most satisfying of logical tools—the combined method of agreement and difference—can be seldom used; and it is not often that it can be set beyond doubt that the presence of a single cause is followed by the presence of a single effect and that the absence of the one, all else remaining the same, is succeeded by the absence of the other and by that alone. In the statistical piece mentioned Giffen¹ argued that a decisive test of the superiority of Free Trade to Protection, or the reverse, could only be secured by comparison between countries alike in all else and differing merely in their fiscal policy. That, he considered, was impossible. Barred thus from scientific experiment, the economist has recourse to observation. Statistics sometimes rally to his aid. If what is to be observed can be shaped into numerical statement, then inspection can be made more sure and systematic. Comparison grows easier and less doubtful; and the link of cause with effect has greater chance of being discovered. Probably better opportunity may offer for its fit adjustment and firm fastening. At any rate the material is more malleable if it still needs expert handling.

Larger prospects have opened with more ambitious schemes. If economic theory is, as we shall note² it has sometimes been defined, reasoned exposition of the sway of measurable motives, quantitative statement, where feasible, should obviously help. Marshall's vision of schedules of demand drawn from assembled figures of

¹ Giffen did not think that the contrast between Free-trading New South Wales and Protectionist Victoria satisfied the conditions, or that a single example, or even a few, would suffice.

² Cf. below, p. 293.

market dealings adding to the power, if not widening the range, of the analysing instruments, may be realized some time hence or sooner. He suggested once¹ that, while the work accomplished in qualitative analysis could pass a tolerable standard of finished perfection, and had perhaps achieved most of what was to be done, quantitative analysis remained. That task might be essayed, though its success would hinge on command of the necessary statistics. His successor² in the Cambridge Chair, gifted with a rare endowment of fine, intricate reasoning, has not failed, as occasion offered, in analysing elucidation to get supporting light from statistical sources.³ But we need not subscribe straightway to a challenging creed avowed elsewhere. According to that provocative faith statistics are to be our servant and our monitor in the realistic study of institutions, and of the behaviour of men with regard to them, viewed 'dynamically,' that is, as evolving processes and not as stationary conditions.⁴ This is held out for admiration as the new live substance that should sentence and expel the moribund fantasy of the 'atomistic,' pleasure-hunting 'economic man' striving to reach and keep a strained artificial pose of 'equilibrium.' These controversial expressions will meet us afterwards and will then receive more explanation and commentary.⁵ Here our concern is with the tie between economics and statistics. The language quoted is current, especial in the United States.⁶

¹ In an address to the Economic Society.

² Professor A. C. Pigou.

³ e.g. to show that a rise of wages need not mean an increase of population (on the analogy of an increase of supply following a rise of price).

⁴ Cf. below, p. 304.

⁵ Cf. below, pp. 296, etc.

⁶ Cf. Professor Homan in *Contemporary Economic Thought*, on the attitude of the American statistician, Professor Wesley Mitchell, influenced by his countryman, the economist Veblen, cf. below, p. 304.

The statistical armoury has been credited lately with an access of strength, and it is suggested that its capacity for handling economic theorizing is thereby enlarged. As we shall see ¹ subsequently in this chapter, the light, quick machine-gun of 'sampling' has, so to say, reinforced or displaced the slower, heavier artillery of 'aggregation.' Where, that is, massed collections of figures cannot be got, or are hard to manage, for the end in view it may be possible to choose samples sufficient for the purpose which will yield better results. Clearer vision may be gained thereby and more effective hitting guaranteed. They should, of course, be representative; but, passing approved tests for limiting error, their conformity to the normal gauge of that defect can give assurance of their trustworthiness for arriving at the mark at which they are aimed. Revealing, so to speak, the significant part of a story, the whole disclosure of which might require aggregated data, sample figures may not merely fill a gap but fit in, without overlapping or compression. An English statistician and economist, who to this double qualification has added the dual experience of high rank in the public service and the responsible administration of large business, observed ² instructively that this country, occupying no lower level in the quality of its 'aggregated' statistics and in the native calibre and technical dexterity of its statisticians, had yet come short of the attainment of the United States in apt 'sampling' for special objects, in the number of the craftsmen engaged continuously in the statistical workshops, and in the wealth of the resources at their disposal. Sir Josiah Stamp indicated various

¹ Cf. below, p. 253.

² In the Sidney Ball Lecture at Oxford on the *Statistical Verification of Social and Economic Theory* (in 1926). Professor Pigou dealt two years later with the question in his lecture on the *Functions of Economic Analysis*. Sir Josiah Stamp is Chairman of the London Midland and Scottish Railway, and a Director of the Bank of England.

possibilities opened by this ampler and richer activity. New 'aggregated' statistics might, he showed, be gathered thereby, 'sampling' could be scientifically conducted and exhaustively pursued, and existing figures were brought into fresh relation with one another, and comparisons as yet unknown or hitherto untried were found or made. In statistical language 'correlation' came within range. Yet even in the less copiously equipped England the effects of trade fluctuations upon profits, the comparative advantage as investment of bonds and ordinary stock, and the problem in public finance whether income tax was, or was not, part of the cost of production, had been studied on such lines. The consequence was that economic theorising promised development, in part perhaps reformed or enlarged, and in part confirmed or corroborated.

As we try to appraise the outcome of this novel departure we may, with Professor Wesley Mitchell on the other side of the Atlantic and with Professor Sargant Florence¹ on this side, admit that some old problems of economic theory will need recasting if they are to be amenable to statistical treatment. We may grant advantage on some ground to a straight course taken by the statistician to the measurement of the masses that are present in markets, moving supply and demand up and down, without stopping for long on the way with the analytical economist to bring under rule the behaviour of the individual. Difficulty has been felt, and it can be disputed whether it is yet removed, about transition² from the subjective feeling by individuals of the utility, or desirability, or the reverse, of a commodity, or service, to the objective prices paid and received by market dealers. We may, too, concede importance in quantitative work to institutions, because they 'standardize' behaviour, as they facilitate the gathering and use of statistics. Some economic theorists, or their more

¹ In his *Statistical Method in Economics*.

² Cf. above, p. 205.

impetuous or less discreet disciples, may, in their turn, be allowed to have gone astray at times through scant attention to the variability of human character and conduct, and statistics can interpose here, correcting this transgression, for they have been busy with measuring and comparing variations. And yet, whatever be thought or said of this criticism and aspiration as a whole, or of its parts, the function of statistics as serviceable help-mate to economics can be exhibited in a more modest and less negative guise suited to our present object. They may verify or corroborate the hypotheses of theory as they may confirm interpretations placed on recorded facts by inquirers into history. Both may be suggested by them. They do unquestionably help systematic observation. To that use they were felicitously put by the two writers whose work we shall consider.

GIFFEN, starting as a boy educated in a village school in Lanarkshire, was apprenticed to a Glasgow lawyer. Taking to journalism, he came to London in 1862. He was city editor of the *Daily News* from 1873 to 1876 and a founder of the *Statist*. On the staff of the *Economist* from 1868 to 1876, as assistant-editor, he was in close intimacy with Bagehot, to whom he owed great indebtedness. Sagacious counsel from this source in its good, and also perhaps sometimes in a less meritorious aspect, can be recognized in Giffen's subsequent statistical performance. 'Say,' Bagehot advised, 'at the beginning' of your article 'what you are going to prove; say in the middle that you are proving it; say at the end that you have proved it.' At any rate this experience imparted or strengthened a sense of 'good copy'; and Giffen was gifted with the wish and power to make figures intelligible to ordinary citizens as well as Cabinet Ministers. From 1876 until his retirement in 1897 he was chief of the statistical department of the Board of Trade. To his services there Joseph Chamberlain, when President, bore the high testimony of frank acknow-

ledgment that he was to a great extent the real author of the new bankruptcy law ; and a colleague supplied ¹ a living portrait of the man at his work. Extraordinarily swift and yet sure in getting to the ' heart ' of a complicated mass of figures, he could draft at ' lightning ' speed luminous memoranda on them. With an unique power of carrying statistics in his head he never lost his bearings, and he had a keen perception of what was or was not measurable. He would first surround the figures with an atmosphere of caution, and then scatter the mist by bold estimates. Without much, or any, knowledge generally, we are told,² of the more advanced mathematics associated afterwards with statistical technique, or mastery in particular of the refinements of the theory of probability, to which prominent statisticians have felt their reasoning bound,³ his natural genius and trained aptitude for discerning what was probable and his strong ' arithmetical ' sense led him without error through elaborate calculation. He could securely thread mazes, avoid snares, and escape pitfalls. The greatest boon he conferred on the public at large was his easy, plain exposure of common fallacies about percentages ⁴ and the like ; but he is also acknowledged to have done not a little to improve the form and substance of official publications.

His journalistic flair had the drawback that he did not enter readily into the standpoint of opponents, who thought him an inconsiderate controversialist. Yet it was his honesty that furnished their ammunition.⁵ In his *Case*

¹ Quoted in an obituary in the *Economic Journal* for 1910 (unsigned and probably written by the editor, Edgeworth).

² By a witness cited as ' one of the highest authorities on the application of the mathematical theory of error to practical statistics ' in the same obituary.

³ Cf. below, p. 275.

⁴ Cf. above, p. 160.

⁵ Cf. an obituary by the present writer in the *Economic Review* for 1910.

against *Bimetallism* (1892) he pictured it as absurd as well as impracticable; but in his *Production and Movement of Gold since 1848* (1873), and various papers, he had placed beyond question a vexing fall in prices, and exhibited transparently its origin in smaller output from the mines and larger demand for 'standard' money of that precious metal, to which, under the bimetallic scheme, silver was a supplement or alternative. And again, while as a stout Free Trader he was ready to ridicule Protectionist pretension, he pleaded convincingly the imperative necessity of bolstering the revenue by broadening its supports in indirect taxation of commodities, and he seemed not averse to something of the nature of a revival of the principle of the Navigation Laws in privileged coastal trade embracing the Empire. In general economics he did not apparently trouble to keep abreast of more recent developments, though he changed the name of his *Essays in Finance* (1880, 1886) to *Economic Enquiries and Studies* (1904) when they were republished with some additions and some omissions. They are fully representative of his best work, and not a few can appropriately be deemed 'classical' examples of the grip and display of testimony forthcoming from numerical data. Before a yawning gap was filled with a satisfactory manual¹ teachers could point their pupils to no better fount of statistical instruction. Giffen himself contemplated a 'popular handbook,' and after his death his *Statistics* (1913) were edited by Mr. Higgs and Mr. Yule. He inspects here 'various leading branches' with the triple aim of describing the 'objects' for which they are 'intended,' how they are 'obtained and compiled,' and the 'principal facts' established by them and the 'controversies and questions they are employed to discuss.' The chapters completed justify the pronouncement by his editor that in matters of

¹ e.g. *Elements of Statistics*, and an *Elementary Manual of Statistics*, by A. L. Bowley.

statistics to Giffen may reasonably be applied his own favourite compliment quoted in the preface. 'We are none of us wiser than Adam Smith,' he was wont to say, with gleeful emphasis. A frequent comment made by him is that the figures are 'contentious,' and by that it is meant that they are the more trustworthy because they have been criticized by two parties, the one having an interest in seeing that they are not excessive and the other being concerned to secure that they do not fall below the truth.

With passing reference to his *American Railways as Investments* (1872), which, we are informed,¹ did much to dispel the distrust of the investing public, and the *Growth of Capital* (1889), which set a pattern, followed with some variation since,² of building up an estimate of the total of the nation's capital from returns of income for income-tax, and the *Stock Exchange Securities* (1877), we may go, in conclusion, for a typical sample of his reasoning to the paper³ on the 'use of import and export statistics' contained in his *Economic Enquiries and Studies*. The piece, filling about a hundred pages, is clearly mapped and the argument is closely knit. It shows him as controversialist as well as statistician. At the end he reaches the general conclusion that the figures of even these statistics, which are 'so familiar to many' and have been so 'commonly and readily' appealed to, cannot be 'handled with facility,' and that 'sound diligent study'

¹ By Mr. Higgs in Palgrave's *Dictionary of Political Economy*.

² Sir B. Mallet used the death-duties for this purpose. Giffen compared his own computation with earlier English and foreign estimates. Commenting on the alternative or complement of the death-duties he considered that the income-tax returns were the better basis.

³ Comparison of this paper with Professor Bowley's article on 'Statistical Methods and the Fiscal Controversy' in the *Economic Journal* for 1903 will interest the statistical student, though that is more technical.

must come before 'good use.' It was with reference to them that he made the statement quoted previously in this history.¹ that 'no' statistical 'table almost can be used without qualification.'

After a short introduction he offers some 'general remarks' and raises as the 'first point' to be considered in 'all statistics' the 'degree of accuracy obtained in the original data.' Following in the track set by Stephen Bourne,² he shows that, as the data with regard to 'quantities and values,' and the 'countries of origin and destination,' come from the declarations of importers and of shippers, 'subject to a certain check by the customs officers,' there is a 'margin of error to be allowed for.' That may affect the quantities, but it is still more likely to vitiate the declarations of value; and the entrepôt or transit trade, it is hardly exaggerated to affirm, plays havoc with the statements of origin and destination. From 1854, moreover, until 1870 the values of imports were 'officially computed,' and that difference spoils comparison with years before and after when they were declared. Changes of system and possibilities of error attached in less or greater measure to the figures of foreign countries; and in arguing from values in different years allowance should be made for variations in prices and for the disturbance caused by great economic events like a war, and it must also be remembered that the figures do not mean the same thing to each country owing to the 'different character intrinsically of their foreign trade.' Giffen then passes to the 'balance of trade,' and, after noticing the curious but explicable³ fact that the imports

¹ Cf. above, p. 160.

