

THE
ECONOMICS OF INDUSTRY

BY

ALFRED MARSHALL,

PROFESSOR OF POLITICAL ECONOMY IN THE UNIVERSITY OF CAMBRIDGE;
FELLOW OF ST JOHN'S COLLEGE, CAMBRIDGE;
SOMETIMES FELLOW OF BALLIOL COLLEGE, OXFORD.

AND

MARY FOLEY MARSHALL,

LECTURER AT NEWNHAM COLLEGE, CAMBRIDGE.

THIRD EDITION.

London:
MACMILLAN AND CO.
1885

[The Right of Translation is reserved.]

Cambridge :

PRINTED BY C. J. CLAY, M.A. & SON,
AT THE UNIVERSITY PRESS.

PREFACE.

THIS book was undertaken at the request of a meeting of Cambridge University Extension lecturers, and is designed to meet a want which they have felt.

It is an attempt to construct on the lines laid down in Mill's *Political Economy* a theory of Value, Wages and Profits, which shall include the chief results of the work of the present generation of Economists. The main outlines of this theory have been tested during many years in lectures at Cambridge, and more recently at Bristol.

An inquiry into the subjects of Banking, Foreign Trade and Taxation is deferred to a companion volume on the "Economics of Trade and Finance."

The authors wish to acknowledge their obligations to Mr H. Sidgwick, Mr H. S. Foxwell and the Rev. W. Moore Ede for suggestions and aid in preparing the book for the press.

PREFACE TO THE SECOND EDITION.

THE present volume contains an outline of the theory of Value, Wages and Profits. This theory, as it was left by English Economists of the last generation, made too great pretensions to finality: and by a natural reaction their work has been severely criticised. But on the whole the progress of inquiry has tended to vindicate it, and to show that while most of it is very incomplete, there is but little in the careful exposition of it given by John Stuart Mill which is not, when properly interpreted, true as far as it goes.

It seems however necessary to go a good way apart from Mill with regard to one important question. He never worked out fully the applications of his own principles to the problem of Distribution: his last utterance on the question in his review of Thornton, left part of it avowedly in an unsatisfactory state; he gave indeed some hints as to the direction in which a solution was to be looked for, but he did not pretend to work it out himself. In this volume an attempt is made to supply the solution, and to show that there is a unity underlying all the different parts of the theory of prices, wages and profits. The remuneration of every kind of work, the interest on capital, and the prices of commodities, are determined in the long run by competition according to what is fundamentally the same law. This law of Normal Value has many varieties of detail, and takes many different forms. But in every form it exhibits value as determined by certain relations of demand and supply; and Cost of Production as taking the chief place among the causes that determine supply. The Second Book begins with a general statement of this law as applied to commodities. This is followed by a discussion of some peculiarities that are found in the laws of supply of unskilled

labour, of skilled labour and of business power. The ground is thus cleared for the inquiry how Normal demand and supply determine first the share of the joint produce of capital and industry which goes as interest to capital, and secondly how the share that goes to industry is divided among its different ranks. The volume ends with a discussion of the way in which the Normal action of economic forces is hindered, or even overridden, but never destroyed by friction, by combination or by those passing events which exercise a restless influence on Market values.

By an oversight no formal definition of the term *free competition* has been given in the text; and as, the book being stereotyped, there is some difficulty in introducing it at the proper place, it may be given here. A man competes freely when he is pursuing a course, which without entering into any combination with others, he has deliberately selected as that which is likely to be of the greatest material advantage to himself and his family. He is not supposed to be selfish; in fact the Normal supply of all grades of industry, except perhaps the lowest, depends on the unselfish sacrifice by parents of their own pleasures for the benefit of their children. But he is supposed to be consulting his own material advantage and that of his family to the comparative neglect of the welfare of others. If every one always found his greatest happiness in trying to do that which was best for others, the world would have no theory of Normal values as it is described in this volume: some such Communism as that which prevailed among the early Christians would be the basis of economic theory. But in this world, as it is, the chief *active* principle in business is the desire of each man to promote the material interests of himself and his family. Normal results in Economics are therefore those which would be brought about in the long run by this active principle, if it had time to overcome—as it necessarily would in sufficient time—custom, inertness, ignorance, and all the other *passive* elements which make up economic friction. It has been urged that as custom is often more powerful than competition it ought not to be spoken of slightly as a mere friction. But this is entirely to misapprehend the meaning of the term friction. A friction is not necessarily a small

thing, but it is a passive resistance ; and an active force, however small it is, acting on a material that is not perfectly rigid, will in the long run overcome any amount of friction. Human nature is never absolutely rigid ; and custom never holds its own in opposition to a strong active economic force working for many generations persistently in the same direction.

Normal results are those which competition would bring about *in the long run*. The periods to which they relate must be sufficiently long to give time for the active forces of competition to overcome the passive resistances of ignorance, prejudice, custom, etc. They must be sufficiently long to enable us to neglect temporary fluctuations of supply and demand, the influence of good or bad harvests, etc., and to regard these alternating changes in opposite directions as neutralizing one another. We must be able to see standing up in clear outline the broad effects of the constant action of the forces of competition.