² A well-known statistician.

³ The imports include the cost of carriage, while the exports do not. Imports are taken 'c.i.f.' (that is, including cost of the merchandise plus insurance and freight), while exports are 'f.o.b.' (that is, free on board).

of the world as a whole exceed the exports, he dwells in the case of the United Kingdom on the large role of the 'invisible exports' that did not appear in the export statistics, but for which return was due and swelled the figures of imports. A reckoning for shipping and investment must be brought into the full account.¹

Finally, he comes to what must be recognized as strong arguing so far as it goes and was designed to go. In his candid treatment of the real bearing of the import and export statistics on the controverted question of fiscal policy he laid stress on their negative rather than their positive use. They could be employed to rebut the case against free trade. The burden of proof, he urged, rested on the protectionist, who, he contended, sank beneath more manifestly than sustained or removed it. The United Kingdom was prospering rather than the reverse in 1882. It had done more than tolerably well under its fiscal policy. So much was evident from the statistics. Nor had protectionist countries fared markedly better if the figures were properly appraised. He did not pretend to be other than a 'convinced' free trader, but he was ready to allow without hesitation or reserve that the statistical argument was 'only useful with its necessary limitations.' 'If the first figures that come to hand are shied at opponents on the principle that any stick is good enough to beat a dog with,' then 'the public will simply be puzzled, and induced more than ever to believe that there is nothing at all in statistics.' This discreet conclusion was the characteristic utterance of a 'wise' statistician.

BOOTH was a business man on a big scale as well as a social reformer. Becoming a partner at the age of twenty-two, he was throughout his life shipowner, merchant, and manufacturer actively concerned in world-wide enterprise. That significant circumstance moulded his thought and

¹ Cf. above, p. 32.

action in economic matters. As Mr. Aves picturesquely commented,¹ 'though he looked into the blue, his feet were always on the ground.' In a memoir² of him we are told that he regarded the progress achieved in his own business as a 'sort of romance'; and, while he 'cared little for money as an instrument for luxury,'³ he was 'keenly sensitive of the value of money as the only final test of success in business.' Practical wisdom controlling bold innovation was the keynote of a pamphlet written towards the close of his life on *Industrial Unrest with Special Reference to Trade Union Policy* (1913). He mentioned there as the proper qualities of 'enterprise'—a term in itself, he declared, 'quite inadequate'—'forethought, guidance, the capacity to plan, the nerve to execute, the whole genius of mind and character.' He was anxious that working men should not be beguiled by 'will of the wisps.' Modern business, he held, required above all good leadership; and he thought that socialism was bound to come to grief from dismissal or neglect of the 'inexorable court of personal profit and loss.' Nevertheless, while he disclaimed the title of philanthropist, he was unquestionably a social reformer. Two achievements in actual fact stand to his credit. Besides the seventeen volumes of *Life and Labour of the People in London* (1889-1902), he advocated successfully old age pensions. The legislation that followed departed, it is true, from his proposals;⁴ and, as he said, the scheme he put forward was not his own invention. He wrote two books on *Pauperism and the Endowment of Old Age* (1892) and the *Aged Poor in England and Wales—Conditions* (1894); and he sat for a time on the Poor Law

¹ In the obituary mentioned above.

² Anonymous, but evidently written by his wife.

³ He had a replica made of Holman Hunt's 'Light of the World,' which he sent round the Empire for exhibition, and eventually gave to be hung in St. Paul's Cathedral. He was a supporter of Tariff Reform, it may be noted.

⁴ He wanted them to be universal as well as non-contributory.

Commission, submitting projects of reform.¹ It was a characteristic indication of his pose and method in the business of social advance that the full title-page of the first of these two books was 'Pauperism—a Picture—and the Endowment of Old Age—an Argument,' and that his pleading based itself on figures. Mr. G. N. Barnes, the trade union leader, and afterwards Cabinet Minister, who met Booth while he was pressing the plan of pensions, gave an interesting account² of his 'momentary' surprise at the 'quiet demeanour of a spare man with methodical habit of address.' But he soon found that Booth 'had that about him which inspired others to go out and do what he willed they should do.' 'His arguments,' he added, 'were irresistible, his disinterestedness transparent, and his simple desire to serve infectious.'

To his great book, it has been remarked,³ he brought the combination of a 'curiosity spurred to its intensity' and 'undying faith in the possibility of improvement.' For, dissatisfied by talks with socialists and others, he doubted the remedies proposed because the facts themselves were doubtful. Those he wished to find and present accurately ascertained and exactly measured. He wanted, as we saw before,⁴ to 'weigh' poverty. And, after some endeavour to get results by laborious personal examination of the Census figures, and the preliminary conception of investigating East London alone, his plan grew into the large shape that it took eventually; and he made up his mind that a number of workers must gradually be trained under a chief. 'I had,' he stated, 'one leading idea—that every social problem must be broken up to be solved or even to be adequately stated'; and the main purpose in view was not historical looking to the past, nor, save

¹ Cf. *Poor Law Reform* (1910).

² Quoted in an obituary in the *Statistical Journal* for 1917.

³ In the *Memoir*.

⁴ Cf. above, p. 237.

incidentally, inquiry into the future trend of things, with recommendations or suggestions of reform, but a description of facts as they are. He desired to portray faithfully the people who were dwelling in London, their occupations, opportunities, and disabilities, what administration, education, and religious organization were about, how work was being done and leisure used. At the close he himself used these words: 'I have,' he declared, 'made no attempt to teach.' 'My original design was solely to observe and chronicle the actual, leaving remedies to others.' And, if he had departed at times from that limited aim, and pointed to opening paths of amelioration, he wished now to revert to his first object.

Of his big undertaking he was in a very real sense the responsible director and the prime mover. Finding the necessary funds, he tested, we are told,¹ the material at first hand and in detail. He saw many of those from whom information was got, visited constantly the areas investigated, lived at one time for many months on a few pence a day, and lodged with working-class families. He himself wrote much of his book, and was delighted when a long stage was finished, a difficult section passed, or a perplexing tangle resolved. The work took seventeen years in all; and nothing pleased Booth more than the inclusion of part of his book in the curriculum for the Economics Tripos at Cambridge. It was arranged in three series. The first four volumes contained the classification of the people according to their relative poverty, together with studies of some special subjects such as the influx of population and the 'sweating system.'² For all London it was shown that 30·7 per cent were in 'poverty' and 69·3 per cent in 'comfort.' Booth divided the people into eight classes. The lowest two, of 'occasional labourers, loafers,

¹ By Mr. Aves.

² The term applied to domestic industry carried on for a remuneration amounting to no more than a bare pittance.

semi-criminals,' and of those with 'casual earnings,' were 'very poor.' The next two, with 'intermittent' and 'small regular' earnings were the 'poor.' The class above the line of poverty had 'regular standard earnings,' and above that again were 'higher class labour,' the 'lower' and the 'upper middle' class. A 'moderate' family which was 'poor' would have an income of from eighteen to twenty-one shillings a week. They were not 'in want.' They were 'neither ill-nourished nor ill-clad,' although they lacked 'comfort,' and life was a never-ending struggle. Nor were they necessarily unhappy, but sometimes much the reverse. For East London alone the percentages below and above the poverty line were 35·2 and 64·8, and for each class ranging upwards $1\frac{1}{4}$ (an estimate), $11\frac{1}{4}$, 8, $14\frac{1}{2}$, 42, $13\frac{1}{2}$, 4, 5. The second five volumes were devoted to detailed studies of every London trade, and the third seven to religious influences, while the final volume presented the conclusions. The basis of the trade inquiries was furnished by the Census, special returns, and detailed investigation. The poverty classification, in which the means and position of the heads of families, with the character of their employment, were ascertained, rested on information supplied by the School Board visitors, a source, it is interesting to note, which was suggested by Joseph Chamberlain.

This remarkable statistical venture, springing from private initiative, and sustained by a single purse, might look for a sort of parallel to some earlier achievement, like that of Eden, whose *State of the Poor*, dating a century before, has been described,¹ with reason, as ranking, by common consent, among the economic books called 'classics.' More than forty years after its start, and about a quarter of a century from its finish, a new survey of 'London Life and Labour' was mooted, and commenced,

¹ By Mr. A. G. L. Rogers, who prepared and published a summary of Eden's book. Cf. also Henry Mayhew on *London Labour and the London Poor* (1862).

with the pecuniary help of the Rockefeller foundation, City Companies, and others. Comparison of this with Booth's work will interest; and the preliminary opportunity was given in a paper read to the Statistical Society in 1929 by Sir Hubert Llewellyn Smith, being in charge of the fresh scheme. It aimed avowedly at close resemblance to its predecessor, and therefore followed, as far as might be, the same general lines. But differences were suggested by investigations in the interval by Mr. Seeböhm Rowntree of York¹ and by Professor Bowley, with the help of others, of five provincial towns.² They were Northampton, Warrington, Stanley, Reading, and Bolton.

Two points needed consideration. Booth's inquiry had been extensive but indirect. The social condition of every street as represented by families with children of school age had been explored through the medium of reports from the school board visitors. An alternative procedure was followed subsequently. It was that of intensive direct scrutiny of representative samples in keeping with the canon of statisticians that sampling was legitimate and trustworthy if care were taken to make it adequately representative.³ In the new survey the two processes were to supplement one another. The other question which asked attention was the drawing of the 'poverty line.' Since Booth's day the 'science' of measuring nutriment by 'calories' (or units of heat) had come into vogue and had developed. This calculation does not mean that all food goes to form heat, and account is taken of 'protein' which nourishes the framework of the body. But it does imply that food can be expressed conveniently in terms of heat. Such mechanism was not used by Booth.

¹ Cf. *Poverty: A Study of Town Life* (1901).

² Cf. *Livelihood and Poverty* (1915), and *Has Poverty Diminished?* (1925). A. R. Burnett Hurst co-operated in the first and Margaret H. Hogg in the second book.

³ Cf. above, p. 241.

He brought, indeed, a number of factors into account, of which the family income, though given the most weight and most carefully measured, was one; and he stated the 'poverty line' in monetary equivalent. After him the 'objective standard' of the minimum nutriment of an average family was set up, precisely fixed, and strictly calculated, and put into technical terminology. Nevertheless, the four shillings per adult per week taken by Booth, which, expressed in 'calories,' worked out at 3000 compared with Mr. Rowntree's 3500 for 1899, corresponded broadly with Professor Bowley's four shillings and sixpence in 1914 and seven shillings and sixpence in 1924. The last figure allowed for the change in the value of money and the consequent cost of living, and in the new survey 3300 'calories,' or seven shillings per adult per week, were taken as practically identical with Booth's 'poverty line.'

It was, however, informing and significant to learn that the standard of 'comfort' had so risen, and 'poverty' so decreased, that the new investigators, it seemed, had to face and fight an inclination on the part of the persons interviewed to place the line higher. As a demonstrated sequel of the War a process begun before continued, and the average wage of unskilled labour at least, it was established, outstripped the cost of living. Recent social legislation, too, such as insurance against sickness and unemployment, together with free education and meals for the young and pensions for the old, has become a considerable item to be entered in the reckoning on the credit side of real wages generally. Allowance should also, it is clear, be made for diminution in the hours of work where that has happened without lowering the payment made. The effect of all this became appreciable, and it has also been disturbing.¹ While a difficult situa-

¹ Cf. Professor H. Clay in the *Problem of Industrial Relations and the Post-War Unemployment Problem*.

tion after the Armistice was generally eased thereby, in some quarters since obstructing friction injurious to the common welfare had become established. The mobility of labour, the wage-policy of trade unions, and the adjustment of monetary earnings have been affected. Revival of accustomed ratios between remuneration in different employments had been delayed or prevented so far as the required movement had not occurred from the less to the more advantageous occupations and localities. Short-sighted opposition had resisted stubbornly reduction in the rates of wages patently and imperatively demanded by the circumstances. The cost of manufacture and sale in England, compared with competing countries, where such real additions to payments reckoned in money alone do not obtain to the same extent, or in some respects not at all, was, on the face of it, evidently increased, though considerations may be set on the other side in the better health or more cheerful spirit of the worker.

Without trenching further on such questions it should be added, in connexion with our present concern, that the first volume of the new survey endorsed the optimistic estimate of marked amelioration. Professor Bowley had indeed already answered in the affirmative the question put in the title of the later of his two studies. Poverty had diminished in the interval between them. As a contributing factor he emphasized the fall in the birth-rate, while he noted that the standard diet adopted for measuring the 'poverty line' was 'conventional' rather than 'absolute.' In actual fact it was 'considerably exceeded' in the 'very great majority of cases.' We may now fittingly end this account of Booth with the handsome but just tribute paid at the start of what aspired to be a copy, or second edition, of his achievement. The director of the fresh project, after access to the unpublished material of the old accomplished design, avowed frankly 'increased admiration' for the 'magnificent work' then done. 'If,'

he significantly added, 'we can see further and more clearly this is chiefly because we are standing on the shoulders of a giant.' 'From Charles Booth, perhaps more than any other individual, came the impulse to extend and improve the collection of official statistics which has made possible the great development in the apparatus of social inquiry.'¹

¹ The present writer reviewed in the *Economic Journal* many of the separate volumes of *Life and Labour* as they appeared, and he may be allowed to quote a sentence from that on the final volume. 'It will long remain as an exemplar of what an individual can achieve in statistical research for the enlightenment and advantage of his fellow-men' (cf. *Economic Journal* for 1903).

CHAPTER XI

ECONOMIC THEORY

HENRY SIDGWICK. (1838-1900)

JOSEPH SHIELD NICHOLSON. (1850-1927)

FRANCIS YSIDRO EDGEWORTH. (1845-1926)

ALFRED MARSHALL. (1842-1924)

Mutual Relations of Economic Theory and Economic History—Sidgwick's Characteristics—His Christian Qualities—His Practical Wisdom—His Open-mindedness and Fairness to both sides in Controversy—His *Principles of Political Economy*—An 'Excursion' of a Moral and Political Philosopher—Their Object as a Re-statement of Economic Theory—Some Illustrative Examples of his Treatment—His Criticism of General Sociology as an Alternative to Economic Theory—Nicholson's Characteristics—His varied Writing—His Novels—His Economic Output—His *Principles of Political Economy*—Their Aim in the Incorporation of the Results of New Advance with Re-statement of Old Theory—His Conservative Attitude—His Dislike of Economic 'Vagaries'—His Warning about Mistakes on Monetary Policy during the War of 1914-18—Edgeworth's Characteristics—His Balancing Poise—His Varied Culture—His Judgment on Matters of Economic Practice—His Statistical Writing—The Mathematical Treatment of Economic Theory—A 'Short-hand' but limited in its Application—The Complexity of Economic Phenomena—Marshall's Judgment on Mathematical Economics—Philip Henry Wicksteed and his Two Books—Marshall's Great Influence—His Characteristics—His Intellectual Ability and Integrity—His Moral Enthusiasm—The Work accomplished by his *Principles of Economics*—The Sense of Unity—The Central Position of the Theory of Value—Supply and Demand Mutually Interdependent like a Pair of Scissors cutting with both Blades—Distribution and Exchange—Extension of the Idea of Rent—Its Tenuous Character Intangible for Practice—The Importance of Time in Economic Theory—Some other Characteristic Ideas—Earlier

Objections to Economic Theory met by Marshall's Treatment—Some Questions recently raised—The Growth of Monopoly and Combinations—State Action—Considerations raised on the Opposite Side—Two Lines of Criticism of Economic Theory—Minute Examination of the Language of Theoretical Writers—Cannan's Criticisms—The Objections to (a) Utilitarianism or 'Hedonism' in the Background—(b) 'Atomism' or Individualism—(c) a 'Static' *versus* 'Dynamic' Attitude—Statement and Consideration of Substitutes proposed—Professor Spann's 'Universalism'—Veblen's Writing in America—The Mission of a Science to discern and disclose the Unseen

COMPARISON of the intellectual stature of the four exponents of economic theory we shall now consider to that of giants is not idle or excessive flattery. In their respective spheres of analytical work HENRY SIDGWICK (1838-1900), JOSEPH SHIELD NICHOLSON (1850-1927), FRANCIS YSIDRO EDGEWORTH (1845-1926), and ALFRED MARSHALL (1842-1924) were outstanding figures of great impressiveness. They lent strong support to the belief that the progress of economic theory had kept step with the advance of economic history. Nor should such a parallel movement cause surprise. It can be shown easily that the two studies have it in their power to render opportunely effective mutual service. Though history rarely 'repeats itself' exactly, and it may possibly mislead the ignorant or incautious to liken¹ past to present politics, yet recorded experience duly weighed and discreetly used has shed light and given counsel in the solution of immediate problems. Such mission is no less appropriate a rôle in economics than is reiterated insistence by the historically minded on facts as the desired base and constant test of theories. In return, not merely may knowledge of systematized economic reasoning to-day contribute to the understanding of past thought and the interpretation of past action, but methodical training in analysis is no bad preparatory discipline for encounter-

¹ e.g. by Seeley.

ing successfully the difficulty shared by historians with theorists of disentangling causes and effects. We must, no doubt, beware of mistaken proneness to read with haste into the past what is only true of the present ; but, if it do nothing else, economic theory may help in pointing to the facts which call for special notice. It may indicate how they can most conveniently be viewed, and may legitimately be explained.¹ It is even conceivable,² though it may not be very probable, that the refined precision of mathematical statement of economic theory, with meticulous care bestowed to see that nothing be intruded by the way, without warrant and attention, into the strict course of logical argument, may develop, as it may make more taut and firm, the reasoning muscles both of narrators and expositors. On such niceties of refined technique Edgeworth concentrated high ability, though his commanding position on the lofty altitude of a difficult peak made him inaccessible³ to any large body of climbers. Nicholson, by contrast, was no less plainly intelligible to ordinary men than he was considered justly by professional students a convincing and informed reasoner. His easy mastery of his subject would not be impeached. Sidgwick's economics could be represented as an 'excursion' by a moral and political philosopher, but it brought advantage to the region into which he went, and in that from which he came he occupied, by general confession, foremost rank. To the supremacy of Marshall's sway in England ungrudging tribute, we shall see,⁴ has been paid by detached foreign observers.

SIDGWICK'S family connexions were noteworthy. He

¹ Cf. an article on a 'Plea for Theory in Economic History,' by Professor Heckacher, in the *Economic History Supplement* of the *Economic Journal* for 1929.

² Cf. the present writer's *Position and Prospects of the Study of Economic History*.

³ Cf. below, p. 277.

⁴ Cf. below, p. 281.

married a sister of Arthur (afterwards Lord) Balfour, who was a Cambridge pupil. His mother had been a Benson, and his sister became the wife of her cousin, the future Archbishop of Canterbury. Sidgwick was Benson's pupil at Rugby, and was much influenced by him then. In an interesting account¹ of his uncle Arthur Christopher Benson states that he sent a computation of the intellectual distinctions of the Sidgwick and Benson family to GALTON,² who replied that it was the 'most remarkable case of kindred aptitude' that had come to his notice. There were, it seems, something like twelve members of the combined group who obtained first classes at the universities, and twenty had published books. Sidgwick himself was Senior Classic and a Wrangler at Cambridge, where he spent his life. He gave up his fellowship at Trinity College in 1869 from scruples about not being a 'bona-fide member of the Church of England.' This act was characteristic. James (afterwards Lord) Bryce in an appreciation³ says that he was thought 'over scrupulous,' but that George Eliot's comment was that Sidgwick's friends looked for a higher standard of morality from him than from others. His conduct was, it seems, instrumental in causing, by 1871, the abolition of tests at the universities, and he himself wrote⁴ that 'after all it' was 'odd to be finding subtle reasons for an act of mere honesty.' Subsequently, in 1883, he was elected to the Professorship of Moral Philosophy, which he held until shortly before his death. Despite his abandonment of dogmatic faith, his nephew picked him out as the 'one man' he had known 'who, if he had been a Christian,

¹ Cf. *Leaves of the Tree*.

² Galton was interested in eugenics.

³ Cf. *Studies in Contemporary Biography*.

⁴ Cf. *Henry Sidgwick: A Memoir*, by A. S. and E. M. S. (his brother and wife). It is mainly autobiographical and produces a rather gloomy impression. A. C. Benson thinks that this is wrong, and that autobiograpy misrepresents intellectual men.

would have been selected as almost uniformly exhibiting perhaps the most typical Christian qualities'; and this warm testimony was confirmed by the emphatic exclamation that he tells¹ us sprang from the lips of a well-known clergyman, J. A. Reeve, of Truro, and afterwards of Lambeth. 'The man,' he said, 'is a perfect saint, one of the best of Christians living, and he doesn't even suspect it.' Similarly, Bishop Gore, after visiting Sidgwick when he was showing a 'most moving courage in the face of death,' having been suddenly confronted but a little while before with the diagnosis of a disease needing imperatively dangerous operation, averred² that he came away with one thought summing up his impression: 'Blessed are the pure in heart for they shall see God.'

This was an attractive side of his rich endowment, and we cannot wonder at Bryce's recognition that 'few men' of his day had 'influenced so wide and so devoted a circle of friends.' There were also other sides. He was wise in counsel. Dr. J. N. Keynes paid³ the suggestive tribute that 'pre-eminently realizing' Aristotle's conception of the sage, or prudent man,⁴ Sidgwick was the 'impersonation of reason' as well as the 'most intellectually gifted' individual he had known. This trait calls for some development. In the Memoir of him we are told that his vivid perception of the other side by no means implied lack of decision. In university business he took so great a share as to give currency to the report that nobody had been more conspicuously influential. At first some anxiety was felt lest he should remain 'sitting on the fence' between alternatives, but an expert⁵ in

¹ Cf. *The Trefoil*.

² In a speech at the memorial meeting.

³ In an obituary in the *Economic Journal* for 1900.

⁴ 'Ο Φρόνιμος.

⁵ Dr. Browne (Bishop of Bristol) in a speech at the memorial meeting.

academic affairs pithily condensed the situation thus. It came to be acknowledged that when Sidgwick had spoken it was certain that no main consideration would be lost sight of. He combined, in fact, firmness in action with an open mind in deliberation. By so good a judge as Leslie Stephen he was pronounced ¹ the 'best of talkers,' and this compliment was explained by tracing his vivacity to the continual 'flash' on his mind of some fresh light. His stammer was an aid rather than an obstacle to the effective flow of his conversation.² Balfour affirmed ³ that of all the men he had known Sidgwick was the 'readiest to consider every controversy and every controversialist on their merits.' He 'never argued for victory' and he 'never evaded an issue.' Maitland, another pupil, spoke ⁴ of him as a 'supreme' teacher who disliked mere reproduction of his own opinions.

His lectures did not draw more than a select small audience; and it was characteristic of him that when a friend,⁵ in somewhat tart ire, levelled this reproach, he set himself conscientiously to explore the reasons and judicially put on trial any personal defect, if such there were. He was indeed responsible for a 'lecture against lecturing,'⁶ regarding the written book as the more desirable substitute. In his writing he was most scrupulously fair; and to some readers, Bryce allows, he might appear

¹ In *Mind* for 1901.

² A. C. Benson records one of the best conversations he ever listened to in which Sidgwick took the most impressive share. The present writer thought Sidgwick's talk the best he has heard.

³ Cf. the Memoir.

⁴ Wilfrid Ward (*Ten Personal Studies*), quoting, says that Sidgwick was 'prejudiced against his own prejudices.'

⁵ Marshall.

⁶ An article in the *New Review*. He had a controversy with Max Müller on the subject. The latter, an admirable lecturer, by the irony of fate was under an obligation at Oxford not to lecture but to write.

to see exceptions to every rule and to discriminate anxiously between what were but minute distinctions.¹ And yet with 'singular subtlety, fertility, and ingenuity' his arguing had always 'weight and substance,' and the genuine student could not fail to be much impressed by his transparent candour and his loyal love of truth. His intense intellectual curiosity and his absolute impartiality in appraising evidence prompted and guided him in his continuous concern with psychical research, while his practical sagacity and moral fervour were shown prominently in his prudent and zealous promotion of women's education. His wife became the head of Newnham College, where he went to live. Besides his book on economics he wrote two large treatises on the *Methods of Ethics* (1874) and the *Elements of Politics* (1891). The *Development of European Polity* (1903) and *Miscellaneous Essays and Addresses* (1904) were published after his death, together with some courses of lectures; and *Outlines of the History of Ethics* (1886) and *Practical Ethics* (1898) had come before from his pen.

Of the *Principles of Political Economy* (1883) he remarked that there were 'some good things' in it, but he regarded it, 'on the whole,' as a 'failure.' The economic student will be more inclined to agree with Dr. Keynes, no mean or ill-informed a judge,² who wrote that it was 'one of the few works of first-rate importance' that had appeared in England since Mill's death. In a very short obituary in the *Statistical Journal* for 1900 Sidgwick was described correctly as making it his 'endeavour, to an extent surpassing that of any other economist of the day, to increase knowledge without causing a breach with old

¹ The present writer remembers Sidgwick examining the report of a committee very carefully, and at the end making the single suggestion of altering 'disposed' into 'inclined.'

² Dr. Keynes was himself the author of an able and erudite book on the *Scope and Method of Political Economy* (1891).

traditions.' In this attitude, adopted and maintained throughout in his book, he was anticipating Marshall;¹ and with that economist, as a detailed comparison of the two would show, he agreed on not a few important points, and had read some of his friend's work circulated privately, partly at Sidgwick's instigation, to secure priority. In his own introduction, commenting on the circumstance that Political Economy, after rising 'during the last thirty years' from the 'state of controversy on fundamental principles and method into that of an apparently established science,' had 'again relapsed' into that state, Sidgwick announces as his 'special aim' the elimination of 'needless polemics' by a 'guarded statement of traditional doctrines' with 'due recognition of the advances made' in economic theory by 'recent writers.' This object was amply fulfilled. Step by step he travels with punctilious scrutiny over the ground trod by his predecessors, adding here or subtracting there, increasing, diminishing, or shifting emphasis, removing ambiguity and clearing doubt by more precise and minute re-statement. Here we must be content to notice, as illustrative, a few of the deft and opportune improvements, whether by way of development or of correction, that were due to him.