It must however be admitted that there are several difficulties in the way of a precise definition of the period of time to which normal results apply, a great deal must be left to the judgment in each case. In particular it is impossible to lay down general rules as to the time that must be allowed for the spreading of knowledge with regard to new inventions, and to changes in the markets for goods and for labour. Every one has a tendency to seek the most advantageous occupation for himself and for his children, and this active tendency will in the long run overcome the passive resistance of ignorance. But ignorance may act as a drag for a long time, and the advantages of different occupations may vary rapidly. One of the most important of the unwritten chapters of Economics is that on the time that elapses between economic causes and their effects in consequence of the slowness with which knowledge diffuses itself.

The first chapters were printed at a time when it was proposed to give the volume a more elementary character than was ultimately found advisable ; and the difficulties which surround the definition of economic terms were ignored as far as possible ; but in this edition some further discussion is given of the definitions of wealth and

capital. There is however no really satisfactory meaning to be given to these terms without departing too much from precedent.

In particular the account which ordinary English usage compels us to give of capital when looked at from the point of view of the individual is not well suited for scientific purposes. Not only is it indefinite in many ways; but it compels us to say that if a boat builder has rented his carriage from a carriage builder who meanwhile has rented a boat from him, the capital of each would be diminished if each were to buy the things that he had been hiring.

We are thus brought to a fringe of difficulties which it would be out of place to discuss in a treatise such as the present. They are not merely verbal; but yet they are of such a nature that we can pass by them. For it will be found that none of our reasonings depend on our being able to give an exact list of the things which we regard as capital.

The notion of providing enjoyment for the future rather than for the present is that which underlies all the uses of the term Capital; and the property of providing for the future admits of all degrees and suggests no precise dividing line. The direction in which we ought to look for a solution of the difficulty seems to be a classification of all kinds of wealth according to the extent to which they possess this property.

French writers have always used the word Capital in a broad sense, sometimes as practically synonymous with wealth. Some German writers have also developed a hint of M. Say's as to the division of capital into productive capital and capital for consumption. But their suggestions, though not without value, do not seem to go to the root of the matter.

It may be mentioned that the phrase Net Income is used in several senses in different parts of the book. "Net" in each case means that which remains after making the deductions described in the context.

CONTENTS.

BOOK I.

LAND, LABOUR AND CAPITAL.

CHAPTER I. INTRODUCTORY.

- § 1 The work of Political Economy or Economics. [§§ 2, 3 The relation of science to practice. The methods of moral or social sciences.] § 4 Definition of the terms *Economics*, § 5 *Wealth*, *Material Wealth*, *Personal or Non-material Wealth*, § 6 *Productive* [§ 7 Wealth, further considered] pp. 1—7

CHAPTER II. AGENTS OF PRODUCTION.

- § 1 Man's work, § 2 Is aided by machinery, § 3 And controls Nature's forces. § 4 Man's efficiency depends on his physical vigour; § 5 On his knowledge and mental ability, § 6 And his moral character pp. 8—12

CHAPTER III. CAPITAL.

- § 1 *Capital*, § 2 Though saved it is spent. § 3 "What is seen and what is not seen." Labour requires support and aid from capital. § 4 Trade cannot be benefited by destruction of goods; § 5 Or hindrances to free production. § 6 *Remuneratory or Wage Capital*. *Auxiliary Capital*. § 7 *Circulating and Fixed Capital*. *Specialised and Non-specialised Capital*. § 8 Personal Capital. pp. 13—20

CHAPTER IV. LAW OF DIMINISHING RETURN.

- § 1 An illustration. § 2 The Return due to a Dose of Capital.
 § 3 *Law of Diminishing Return.* § 4 The influence of improvements in production. [§ 5 Agriculture in a new country.] § 6 Produce of mines pp. 21—26

CHAPTER V. GROWTH OF POPULATION. MALTHUS.
POOR LAWS.

- § 1 The multiplication table. § 2 Recklessness of backward races. *Standard of Comfort.* § 3 *Law of population.* § 4 Malthus' Essay. § 5 Qualifications of his doctrine. §§ 6, 7 State aid and voluntary aid in Poor-relief pp. 27—35

CHAPTER VI. GROWTH OF CAPITAL.

- § 1 The power to save. § 2 The will to save. § 3 Savings from rent, wages and profits. § 4 The growth of capital depends partly on the rate of profits, § 5 And must ultimately be slow. pp. 36—42

CHAPTER VII. ORGANIZATION OF INDUSTRY.

- § 1 Uncivilized tribes. The Agricultural state. § 2 Greeks, Romans, and German races. § 3 Mediaeval Gilds. § 4 Transition to modern times. § 5 Circulation of capital pp. 43—48

CHAPTER VIII. DIVISION OF LABOUR.