Nothing could be more fruitful than his hint that, while a definition, meeting the requirements both of common parlance and of scientific nicety, might be hard, if not impossible, to achieve with such elusive terms as capital,² or even money,³ yet diligent and protracted search for it could hardly fail to enlighten. Fresh varieties of view would open, while older aspects again inspected could be

¹ Cf. below, p. 287.

² He distinguishes between the point of view of the individual and that of the community; and between consumers' and producers' capital.

³ He considers the language of the 'money market,' including 'bankers' liabilities,' on the whole to be 'most convenient.'

more fully disclosed than hitherto. We have noticed¹ earlier in this history that his verdict on the vexing controversy about method was as pertinent as it was sane. In the production of wealth procedure by induction, building up from observed and ordered fact, was the more appropriate and had been usually pursued. In distribution, which, he held, bore affinities with exchange, and could conveniently be treated together, deduction, leading down from some general principle, accepted as axiomatic, or at any rate as fit, had been in practice found as necessary as it was obviously useful. On the theory of rent, we also saw before,² Sidgwick illuminated Ricardo by separating the three parts of his connected trinity—how rent arose, by what forces it was being determined, and what was likely to be its future movement. In international trade he emphasized as crucially important the division in the bargaining of the cost of carriage. To monopoly and combination, and to custom, he devoted special chapters.

We will end with reference to his third book where, after dealing with production, and distribution and exchange, in the first and second, he discussed the 'art' as distinguished from the science of Political Economy. Amongst other topics he treats here of socialism and of public finance. In 'applied economics,' to use an alternative expression, he was perhaps especially instructive. He set a pattern of balanced judgment and fine discernment in his handling of the possibilities and limitations of governmental action. He exhibits some cogent reasons for removing in some instances the misleading or deprecating label of state 'interference'; but, while he admitted, for example, that in theory a case could be established for protection, were governments prudent and incorrupt, he yet thought that the burden of proof lay against its adoption in fiscal practice. So, too, he allowed that a

¹ Cf. above, p. 124.

² Cf. above, p. 76.

'bimetallic currency'¹ might be 'maintained under certain conditions' and had 'certain advantages'; but in 1896, Bryce says,² Sidgwick considered 'political and other practical' objections 'virtually insuperable.' INGRAM, who was wont to judge³ economists by Comte's denial of the worth, or possibility, of a separate science of Political Economy, selected this Book III for special praise. But in his presidential address to the Economic Science and Statistics section of the British Association at Aberdeen in 1885 on the 'scope and method of economic science'⁴ Sidgwick carried the battle into the enemy's camp. He asked whether the new science of sociology in which economists were, so it was proposed, to be henceforth merged, working only in a subordinate division, could show itself possessed of the prerogatives of 'pre-*vision*' and 'continuity' by which Comte, trying Political Economy, had pronounced sentence upon it as a failure and imposture. The answer, Sidgwick held, was in the negative. His retort, we shall see later,⁵ may still possess some pertinence.

NICHOLSON occupied the Edinburgh Chair of Political Economy (and Mercantile Law)⁶ for nearly half a century (from 1880 to 1925), and for part of that time he was the only professor of economics in Scotland. Paying assiduous attention to the claims and needs of his students during the session, he filled the continuous leisure of other months, partly, on holiday, with the angling of which he was a devotee, but mainly with the busy production of many books, both valuable and readable, on a wide variety of economic topics. He was in very truth an 'all-round

¹ It has since been recognized that a 'double standard' need not mean a bimetallic *currency*. Cf. below, p. 276, note 2.

² Cf. *op. cit.*

³ In his *History of Political Economy*.

⁴ Reprinted in *Miscellaneous Essays and Addresses*.

⁵ Cf. below, p. 304.

⁶ The subject was severed when a lecturer was appointed.

master' of his subject.¹ But it has been persuasively suggested² that the 'clear and limpid' style of his serious scientific writing might be attributed with good reason to natural aptitude and trained skill shown also in the composition of imaginative romances, and that his general success as an economist could be largely traced to the breadth and number of his other interests outside. An attraction to Italian literature, illustrated by his *Tales from Ariosto* (1913) and his *Life and Genius of Ariosto* (1914), and an ardent love of nature, proved by vacations spent in the Highlands, with a passion for the open sea, whether to fish or to row or to sail thereon, and delight in travel were accompanied by interest in art and music. He was, too, an expert solver of chess problems. He was educated in succession at London and Edinburgh, at Cambridge, where he was second in the First Class of the Moral Sciences Tripos and obtained twice the Cobden Prize, and at Heidelberg. One of his novels, *Thoth* (1888), was described by a fellow-traveller, the famous doctor, Morell Mackenzie, as a 'prose poem.' It was translated into German and circulated in the United States. The *Athenæum* wrote that it had 'imagination, delicacy, and finish,' and the *Saturday Review* that it attained the 'glory of romance,' which was to 'keep up the reader's curiosity from page to page.' It was compared to Rider Haggard's celebrated *She*; although the author tells us that it had been written more than twelve years before it was published.³ His other two fictions were a *Dreamer of Dreams* (1889) and *Toxar* (1890).

His economic output was remarkable both in quantity and quality. Being the first economist chosen to deliver an evening discourse to the general body of the British Association, he took for his subject at the Oxford meeting

¹ Cf. Mr. Higgs in an obituary in the *Statistical Journal* for 1927.

² By Professor W. R. Scott in an obituary for the British Academy.

³ *She* appeared in 1887.

Historical Progress and Ideal Socialism (1894). The lively sentence therein, full of wit and wisdom, which said that 'you cannot wear on the same head the red cap of anarchy and the broad brim of the Quaker, though you may indeed change your headgear according to your company,' was characteristic of Nicholson's attractive and arresting style. Aristotle was here called by him the 'father of economics,' and he argued that the 'false scientific method' at the 'root' of socialism was the 'neglect of the actual industrial development of mankind.' 'In history socialists,' he declared, 'only sought for illustration of preconceived opinions and ideas.' With this lecture may be placed his early Cobden prize essay on the *Effects of Machinery on Wages* (1878), and his last book on the *Revival of Marxism* (1920), where he pins to Marx the label of the 'mad Mullah' of socialism, and, like many other economists and some socialists, finds him 'hopeless and depressing.' *Strikes and Social Problems* (1896), which at his death was justly described¹ as being 'as fresh as if it were written thirty years later,' falls into the same class. To the monetary and agricultural writing mentioned before² should be added the *Silver Question* (1888) and *Bankers' Money* (1902), together with two books, to which further reference will be given,³ and *Tenant's Gain not Landlord's Loss* (1883). In addition to the *Project of Empire*, to which allusion was made, Nicholson, like Rogers, edited the *Wealth of Nations* (1884). He felt and showed a profound reverence for the famous economist generally known as the 'father of Political Economy.' Professor Scott appropriately calls⁴ the one the 'lineal successor' of the other, and Mr. Higgs writes⁵ that 'few men knew Adam Smith so well or admired him

¹ By Mr. Higgs in the obituary quoted above.

² Cf. above, p. 201.

³ Cf. below, p. 272.

⁴ In an obituary in the *Economic Journal* for 1927.

⁵ In the obituary quoted.

so much.' In the presentation portrait of Nicholson Tassie's medallion of the immortal Scot is an inset. Comparing Mill's treatise with the *Wealth of Nations* he said that the former had 'none of the creative power which gives a lasting freshness to the latter.'¹

The three volumes of the *Principles of Political Economy* (1893, 1897, and 1901) took a place deservedly high beside those of Sidgwick and Marshall. The three treatises were outstanding products of economic theory in this period. Marshall frankly recognized, we are told,² that Nicholson had won, as he generously said, 'everlasting fame' in a 'large part' of the subject; and, as his own book is incomplete, Professor Scott called Nicholson's work the 'representative British treatise of his generation, aiming at covering the whole field' in the comprehensive 'systematic manner of the economists of the nineteenth century.' He describes the author, in no excessive praise, as a 'pellucid expositor' and a 'master of condensation.' One review³ said of it that, 'while not pretending to the originality and analytical criticism of Sidgwick,' it 'kept closer to the facts and was more fearless and independent,' and that it 'avoided Marshall's fault' in 'using a mass of technical phraseology,' and was 'more readable than either.' Nicholson himself wrote⁴ that his aim was to survey economics in the light of the 'advance' achieved since Mill, whom he followed generally in arrangement of material, with particular exceptions in detail.⁵ That advance was caused, he said, by the application to economic

¹ It is interesting to observe that Marshall, while appreciating highly Mill, yet denied his book the title of a 'classic,' because it was not, as he thought, 'architectonic.' Cf. below, p. 282, note 3.

² By Professor Scott.

³ In the *Scotsman*.

⁴ Cf. the preface to vol. iii.

⁵ e.g. in international trade and value he brings in at the outset the monetary expression of the goods, while Mill introduced money later.

study of the historical and comparative methods on the one side and by mathematical analysis on the other.

Of set purpose, following here Adam Smith, whom he regarded as a standard for appreciative copy in a higher degree than Mill, he incorporates a large amount of history, finding room by limiting, or omitting, topics that had lost relevance or forfeited consideration. But in talk with Mr. Higgs, we are told,¹ Nicholson said frankly that he would no more think of using mathematics in economic exposition than he would employ it in daily conversation with plain folk. In not a few respects, indeed, he showed himself a conservative. He did not employ the newer term 'economics' in his title; he questioned the advisability of what Marshall called first 'consumers' rent';² and he followed Mill in placing exchange after distribution instead of the reverse order that approved itself to Sidgwick and Marshall. This plan may have been mistaken;³ but here, as elsewhere, he left no doubt of his opinion and of the cogent reasons he could plead. He did not conceal his dislike and mistrust of other recent fashions, which he called reproachfully 'vagaries.' They were described forcibly by Foxwell⁴ as the open, if not boasting, display of technical apparatus that, in his considered view, would be better kept in the background, after the same wise rule, in his suggestive image, as that by which a painter does not parade the means of getting his perspective right. Certainly their flaunting, we must recognize, is likely, or sure, to frighten the public, which indeed

¹ In the obituary quoted.

² Cf. below, p. 290.

³ Cf. a review by the present writer in the *Economic Journal* for 1893.

⁴ In a review in the *Economic Journal* for 1913 of Mr. J. M. Keynes' able book on *Indian Currency and Finance*, which, he says, would have pleased Nicholson, referring to that economist's article in the *Quarterly Review* on 'Vagaries of Recent Political Economy.'

is sometimes expressly forbidden¹ to trespass on ground that must, we can conceive, appear forbidding, apart from any such veto. This course, we frankly own, seems to us regrettable departure from earlier tradition; and Nicholson, on the contrary, was a firm believer, as he was an unmistakable exponent, of the wholesome maxim that 'what is clearly thought can be clearly expressed.' He considered it, indeed, part of his business and his duty as professor to write articles in a popular vein in the *Scotsman* and elsewhere, and to address such audiences as chambers of commerce on whatever economic questions came to the front, or were mooted, in public discussion. We shall end our estimate of him with allusion to opportune playing of this role. But it remains to be noted that his book on the *Elements of Political Economy* (1903) was not simply an abstract of the *Principles*, but rather a work independently conceived and written. Good as it manifestly is, we could have preferred abridgement, designed expressly, of the larger treatise, which might have proved even more acceptable an introduction to the study of the subject. For it is impossible to come in close contact with Nicholson's full statement of economic theory without being reminded continually of the rich store of varied knowledge, the sure sagacity of discriminating judgment, and the fine, rare quality of direct, clear exposition that enabled him to reset old jewellery, with the appropriate cutting, polishing, and embellishment. A needed revise, smoothing the antithesis of Mill's sharp distinction between fundamental conditions imposed by the nature of men and things on the production of wealth and modifiable arrangements for its distribution, resting with the altering optional discretion of human beings, might be cited as one illustrative example.

¹ Professor Robbins, of London University, in an inaugural lecture appeared to deprecate continuing the attempt to put economic reasoning into popular language (cf. *Economica* for 1930 'On the present position of Economic Science').

Another would be found in the happy invention of canons of public expenditure analogous to the traditional four maxims of taxation. A third is furnished by the statement that the 'importance of the real teaching of Malthus is in danger of being neglected.' But we proceed now to the closing chapter of his career which was connected with the critical handling of monetary policy. With reference to that this account of his work will conclude.

In his earlier 'treatise on money,' originally written for the Co-operative Wholesale Society as an essay 'suitable for the industrial classes,' and his *Bankers' Money*, which was a 'supplement,' Nicholson had carefully surveyed and restated lucidly the theory of money; and he took a leading part in the practical movement for bimetallism, in which Giffen had been a doughty combatant on the opposite side.¹ During the War of 1914-18 he came forward again as expert monitor. The *Scotsman* was the vehicle for much of the grave warning that he gave; but in book form it appeared later in *War Finance* (1918) and *Inflation* (1919). Summed up in two sentences, this timely but vain admonition was thus expressed. 'The only economy practised,' he complained, was an 'economy of truth and plain speaking.' 'Every one of any importance in the country,' he lamented, had 'forgotten all about the principles of currency.' He realized very early what the financial strain of the War would be, and deprecated from the outset what he feared would happen. That was a desperate but calamitous attempt to shirk taxation by the issue of inconvertible paper money. He was at one time in favour of a forced loan, but not raised backhandedly by such means. Yet that was what monetary history, together with monetary theory—a combination he liked and exemplified—had disclosed as the consequence of such an issue. The rise of prices, which must almost inevitably be the sequel, viewed

¹ Cf. above, p. 245.

from another aspect, was perhaps the very worst form of indirect taxation.

The evil was not removed by the plea that the Government intended no such effect, and were not themselves the prime movers setting the cause in operation. For it is conceivable¹ that the open use of the printing press for getting funds, made brazenly in other countries, such as, notably, Germany, might prove less dangerous than unconscious action, in response, as alleged here, to the imperative demand for currency to enable trade to go on. Nor was it proved, or probable, that British Ministers should not thus seek to meet the exhausting drain on an emptying purse, however circular or tortuous or hidden from public view the actual process might be rendered or become. The ugly fact was afterwards admitted. Nicholson² saw the peril at its first approach, and he was as frank as he was tireless in giving vent to his shocked alarm. 'The old name for the old malady,' he wrote, 'is inflation,' of which the 'beginnings may be pleasant as of other diseases,' but the 'end, if not checked in time,' is 'industrial anarchy.' 'The root evil of our financial policy' during the War, he declared, has been 'extravagance, and the extravagance has been made possible by inflation.' The sour aftermath appeared indeed and grew up apace.

EDGEWORTH, 'illustrating,' it has been said,³ his own 'favourite law of averages,' was the last male descendant almost of a very prolific Irish family with an estate at Edgeworthstown. The Abbé Edgeworth,⁴ who attended the son of St. Louis on the scaffold, belonging to it, as did his cousin, the Oxford professor's grandfather, the auto-

¹ Cf. the present writer's *Money and its Relations to Prices*.

² Edwin Cannan also pointed out this danger. Cf. *An Economist's Protest*.

³ In an obituary by Mr. J. M. Keynes in the *Economic Journal* for 1926.

⁴ Cf. *The Black Book of Edgeworthstown and other Edgeworth Memories*, by H. J. and H. E. Butler.

cratic and eccentric Richard Lovell Edgeworth,¹ who married four wives and had twenty-two children. That uxorious person's daughter and obedient pupil, Maria Edgeworth, the novelist, was the economist's aunt. Edgeworth himself was the fifth son of a sixth son. His ' quaint, old-fashioned courtesy ' ² came partly, it is likely, from his Spanish mother; and he was a good linguist. He was educated at Trinity College, Dublin, and at Oxford, where in 1891 he succeeded Thorold Rogers in the Professorship of Political Economy, which he held until shortly before his death at a ripe old age. A greater contrast could hardly be imagined than that between the broad humour and robust dogmatic positiveness of the one and the rapier wit and deferential tentativeness, halting between two opinions, of the other.³ Edgeworth poised himself so evenly in the practical affairs of life as in fine pondering on economic theory that he generally descended from the fence only to take shelter behind the screen of some one else, or, it might often be, of more than one at the same time. He was, however, a ' delightful companion, full of out-of-the-way bits of learning, not merely an economist, but widely read in the classics and in many branches of modern literature, with an astonishingly good verbal memory and a whimsical humour.' ⁴ Living mostly in clubs and reading in the main in libraries, he was content with a ' prophet's chamber ' at Hampstead, and his barely furnished rooms at All Souls College, Oxford, contained few books, in the pages of which were abundant slips of paper to facilitate speedy reference to the views of others. As a lecturer he soon passed beyond the ken of ordinary students, but in his informal class he would deftly stimulate the

¹ Cf. *Maria Edgeworth*, by the Hon. Emily Lawless.

² Cf. *Memories of Sixty Years*, by Lord Sanderson.

³ Cf. an obituary by the present writer, in the *Statistical Journal* for 1926.

⁴ Cf. Lord Sanderson in *op. cit.*

abler and more advanced to discussion among themselves, rarely giving a definite opinion of his own. For many years, we noticed before,¹ he edited the *Economic Journal* with liberal comprehensiveness. His physical energy equalled his mental agility and lasted unimpaired until the end. He was an early riser, a bather and swimmer in mid-winter, and a fast and long walker.²

A pamphlet or booklet, bound in paper, on *New and Old Methods of Ethics* (1877), which was a discussion of the quantitative problems that arise in examining utilitarianism, and was partly comment on Sidgwick's *Methods of Ethics*, and, ten years later, a monograph, entitled *Metretike* or the *Method of Measuring Probability and Utility*, make up, with a small volume on *Mathematical Psychics—an Essay on the Application of Mathematics to the Moral Sciences* (1881), his contribution to economic study in book form; and the titles indicate sufficiently the nature of the contents. He never reached the proportions of a treatise. But various *Papers relating to Political Economy* (1925) were collected in three volumes published by the Economic Society, obtaining thereby no small circulation, and his contributions to statistical theory, where he moved in no less rarefied an air, were summarized after his death by Professor Bowley.³

The approach was made by the unfrequented path of the philosophy of probability and not by that generally trod of objective statistics. Edgeworth confessed⁴ that he was more interested in methods than in results; and here he was mainly concerned with the law of error, its

¹ Cf. above, p. 201.

² Dr. J. Bonar (in the *Economic Journal* for 1926) supplies a further account. 'In private talks,' he writes, 'Edgeworth dived where he chose, and one could not always tell where he would come up again.'

³ Cf. *F. Y. Edgeworth's Contributions to Mathematical Statistics* (1928).

⁴ Cf. an obituary in the *Times* of 1926.

proof and its application, with the best mean of averages, and with 'correlation' (that is, where the fluctuations of two quantities move sympathetically).

Professor Bowley states that in more than seventy pieces produced in forty years the mathematical style varied from 'complete lucidity' to 'very involved' work, and that the use of metaphors and literary allusions, of which Edgeworth was fond, was a 'stumbling-block' to the pure mathematician. But there were 'original' and 'important' contributions, the loss of which, though they were little known, would be a disaster. By those initiated into the mysteries at which he worshipped Edgeworth was estimated highly; and some of his economic writing—that, for example, on fiscal theory, where he claimed minimum rather than equal sacrifice as the best criterion of good taxation—won wide repute. In economic practice, when he ceased to waver, he arrived at such conclusions as to look with welcoming composure on differences in minus values as a suitable base for taxing increments of landed wealth¹—an issue that could but bewilder or disgust matter-of-fact men of the world—and in monetary reform he, with Marshall, preferred the unfamiliar 'symmetallism'² to the known and tried bimetallism. His conspectus of 'index numbers' as gauges for comparing movements up and down of general prices and measuring the altering worth or purchasing power of money was masterly and was pronounced by good authority³ to be 'classical.' The writer of this history cannot pretend to be a mathematician; and he thinks it unlikely that among his readers many mathematicians could be counted. An attempt to

¹ The House of Lords gave a judgment for such application of the increment duty in the land-value taxes of the Budget of 1909-10.

² Under this proposal bars consisting of gold and silver welded in certain proportions were to be used as reserve backing the issue of notes.

³ Professor Pigou in a notice of Edgeworth's 'Collected Papers' in the *Economic Journal* for 1925.

sample Edgeworth's work would not be in place, though some remarks on the mathematical treatment of economic theory may be opportune. He was certainly the chief English representative of it in this period, but Professor Pigou, who might be regarded as to some extent a companion in his intellectual mountaineering, observed¹ that 'very few economists' were 'equipped to take an equal part with' Edgeworth 'in his lofty climbs,' and 'not many' were 'even qualified to follow on the rope behind him.' 'Standing by the telescope on the terrace of our hotel,' he added, 'we can watch and admire and congratulate.'

In his *Mathematical Psychics*, considered some of his best as of his most typical composition, Edgeworth advanced the plea, then original, that mathematical reasoning was possible and apt without numerical data. Giving examples of data which, though not numerical, were nevertheless 'quantitative,' he pointed to increases and decreases, and a maximum or minimum, and showed that a quantity might be 'positive' or 'negative,' and one might be greater or less than another. Similarly, Professor Bowley demonstrates² how, while we may be unable to measure and apply the 'arithmetical' processes of addition and multiplication and their converse, we may yet be able to detect 'equality and inequality, relationship, continuity, variation, and other properties which lead to algebraic expressions.' Edgeworth contended in his book, as also in an address³ as president to the economic science and statistics section of the British Association, that, where questions of quantity were raised, as in not a little economic discussion, though not as in statistics numerically expressed, the mathematician could gain with greater rapidity and more sureness results that would be got, at cost only of

¹ In the notice quoted.

² In his *Mathematical Groundwork of Economics*.

³ Reprinted in *Papers relating to Political Economy*.

toil and time, by the ordinary logic of plain common sense. This consideration, he held, was specially pertinent where the problem was 'indeterminate.' The mathematician would be more likely to suspect the deficiency and more competent to correct it by indicating what conditions were necessary and sufficient to secure determination.

It may freely be allowed that a certain, not unimportant, quota of economic reasoning can be expressed mathematically, that some leading ideas of more recent economics, such as the mutually determining relations of variables like demand and supply, have a mathematical, or semi-mathematical, complexion, or even substance, and that the mathematical mind and temper are likely to aim anxiously at accuracy and precision and to avoid slipshod, faulty, or illegitimate argument. The treatment of economic theory thus might accordingly compare with the deft shorthand that is an apt substitute or convenient helpmate for the longer less neat script of ordinary writing. Economists might esteem it a serviceable preliminary at least or assisting summary. On the other side it may be urged that the facile employment of a polished tool can betray the user into the belief that he has more power than he really commands, or even perhaps into the assurance that he has solved a problem when he has only stated it neatly or correctly. It is significant that Marshall, a second wrangler, and confessedly a debtor of the early mathematical economist, the French Cournot,¹ while earning the credit of setting a pattern in diagrammatic illustration of economic theory by papers,² privately circulated, on the pure theory of foreign trade and domestic values that won laudation from connoisseurs like Jevons,

¹ The author of the *Principes Mathématiques de la Théorie des Richesses*.

² Reproduced in part in *Money, Credit, and Commerce*, and reprinted as Volume I in a series of scarce tracts published by the London School of Economics and Political Science.

deliberately placed his mathematics apart from the text of his treatise. Edgeworth himself noted¹ that Jowett, the famous Master of Balliol, a good indicator, he admitted, of the trend of opinion in cultivated circles, disliked Marshall's mathematical apparatus, though he felt and showed cordial appreciation of his economic attainment otherwise and of his general ability and character. He invited Marshall to succeed Toynbee as lecturer at Balliol, where for two years he drew large audiences.²

It would be difficult to discard the significant testimony in this matter of an expert witness, who was Edgeworth's co-editor and Marshall's pupil, and wrote a *Treatise on Probability*, as well as books on monetary economics. Mr. J. M. Keynes declared³ that mathematical psychics had not fulfilled the bright promise once offered. The results were at their best 'first approximations' and were 'dubious, fallible indexes.' The material handled had, in practice, proved recalcitrant. It was, he said, not sufficiently uniform and homogeneous. Small changes in economics produce large effects and comparisons of quantity fail. The elegant apparatus of diagrams, powerfully attractive to clever beginners, falls, he pronounced, inevitably into the background as we penetrate further into the recesses of economic analysis. The irony remains that it is only the bare bones of economic theory that can be expressed mathematically, and yet the mathematics needed for that are so easy as to beguile those with not much technical training. Marshall, Mr. Keynes suggested, rather scorned the mixture of algebra and diagrams.⁴ He regarded them

¹ In his reminiscences in *Memorials of Alfred Marshall*.

² The present writer attended these lectures.

³ In an obituary of Marshall in the *Economic Journal* for 1924.

⁴ An 'elementary treatise on the method of explaining some of the theories of pure economic science by means of diagrams,' by H. Cunyngname, was published under the title of *A Geometrical Political Economy*. The writer said that he had 'preferred simplicity at the risk of being considered inadequate.'

as seductive toys. They should, he probably felt, be sternly thrust aside for more serious, stiffer work. He certainly said¹ that the 'most helpful applications' of mathematics to economics are 'short and simple.' Employing 'few symbols,' these 'aim at throwing a bright light on some small part of the great economic movement rather than representing its endless complexities.' 'Many important considerations,' he wrote² in a similar vein, 'do not lend themselves easily to mathematical expression,' and accordingly they 'must either be omitted altogether or clipped and pruned till they resemble the conventional birds and animals of decorative art.' From this it may happen that 'wrong proportions' are assigned to economic forces because those elements are emphasized most which lend themselves most readily to such treatment.

Before leaving the topic it should be added that PHILIP HENRY WICKSTEED (1844-1927), Dante scholar and Unitarian minister, published a small *Alphabet of Economic Science* (1888), which, opening with forty pages of 'almost unbroken mathematics,' was, it has been commented,³ 'of most use to the chosen few'; and that he then went on to a 'descent to ordinary folk' in a large book on the *Common Sense of Political Economy* (1910). In this treatise he demonstrated shrewdly that the connexion of the marginal utility, or desirability, of articles with their market price⁴ was but the reasoned expression of the daily custom of a prudent housewife as she was wont to distribute her available money over the purchase of the goods she wanted with varying degrees of diminishing urgency. He aimed at exclusive emphasis on that side of the bargaining which Jevons and the Austrians had brought into prominence.

¹ Cf. *Economic Journal* for 1928.

² Cf. the Mathematical Appendix in the *Principles of Economics*.

³ By Dr. J. Bonar in an obituary in the *Economic Journal* for 1927.

⁴ Cf. above, p. 203, and also p. 103

But similarly it might be shown that on the other side, that of supply, to which the older economists had chiefly turned, obedience to the prompting of the cost, or expenses, of production was a translation into technical language of the 'common-sense' truism that goods will not and cannot go on being produced and sold at a loss. Jevons' own *Primer* made no attempt to popularize mathematical theory.

The erudite French historians of economic doctrines, MM. Gide and Rist, writing in 1909, distinguished first among four characteristic tendencies apparent at the end of the nineteenth and the beginning of the twentieth century a revival that had not been looked for of 'pre-occupation' with theory in France, England, and Austria. In 1911 the American Professor Haney, in an authoritative *History of Economic Thought*, described MARSHALL as 'admittedly the greatest living English economist.' 'There is, perhaps,' he added, 'no contemporary economist who surpasses him in constructive general theory.' Another American professor, in 1928, in a close, acute study, as balanced as it is informed, of five representatives of *Contemporary Economic Thought* went further. 'During the generation' since the publication of his *Principles*, Professor Homan wrote, Marshall had 'occupied a position of practically undisputed pre-eminence among English-speaking economists. His name' was 'linked reverently with the giants of the past,' Adam Smith, Ricardo, and John Stuart Mill. 'So far as there is to-day any generally accepted body of economic doctrines it is largely what Marshall made it. For a generation the more accredited economists have been largely engaged in modifying, interpreting, extending, and in general embroidering' his economics, and 'even for the dissenters and nonconformists Marshall has been very generally the point of departure.' Beside such opinions may be placed the judgment¹ of Mr. J. M. Keynes that 'as a scientist'

¹ In the obituary quoted.

Marshall was 'within his own field the greatest in the world for a hundred years.' Together with these complimentary but considered verdicts we can weigh the indubitable facts of the very large sales of his books and of the occupation of many, if not most, teaching posts in England by his pupils. Measured intensively by the latter or extensively by the former gauge his influence was immense.

As a boy, born at Clapham, and going to Merchant Taylors' School, he was well-nigh as hard worked in his studies as the younger Mill.¹ His father, a cashier in the Bank of England, was, we are told,² 'cast in the mould of the strictest Evangelicals'; and Marshall, who inherited his masterfulness, declared that his life was saved by the long summer holidays spent with his aunt near Dawlish. In his earlier years some characteristics appeared that exerted an influence later. While learning the classics, for which he had no great love, he neglected the accents because he thought they would take time and energy that could be more usefully applied. Turning to mathematics, he resolved never to read a mathematical book for more than an hour and a quarter at a stretch, in order not to use his mind when it was not fresh. Throughout his life a lack of power of rapid execution and continuous concentration may have been responsible for delay or failure in the completion of big designs. *Industry and Trade* (1919) was kept in proof for an extraordinary number of years, and the *Principles*, remaining Volume I, had more unity of conception, and seemed more closely knit in execution, than the other large productions of his pen. Architectonic power in that sense, though not in another in which it was regarded³ by him as the real test of a

¹ Cf. above, p. 85.

² By Mr. Keynes.

³ Cf. a letter to Dr. Bonar printed in *Memorials*. Jevons came under this category (but not Mill), as creating ideas which can never die.

'classical' economist, was not his: and it has been suggested¹ that through reluctance to publish his thought in monographs he forfeited to others in some matters credit that was properly his own.

The scheme of the *Principles*, originally planned for a single volume, grew into four, of which only two were given to the world in finished shape. '*Industry and Trade*,' separated by thirty years from the first instalment, was the second. It consisted of three parts, the first of which on 'some origins of present problems of industry and trade' was historical, discussing the claims of England, France, Germany, and the United States to industrial leadership during the second half of the nineteenth century. The second part dealt with 'dominant tendencies of business organization' during the same period, and the third with 'monopolistic tendencies and their relations to well-being,' while a batch of appendices on various topics followed. Amounting to sixteen, they occupied about a quarter of the whole book. '*Money, Credit, and Commerce* (1923), with as many as eight appendices to the final chapter, was mainly 'pieced together from earlier fragments,' some of which had been written fifty years before. It showed the 'marks of old age' in a way which *Industry and Trade* did not;² and it remained true that Marshall failed to extend to money and foreign trade the design of the *Principles* in such a manner as to add to the main structure he had built the required wings or storey. He was, too, very susceptible to criticism, and unduly fearful of it, and therefore kept on amending and improving; although this revision had the result that eventually it became difficult or impossible to pick holes in what was finally put into print, and what later writers thought they had discovered for themselves they found when they made inquiry had been anticipated by him. The toughness of

¹ Cf. Mr. Keynes in the obituary quoted.

² Cf. Mr. Keynes.

some of his exposition can be traced to its concentrated pith, or, to vary the metaphor, to its hard grit.

But there was another trait revealed in his youth that marked him afterwards. He intended to become a clergyman, and turned his thoughts to foreign missions. He has been properly placed by Mr. Keynes in the class of those who were both 'sages' and 'pastors.' He came to economics through classics, mathematics, metaphysics, and then ethics, where he described¹ Sidgwick as having been his 'spiritual father and mother.' The mixed training, it is not improbable, made him a better economist than he would otherwise have been, and the pastoral and missionary bent was not the less attractive, or influential, side of his nature. It may have led him to prefer in his own mind the concrete study of industrial affairs to the creation and development of the analytical engine of such study which competent observers,² who were also pious disciples, exalted as his main lifework. He himself declared in old age that, if he were starting again, he would have chosen to be a 'psychologist,' because 'economics has little to do with ideals.' Yet he certainly endeavoured to turn the balance, and his success was considerable. One of the loyal admirers, to whom allusion has just been made, reminded his hearers in a memorial lecture that his master had held that economic science was 'chiefly valuable,' neither as an 'intellectual gymnastic' nor as a 'means of winning truth for its own sake,' but as a 'handmaid of ethics and a servant of practice.' The other wrote that in relations with his pupils, which were 'beyond criticism,' they were presented with a 'disinterestedness of purpose' as well as a 'standard of intellectual integrity,' and came away, especially from informal intercourse, with a 'feeling of being embarked on the most interesting and important voyage in the world.'

¹ At the memorial meeting.

² Professor Pigou and Mr. J. M. Keynes.

In his farewell address in 1881 on leaving Bristol, where he had been at one time Principal of University College, he described the work he had set before himself as being how to 'get rid of the evils of competition while retaining its advantages.' He would be satisfied with progress during his life some 'four or five inches' along a line in that direction which might be deemed equivalent to a 'thousand miles.' In his inaugural lecture at Cambridge in 1885 he announced as his 'most cherished ambition' and his 'highest endeavour' an increase in the number of those whom 'Cambridge, the great mother of strong men, sends out into the world with cool heads but warm hearts willing to give some at least of their best power to grappling with the social suffering around them, resolved not to rest content till they have done what in them lies to open up to all the material means of a refined and noble life.'

It is to be noted that with such an object in view he deprecated mere negative criticism of other writers, and himself wrote¹ only two reviews of books—one of Jevons' *Theory* and one of Edgeworth's *Mathematical Psychics*, in which he expressed the hope that the mathematics would not 'run away' with him and take him out of 'sight' of the 'actual facts of economics.' He appreciated highly real constructive work wherever he could find it. He wanted to get, as he said, the 'direct feel' of the economic world, and disapproved of chasing with the intellect such things as diagrams because they purloined valuable hours required elsewhere. On that account he was glad to serve on the Labour Commission, and he reaped a ripe harvest from his travel in America. Despite a serious illness due to overwork in early life and of a liability to invalidism afterwards he lived to an advanced age, largely,

¹ His article on 'Rent' in the *Economic Journal* for 1893 is closely bound up with examination of the Duke of Argyll's *Unseen Foundations of Society*.

no doubt, through the assiduous care of his wife, who shared his interests, and partly in consequence of his habit of working as much as possible in the open air. He held the Professorship at Cambridge for twenty-three years and created the Economics Tripos. He was also instrumental in starting the Economic Society which after his death published memoranda and evidence furnished by him to Royal Commissions.¹ In the *Memorials* are contained a variety of smaller pieces and letters, so that it will be possible for future students to become fully acquainted with his work. As they are thus brought into contact they may share the feeling of a Cambridge pupil² who pronounced Marshall an 'unique teacher' because he seemed to 'grip the mind' and 'force it through unaccustomed exercise.'

The *Principles*, forty-seven thousand copies of which were sold between 1890 and 1930, will, it is likely, be remembered as his chief book. An abridgment, superseding the older *Economics of Industry*,³ had printed a hundred and eight thousand copies between 1892 and 1932. The success of volume i. of the *Principles* was 'immediate and complete.' One review declared that it would 'probably become for the present generation what Mill's *Principles* was for the last.' Another said that it had 'made almost all other accounts of the science antiquated or obsolete.' The book, Mr. Keynes has written, 'reached the general public,' increased the 'esteem of Economics,' and 'provoked the minimum of controversy.' These were great achievements; and we may now attempt an estimate, which must be broad rather than full, of what was thus done by Marshall for the development of economic theory.⁴

¹ Under the title 'Official Papers of Alfred Marshall.'

² Mr. E. A. Benians.

³ Cf. above, p. 199.

⁴ Cf. the present writer's *Economic Science and Practice*, No. XII, 'A Recent Economic Treatise,' reprinted from the *Economic Journal* for 1892, and a review of the 'Memorials' in the *Statistical Journal* for 1926. Vol. I. was dropped in the sixth edition (1910).

If, in musical metaphor, the leit-motif of his book were sought it would be found in the sense of unity imparted to the subject. This was more outstanding, and it was more definitely pursued and maintained, than in the treatises either of Sidgwick or of Nicholson. As we shall see, it was not merely that the best result of new was incorporated with the most approved outcome of past work. Marshall, following a precedent set by Sidgwick, has been reproached for being 'eclectic,' with the covert hint, which was not justified, that he was not also original. The harmony he wrought thereby was nevertheless a welcome exchange for previous acrid stubborn controversy. For it is more rational to think that those who brought acknowledged ability and unquestioned pains to the close, long study of a subject are likely to have made contributions of some permanent substance than to try to convict them of irretrievable inconsistency or to brand them as ridiculously futile. If they be old-fashioned, or even antiquated, there may yet be some surviving worth which should be rescued and preserved, and it is as rash and foolish as it is narrow and prejudiced to disregard or reject it. With commendable conservatism Marshall approached the great economists of the past; and, if he was indulgent to their lapses, that was error in the better direction, if only by reaction from the opposite excess. It was, too, an advantage to show that some of the ideas vaunted triumphantly as new were, differently treated, not such complete or surprising novelties.

But, in discharging this timely office of pacific reconciliation, he was also able to give unity to what he placed as the central theory of Economics. It will not be necessary to follow his achievement in detail because his restatement of the theory of value was invoked in a former chapter¹ of this history. It will suffice to recall here the stress laid on the mutually determining influence of the

¹ Cf. chapter IV, above.

behaviour of buyers and users in their demand and of sellers and producers in supply. Analogies, we should remember, were established between the marginal utility, or desirability, of goods, and marginal disutility, involved in the expenses of their production. The significant circumstance, too, appeared that, if your analysis of demand was pushed, you would be confronted in most instances by conditions of supply varying with increasing or diminishing returns from outlay of capital and the application of labour of all kinds, managerial or manual or attendance on machines, and that you could not fully consider or satisfactorily understand and explain supply without taking account of demand. The situation could be put historically in this way. The older writers, seeking for some 'law,' and therefore for some force that was acting regularly, thought demand by comparison capricious and even arbitrary, and found the motive for which they were looking in the technical expression as 'cost' or 'expenses of production' of what was but the conclusion reached by common sense that production, or manufacture and sale, could not, and would not, be carried on permanently at a loss. Capitalists and workmen and organizing employers must get in the long run a return sufficient to induce them to face risk, enterprise, and labour. The later writers, seeing that it was of no good to produce and sell, if there were none willing to buy, or desirous to use, disclosed and brought to the front a regular force, fitted to be the basis of economic 'law,' which they derived from the common-sense readiness to give more for what was wanted, but to give less as with increasing supply forthcoming and available the desirability of additional portions tended to diminish. As Marshall stated the position, two blades of a pair of scissors were needed, and joined, in cutting; demand and supply were mutually dependent on one another. So he brought together the two sides which had been before

emphasized with alternating exclusiveness. He aimed at unity, and thus it was secured; for most commodities,¹ being either agricultural products or manufactured articles, obeyed generally a law of diminishing or a law of increasing returns, and involved the consideration both of supply and of demand.

The unifying influence went further. For, without ignoring qualifying considerations, there were broad similarities between the forces at work in the exchange of goods in markets and the motives governing the supply of and the demand for services. Accordingly, Marshall set the theory of value, as he conceived it, in the middle between the consumption and the production of wealth, and at the centre of its distribution as well as its exchange. In this he approached closer to Sidgwick than to Nicholson; but he was more explicit and more thorough in carrying into the sphere of the distribution of wealth the importance of forces acting at a margin, of increase and diminution on the edge, so to say, of dealings, whether of purchase or of sale, and of the play of substitution of the more for the less desirable and of the less for the more expensive or costly. The 'marginal productivity' of capital, 'marginal wages,' and the like, were characteristic expressions. Whatever might be justly advanced against this mode of representation and this broad conception, it certainly gave unity to the whole picture.

On his title-page he placed the motto² which tells how nature not taking kindly to abruptness favours continuity. That idea he applied throughout the range of economic action or behaviour so far as such a course was feasible. The theory that small increments or decrements, additions or subtractions, were crucially important was one such application. Another was the extension of the notion of rent and its surrounding or consequent conceptions. In

¹ Cf. above, p. 106.

² 'Natura non facit saltum.'

his opinion that was pushed too far when it was said¹ that profits are of the same genus as rent ; but it should, he held, embrace extraordinary earnings or returns of many kinds. It might be objected that Marshall himself exceeded in the idea of consumer's rent, though it was first put forward early² in his writing, or that he was fanciful in suggesting, as he also did from the outset, that a tax properly placed on articles obeying a law of diminishing returns should, with advantage to the community, be handed as a bounty to articles obeying a law of increasing returns. For in the resulting surplus of utility there would be net benefit. The conception of economic rent even in agriculture, it may be acknowledged, becomes tenuous and eluding, as it appears and disappears with changing circumstance. For, however relatively permanent it may seem by comparison, yet we are compelled to recognize that it is not possible to get away from movement up and down as the crop or produce raised, the mode of cultivation followed, or the means and expense of transport used, or the market sought, vary or change. Nor for consideration in practice is what Marshall called the 'public value' of land, whether urban or rural, very obviously tangible when linked to 'original' or 'inherent' value defined as that arising from its 'position,' 'extension,' and 'yearly income of sunlight and heat and rain and air.' The distinction, too, between what is 'earned' and what accrues as 'unearned surplus' would seem to call for little less than the discernment and integrity of a 'super-man' when employed by Mr. Hobson.³ Differing from Marshall in some particulars, he has seized his general idea ; but he would use it to transfer wealth from those who save too much to those who are able to spend too

¹ By F. A. Walker.

² In the privately circulated papers mentioned above.

³ Cf. his *Industrial System*. Mr. Hobson would allow enough to remain to safeguard efficient effort and outlay.

little by taking away in taxation whatever has been got from having a 'pull' over one's fellows. Nevertheless, in fixing the essence of rent in the conception of a surplus above a margin, and in hinting that where margins could be found, and differential advantages parting the possessors from their less fortunate neighbours or rivals could be discovered, setting them at varying distances above or away from the margin, something of the character of economic rent, and its surrounding or consequent conceptions, became applicable, Marshall advanced a pregnant notion. It was unifying; and the allied idea of a quasi-rent springing from similar conditions obtaining for a time, as from the introduction of improved machinery not yet in general use, was suggestive. The rent of natural ability and the quasi-rent of higher education were analogous conceptions, shedding some fresh light.

The stress laid on differences of time affecting economic circumstance was in its degree and application both novel and instructive. Marshall made the distinction crucial. According as the period was shorter or was longer the influence of the forces at work would vary and their presence or absence would also be determined. Fluctuations of prices in a short period would be different in amount and character of movement, and be differently affected, from variations, stretching over longer periods, where deeper and more permanent forces could and would exist and operate. Those stretches and those influences should be called 'normal,' and, if of intervening scale, 'sub-normal.' The general idea of continuity indicated that they shaded gradually into one another, and they varied according to the commodities or services considered.

With bare allusion to a few other innovations or improvements we must be content. One was emphasis and development of elasticity and the reverse in connexion especially with demand. Another was the convenient resort to the idea of a 'representative firm' to meet

apprehension arising on the side of supply lest the largest undertaking, which, under the law of increasing returns, should be conducted the most cheaply, should drive all others from the market. For smooth theory something of this sort was needed; but the device does not conflict with inescapable fact, and we shall have occasion¹ for noting the relevance of its reality to another critical issue. The significant distinction drawn between prime and supplementary costs has since become a commonplace of 'business economics,' and much has been heard in industrial and trading practice of 'overhead' costs and their place in the accounts of manufacture and of transport. The classification of 'internal' and 'external' economies of management is no less pertinent, for the work of selling and marketing has manifestly encroached upon the room once occupied by the actual process of production,² and large combinations have achieved much of their success in ousting smaller undertakings in this sphere of enterprise. The comprehensive 'national dividend,' at once the outcome of production and the source of distribution, could be labelled the chief tool of unification. With that put in foremost place we pass to the means by which Marshall countered some objections raised to economic theory as stated by his predecessors.

The older versions had been represented as sordid and inhuman because they exalted selfishness and concentrated on money-making. For 'competition' with unamiable associations thrust upon it, or suggested by it, Marshall substituted 'free enterprise.' In place of 'natural,' which, as an attribute of value, prices, rates of interest, profits, and wages, might unwarrantably convey what was ethically to be praised, and ought to happen, he used the neutral designation 'normal' to represent what would probably occur in the absence of disturbing

¹ Cf. below, p. 300.

² Cf. G. B. Dibblee on the *Law of Supply and Demand*.

influences, whether it were good or bad. Similarly, he employed 'expenses' in preference to 'cost' of production because he wished to avoid presuming exact correspondence between earnings paid and quantities of manual or mental effort exerted and between the return on capital and the risk, sacrifice, abstinence, or postponement¹ involved in subordinating present to future enjoyment. Nor would altruistic or benevolent, or for that matter monopolistic or collective, action be outside the purview if it met his governing condition. In actual fact the self in the self-interest of the 'economic man' was generally so unselfish as to embrace his family. And, as Nicholson urged,² in an inaugural address to the Scottish Society of Economists, the supposed 'conflict of interests' in competition was not a 'series of mutual injuries founded on reprisals' so much as a 'series of mutual benefits founded on contracts,' and the more society came 'under the sway of economic principles' the 'greater on the whole must be the development of morality.' Energy, perseverance, and foresight, which were requisite qualities, were to be commended and not reprobated. Nor have economists generally shown themselves wedded indissolubly to *laissez-faire*, though many of them may have thought that the burden of proof rests with State action if it interfere with individual liberty. All that Marshall took for granted for his reasoning instrument was that the worth of goods and services in markets was appraised by prices moving not capriciously but with sufficient regularity, and that in that manner and to that extent the strength of motives prompting and restraining, or regulating, action could be measured and compared. He reckoned also for some amount of change occurring within limits. In a reply to criticism he suggested³ the use of the expression 'steady motion' in

¹ This is perhaps the most neutral term.

² Cf. *Economic Journal* for 1897

³ Cf. *Economic Journal* for 1898.

place of the epithet 'statical'¹ to convey more clearly the conception that he formed of a state of things which itself was 'full of movement,' although the surrounding 'general conditions' remained 'motionless,' so as to simplify the problem and make it manageable.

Unlike those of Sidgwick and Nicholson, his *Principles* do not deal with public finance: and it should be noted that economic theorists have felt difficulty in fitting to their scheme the discussion of taxation. The behaviour of Governments in this affair seems arbitrary by comparison with the 'normal' conduct of men and women in the production and consumption, exchange and distribution, of wealth. And yet it must be borne in mind that historically economics started with the consideration of public finance. The German Cameralists framed their ideas to supply the ways and means of the petty principalities with the fortunes of which they were bound up. It was because a poor people meant a poor king that French Ministers of State were prompted to push inquiry into the causes of their welfare or the reverse as they fed or drained the sources of the royal revenues. Adam Smith devoted a large space to taxation, and the art of public finance was as conspicuous on his pages as the first beginnings of the science of economics. His four canons of taxation, three of which have been rightly considered rules of fiscal practice, while theoretical discussion and analysis have centred round the first, won lasting fame.² Ricardo developed his doctrines in close connexion with the distribution of the burden of taxation through its incidence, as those classes on whom it was primarily imposed endeavoured, or were enabled, with the play of competition, to shift more or less to others. Nevertheless, some recent writers³ have excluded

¹ Cf. below, p. 304, and above, p. 240.

² Cf. above, p. 15.

³ e.g. in America Professor Seager and Professor Seligman. omitted taxation from their *Principles of Economics*, although the latter was a specialist on the subject.

the subject altogether from their systematic treatises on theory, while others have deemed the more appropriate plan to be a distinct section or part in which it is placed at the end of their books. The tests of equality, or equity, and the degrees, and modes, of shifting incidence have there engaged their attention. Such was the course pursued by Sidgwick and by Nicholson, following Mill in this.

Broader questions have been broached with the raising of more fundamental issues. They should not be ignored ; and with a short statement and consideration of recent debate this history may fitly end. Criticism censorious of past economic theory as set forth by Marshall in the spirit of English classical tradition can be viewed conveniently along two lines. It may be that, as often happens in the progress of a study, the turn has come for a period of revision to succeed a period of construction. Sidgwick's account¹ of the situation before and when he wrote will be remembered ; and present attitudes and new pleadings, we shall see,² recall in some respects positions taken and arguments advanced in bygone controversy. One variety of criticism has assumed the shape of a strict scrutiny, chapter by chapter and paragraph by paragraph, or even sentence by sentence and word by word, of the language of the reasonings of Adam Smith, Malthus, Ricardo, John Stuart Mill, and of others less well known. So Edwin Cannan, whose ability and industry, knowledge and acuteness, could not be denied, finally turned³ his formidable ruthless rifle against Marshall. We are constrained to doubt whether any author, however wary, could pass triumphantly through so minute and close

¹ Cf. above, p. 264.

² Cf. below, p. 303.

³ In his *Review of Economic Theory*. Edgeworth, reviewing in the *Economic Journal* for 1903 a second edition of an earlier book on these same lines by Cannan, regretted that the author had not taken opportunity to 'recant' the 'acrimony' of his 'criticisms.'

animadversion, or would emerge untarnished, without some apparent stain at least, whether removable or not. And we are impelled to voice regret that, however persuasive such inspection can be made, search for desert to praise should not be generously mingled with almost unvarying blame. Marshall's recoil¹ from negative criticism is relevant here. At the best, work, which must be onerous, does not promise to be very helpful: at the worst, it runs serious risk of doing grave injustice. It is obviously destructive rather than constructive in result, if not in intent. And it is surely a repugnant introduction to healthy study to treat writers of high standing and industrious workmanship as chargeable with gross stupidity or sheer neglect; nor is a satisfying conclusion reached when a verdict is returned of perverse error, grave inconsistency, and irreparable confusion. Such, however, would seem to be the issue, which should not be shirked, of so hostile and uncharitable a survey, accompanied as it is with the indictment of such a host of sins of omission and commission. We must abhor anything like wholesale condonance of the infliction of these scars and bruises, and we are not convinced of its necessity.

The other variety of criticism is not perhaps much more heartening. Nor, we hope to show, need we acquiesce in that. The utilitarianism, which economists so refined as Edgeworth, avowedly, and Marshall, with the provisoes noted already, employed in effect as a basis of their reasoning, has been reprobated as misleading and inadequate. A charge of 'hedonism,' exalting pleasure as the goal and test of action, has been advanced. And the reproach of 'atomism,' as it has been called, has been levelled at the individual freedom taken as a starting-point and underlying generally much or most of the subsequent argument. In this last respect, it may be remarked, the protagonist of the other attacking party, to whom we have referred,

¹ Cf. above, p. 285.

was not, naturally, very likely to feel strong sympathy with these assailants. For Cannan, we suspect, could not be anxious to disown the 'soft impeachment' of being a 'convinced' free trader; and he would probably be classed as more individualist than otherwise. Despite of some bold innovations,¹ proudly claimed, and independent and even revolutionary suggestions, consistently advanced, he would, we are sure, in other respects be looked upon in many quarters as 'more orthodox than the orthodox.' Dr. Bonar, too, has brought² reasons against identifying Economics with Utilitarianism, although he recognized that, so far as they were also philosophers, leading economists inclined to that particular creed. Yet, as he shows, while the self-interest directed to tangible goods, which they study, was suited for their purpose because it was more uniform than other motives, concentration upon it did not negative their existence any more than abstract economics promised complete guidance in handling concrete social problems. The beings, indeed, calculating means to ends, whom economists watch, may not be as conscious as utilitarianism needs, of both or their calculation be so deliberate. It is unnecessary to assume that the prompting motive is pleasure alone, or that the individual is infallible in following his interest, or that all desires are equally legitimate, and all satisfaction of desire equally good, because there is a more or less economical way of gaining an economical end. The last, belonging to economics, does not involve the others, pertaining to the utilitarian creed. Political Economy, Dr. Bonar concludes, pronouncing as it does intellectually

¹ Cf. above, p. 59, on the 'optimum' theory of population. Dr. Cannan has urged the consideration of the distribution of wealth from the standpoint of division of the product between different classes, e.g., capitalists, employers, and wage-earners in preference to that adopted generally of rates of interest, profits, and wages.

² In his *Philosophy and Political Economy*.

on the more or less successful adaptation of the means to the end of procuring tangible goods, has only indirectly to do with the resultant pleasure, or the pain from which we may recoil. Utilitarianism is not necessarily bound up with Economics. By these censors, however, the procedure of economic theorists is marked down as 'mechanical.' It is also labelled 'static,' and in this reproach Marshall has been included. The term, representing tendency to equilibrium, is contrasted unfavourably with 'dynamic,' representing process or development or evolution.

It would be idle to contest the obvious fact that collective action by the State, central or local, and the part played by combinations, both of employers and employed, have become more prominent in the economic world. Nor would it be possible to question the disturbance, if it continue to be so called, of competition by monopoly, in greater or less degree, as a real and no negligible factor in present trade and industry. Economists, however, have shown that a theory of the probable conduct of a monopolist can be formed and developed on familiar lines if there be still individual competition on one side of the bargaining. They have indicated that the monopolist has generally to fear the possibility of being supplanted, and in any event his power of raising prices through control of supply hinges on the elasticity of the demand. If his terms are too pressing alternatives will be sought or his commodity or service will be gone without. In his own interest he will probably pay attention to the important circumstance whether the article he offers obeys the law of increasing or that of diminishing returns, and can be produced in larger or less quantity more cheaply; and he will be likely to regulate his action and move his price accordingly. But if the bargaining be conducted between combinations existing on both sides it has been

admitted¹ by Jevons and Sidgwick that it becomes 'indeterminate.' And at least the addition or withdrawal of small increments implied in the conception of decisive forces acting at a margin, on the brink or edge, that is, of sale and purchase, does not correspond with the apparent facts. Trade Unions, like associations of employers, aspire to massed in lieu of individual action, although they may not always realize their ideal. The bargain would also apparently be 'indeterminate' where two or more monopolists are dealing with competitive groups.²

This must be allowed. But not a little can be put forward on the other side. For individual competition continues. It is, and it promises to remain, the general rule, not the exception. Individual energy and initiative, forethought and enterprise, have certainly not yielded yet primacy of place in economic life; nor has service to the public in the sense commonly understood superseded private personal profit as the impelling motive to economic action. In a broader meaning, of course, the latter as a rule is not secured without realization at the same time of the former. Manufacturers and merchants, both employers and those whom they employ, like doctors and lawyers, painters, singers, writers, players, preachers and lecturers, reap their earnings by providing something for the public that the public wants; and it is exceptionally alone that they can and do act otherwise. But it is also more often for the advantage than to the injury of the customers they are bound to serve. From that standpoint a kernel of wholesome truth can be still discovered in the decried idea, abandoned in many quarters, of an economic harmony,

¹ Cf. also the present writer's *Economic Science and Practice*, IX., 'The Relations between Industrial Conciliation and Economic Theory' (a paper printed also in the proceedings of the British Association).

² Cf. Professor Pigou in the review of Edgeworth's *Collected Papers*, referred to above, p. 276.

though valid reasons are adduced, which economists have generally recognized, for demurring to belief in its universal presence. The consumer or the user is frequently, it must be obvious, the real ruler in the competitive market, and the producer must, on pain of forfeiture of profit, comply with his or her behests.

Nor is the State as yet enthroned in sole command of business enterprise; and it is disputable, if we face the facts, whether soon or ever it should become so dominant in England. Apart from its gruesome accompaniment of bloodshed and confiscation, of active discouragement of religion and lax regard for the morality even of the young, of the prevalence of spying and the coercion of labour, the Russian experiment has disappointed rather than fulfilled the hopes linked with the overthrow of capitalism and the rise of the alternative system of nationalization. It might, indeed, be represented as having succeeded only so far as it has made concessions to the essentials of the system it would fain supersede. It is very significant that latter-day socialists in other countries and in ours should now seek to reconcile State-ownership with independent expert management. This attempt to avoid the patent red-tape of bureaucracy, with its necessary responsibility to parliamentary criticism, may fail; but its trial is noteworthy departure from obstinate adherence to a former vaunted creed.

Combinations also suffer obviously, if too big, from weak control or slack direction. They break up or they break down; and they run imminent risk of over-capitalization, paying too large a price to crush opponents or merge rivals. Such facts as these support Marshall's introduction of the 'representative firm,' to which previous reference was made.¹ Small undertakings constantly spring up, as he argued, as well as disappear, like the small land-ownership that has made neo-Marxism in Germany abandon

¹ Cf. above, p. 291.

the confident dogma of Marx himself that absorption of the lesser by the greater concerns would inevitably pave the way for final acquisition by the State. It is, too, to be noticed that a wide diffusion of the ownership of capital has accompanied the organization of large business on the joint-stock principle of limited liability. And so, if in one direction or respect individual economic action has retreated, in another it has more than correspondingly advanced. Lavish public expenditure during the War and after has been, it is gratifying to observe, attended by a remarkable growth of private thrift in the savings of small individuals embracing a considerable quota from the working classes. An acquisitive society so viewed can scarcely be properly described as 'sick.'¹

It has not ceased to be broadly true that a rise of price is likely to tempt forth supply and to deter demand, and that a fall will probably exert reverse influence. The pronounced trend is in that direction, though there may be instances to the contrary, attesting the existence of some variety in human nature. Yet that holds out faint promise of being so transformed within any period that cool reason can conceive that it will not usually endeavour to get the most return for the least exertion and outlay. Exceptionally we may suppose it acting otherwise. On the whole, too, it is safer and less visionary to believe that where the alternative is offered it will seek pleasure, avoiding pain, despite of the attraction, which we may acknowledge as operating sometimes, of some occupation in preference to forced idleness. We must not let exceptions, however remarkable, that excite our notice shut our eyes to the existence of what is in broad fact the general rule. Nor should we repeat socialistic shibboleths about the 'capital-

¹ Cf. Professor Tawney's pamphlet on the *Sickness of an Acquisitive Society*, in which he evinced no great liking for the 'rentier' class, or appreciation of the useful, or even necessary, function they may fulfil in modern industry and trade.

istic system,' its ineradicable evils and imminent breakdown, and the obvious benefits and certain arrival of 'nationalization' and the like as if our utterance implied their reality or realization any more than we should be content to remain hidebound within the narrow confines of individualistic formulas of orthodox economic theory. On their proved or demonstrable merits and demerits both should be fairly judged.

Some means must be sought and will be found for arranging in an order that allows clear inspection and adequate comparison the subject-matter of a scientific study, and the scientist, we may be sure, will not hold aloof from the opportune use of working hypotheses, and will continue to employ deductive as well as inductive inference. Marshall's 'organon' is ready to his hand, and the substitutes proposed do not recommend themselves with convincing force. We may end by examining briefly two. One is put forward on the Continent of Europe and the other has been advanced in the United States.

An English translation of the Austrian Professor Spann's *Types of Economic Theory* mentioned that nineteen editions and ninety to ninety-five thousand copies had been sold of this learned and suggestive history. The latter characteristic can be illustrated from the contrast drawn between the French Quesnay in his famous *Tableau Economique*, emphasizing the framework of society behind economic action, and Adam Smith, inaugurating a fresh movement, followed since, by turning away to watch individuals exchanging goods in markets. It is this framework of society as even antecedent to the behaviour of individuals which Professor Spann himself presents as the substance of the 'universalism' he recommends. That it is which he puts forward in place of the theory with which we have become familiar. Although he holds that history and statistics, being necessarily realistic studies, are indispensable, he nevertheless prefers economic

theory to applied economics. And he thinks that mistakes have arisen from a contrary choice. But he criticizes the older theory as 'atomistic' and 'mechanical' because it was individualist. He does not object to the view which regards prices in markets as tending to equilibrium; and the principle of equivalence, or equilibrium, should, he holds, be treated as the determinant of value instead of marginal utility. But price, he urges, arises not from the 'encounter of supply and demand' but 'out of the relations of magnitude in the articulated structure of an economy.' The idea of 'automatic or self-governing' forces has 'only a restricted applicability.' It is a 'working hypothesis for special occasions,' and does not 'cover the whole of economic life.' 'Individualism starts its reasoning from value and price, universalism from achievement and the articulated structure of the aggregate of all achievements.' To quote again his own words, 'according to the universalist view economics objectively considered is an inter-articulation of means for ends, being subjectively the estimation of means and the consecration of means to ends.' From this outlook 'all economic phenomena are by their very nature an inter-articulated structure of achievements seeing that the means achieve something on behalf of the ends.' This language, as we judge, is not free from suspicion of being turgid or misty; but that may be due to its German origin or to difficulty of placing it in an English setting. The conception behind, if we understand it aright, would seem to bear some family resemblance to previous Comtist advocacy of a general science of sociology in which Political Economy was to be merged as subordinate. Like that it would have considerable worth in the reminder that man, though he be 'economic,' is also a social being, and that the individual is in a real sense the product of society using its speech, ideas, customs, and institutions. Neither individualism nor socialism in their extremes convey the

whole truth. Man apart from society is unreal. But, if we push the war into the enemy's country, as Sidgwick did with the Comtists,¹ we may urge that in positive provision of a working theory as an alternative for such reasoning as that offered by Marshall the promise, whatever it prove in the end, cannot be very readily seized now. It seems to us a 'bird in the bush' rather than 'in hand.' Is it not better, we feel, to start an adventurous voyage in a familiar ship?

Crossing the Atlantic we find Professor Homan telling us in the fascinating book to which reference has been made already,² that in America there is 'hardly a single concept assumption or doctrine' of Marshall's system which is 'not under attack from one quarter or another.' He lays stress on criticism of the 'static' position taken as compared with the 'dynamic,' but he also writes of 'individualism,' 'atomism,' and 'hedonism' conducting to a 'mechanical' view of Economics. The idea spread most widely in the United States, he indicates, is that economic life must be studied from the standpoint of 'process not of normality,' and that a knowledge of the process can only be got through a 'realistic study of institutions' and a 'realistic view of human nature.'³ He defines his own position as of one who 'brought up in the faith of Marshall, then dallies for a while in the camp of Veblen, and thereafter seeks an independent position, committing him to no one's dogma.' But what is his considered judgment on Thorstein Veblen, who 'more than any other' writer 'in recent years has given form and direction to economic speculation' in the United States? After a survey, which is as sympathetic as it is penetrating, he is compelled to pronounce that Veblen's

¹ Cf. above, p. 266.

² Cf. above, pp. 240 and 281. Professor Homan's book is called *Contemporary Economic Thought*.

³ Cf. above, p. 240, on the place of statistics in this study.

achievement is 'in no sense adequate to place economic theory on a sound new footing.' His 'framework is a rigid set of categories.' 'Not much light is thrown on the problems of value and distribution.' 'Part of the truth is displayed as the whole.' 'Factors both psychological and institutional of undoubted influence are artificially excluded.' And the damning summary is that 'no intelligible theory of social ends, no adequate account of social forces, no tenable scheme of social control, are forthcoming.' Veblen's work is 'not science,' though its 'disintegrating effect has been enormous.'

After this judicial condemnation it may seem otiose to produce the new creed, but a sketch may be added. 'Persistent instinctive proclivities' in Veblen's view take the place of 'rational calculation' in setting the 'ends' of life. For accomplishing those ends, institutions, which are 'fundamentally' no more than 'habits,' become the 'established channels.' Human traits furthering the provision of economic wants are the 'parental bent,' the 'instinct of workmanship,' and 'idle curiosity.' They are the foundation of economic institutions. Opposing or obstructing traits are found in false knowledge, involving 'magic, superstition, taboo,' and 'tradition.' The process of development centres on two sets of institutions, one being the ownership of property and the other those concerned with the provision of the material means of life. This leads historically to a clash in the present era of the 'machine process' between the 'pecuniary gain,' which is the aim of business men, and the 'maximum production of useful goods,' which is the goal of the material welfare of the race. There is an antithesis, in short, between 'business' and 'industry,' assisted by the general inevitable presence of monopoly. All this, no doubt, is interesting and suggestive, if it is only 'part of the truth,' while important 'factors' have been neglected or excluded. Professor Homan represents it as cutting into 'every

essential postulate and conclusion' of the 'neo-classical school' of economists. But is there, we may ask again, any effective substitute as yet discoverable here, to be lightly welcomed or readily adopted, in place of such a scheme of reasoning as that of Marshall? Which is the more handy tool for use, at any rate in the first instance?

Might not the final situation be stated thus? The German with a cherished fondness for resounding theory, and the American with instinctive liking for what is novel, could be contrasted with the Englishman merging together what commended itself on trial, though it were new, and what, though old, continued to make good. Travelling, as his countrymen are wont to do, along the middle way, he may perchance have gained the golden mean. In such temper and fashion we can, with good reason, think that advance has been achieved in the past and that progress will be still accomplished in the future. May we not then hope that this short history, in the larger portion of its record, is no barren, idle tale, beginning in deception and proceeding through confusion, which Cannan's criticisms might suggest, and ending finally in disillusioning fiasco, as the Austrian narrator and the American reviewer, cheerily or despondently, conclude? We dare affirm that economic theory, as it has developed in England along the line of 'classical' succession, can enable the instructed student to see a little farther, a little deeper, a little wider, and a little clearer than the less informed. The topic, ever with us, of money is a shining instance of its worth, which has lately received fresh illustration. If the claim be not put higher, is it not the high mission of a science, which is a body of ordered knowledge, to discern and disclose what would otherwise remain unseen?

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