- § 1 Division of labour increases skill, § 2 Economizes skill, § 3 And machinery. § 4 Production on a large scale. § 5 Subsidiary industries. § 6 Localisation of industry. § 7 Advantages of a large factory. § 8 Modern changes in manufacture. § 9 Indirect results of division of labour. § 10 *The law of Division of Labour or Increasing Return.* § 11 Application to Agriculture. § 12 The Peasant Proprietor pp. 49—59

CHAPTER IX. TENURE OF LAND.

- § 1 Early tenures. §§ 2, 3 Modern tenures pp. 60—64

CONTENTS.

BOOK II.

NORMAL VALUE.

CHAPTER I. DEFINITIONS. LAW OF DEMAND.

- § 1 Competition only one of the causes which determine value, but in this second Book all others are to be neglected. [§ 2 The term *Normal*.] § 3 Definition of *Market*, § 4 *Value in Use, Value in Exchange, Price*, § 5 *Buyer, Seller*. § 6 Relation between utility and value, *Final utility*. § 7 *Law of Demand* . . . pp. 65—71

CHAPTER II. LAW OF SUPPLY.

- § 1 Introductory. § 2 *Cost of production. Expenses of production*. § 3 Relation between Expenses of production and supply, firstly by men working on their own account, § 4 Secondly by men working under an employer. § 5 *Law of Normal Supply*. § 6 It assumes free competition. § 7 *Law of Normal Value*. §§ 8, 9 Expenses of production include Insurance against Risk. [§ 10 "Cost of Reproduction."] . . . pp. 72—80

CHAPTER III. RENT.

- § 1 Illustration. § 2 *Law of Rent*. § 3 Special case in which there is land on the margin of cultivation. § 4 The effects on rent of increased demand, of free importation, and of improvements in production. [§ 5 Rent of mines.] . . . pp. 81—87

CHAPTER IV. RENT IN RELATION TO VALUE.

- § 1 Meaning of the phrase: "Rent does not enter into Expenses of production." Law of Normal value of a commodity, different portions of which have different Expenses of production. [§ 2 Ground-rent of factories.] . . . pp. 88—90

CHAPTER V. INFLUENCE OF DEMAND ON VALUE.

- § 1 A change which affects the Expenses of production of all commodities in like proportion, does not alter values, § 2 But an increase of demand alters values. § 3 Consequent addition to Law of Normal value pp. 91—93

CHAPTER VI. DISTRIBUTION.

- § 1 Expenses of production can be divided generally into Wages and Profits. Relation between Cost and Expenses of production. § 2 The *Wages-and-profits-Fund*. § 3 Earnings of Management to be classed with other earnings. *The Earnings-and-interest Fund*. [§ 4 Ambiguous use of the term "Cost of production." § 5 There is no separate class of consumers. § 6 Further examination of the term: "the real net annual income of the country."] pp. 94—100

CHAPTER VII. SUPPLY OF UNSKILLED LABOUR.

- § 1 *Real wages* and *Nominal wages*. *Time wages* and *Task wages*. The family as a unit. § 2 The supply of efficient labour as dependent on wages. § 3 *Net Advantages* of an occupation . pp. 101—103

CHAPTER VIII. SUPPLY OF SKILLED LABOUR.

- § 1 The Law of Normal supply applies to skilled labour in some respects, § 2 But not in all. § 3 Mill's four grades of labour. § 4 Net advantages further examined. § 5 Difficulties which keep down the supply of labour in a trade. § 6 Specialised skill decreasing in importance relatively to Non-specialised ability. § 7 Apprenticeships. Investment of capital in education by Government pp. 104—113

CHAPTER IX. SUPPLY OF BUSINESS POWER.

- § 1 The work of business management is increasing in difficulty. § 2 Transference of business power from one occupation to another. § 3 Supply adjusted to demand in the case of business power as in the case of skilled labour pp. 114—118

CHAPTER X. INTEREST.

- § 1 Interest depends firstly on the amount of the Earnings-and-interest-Fund; § 2 Secondly on the demand of industry for the aid of capital. § 3 The connexion between the rate of interest and the amount of capital demanded. § 4 *Law of demand for capital.* § 5 Supposition that the amount of capital is fixed. § 6 Supposition that the growth of capital is completely controlled by the rate of interest. § 7 *Law of Supply of capital. Law of the Normal rate of interest.* § 8 The Normal rate in England, § 9 And in new countries. § 10 Tendency of the rate of interest to diminish. pp. 119—127

CHAPTER XI. WAGES.

- § 1 Competition for the aid of a trade. § 2 Normal wages of unskilled labour. § 3 *Law of Normal wages* of skilled labour. § 4 A rise of Time-wages, if Task-wages are unaltered, does not lower profits. [§ 5 Wages equal the Discounted Value or *Net Return* of labour.] pp. 128—134

CHAPTER XII. EARNINGS OF MANAGEMENT.

- § 1 Trading with borrowed capital. *Trade Risks. Personal Risks.* § 2 Earnings of Management in private partnerships and Joint Stock companies. § 3 Profits on equal capitals in different trades. § 4 Profits on unequal capitals. § 5 Exceptional cases. § 6 *Law of Normal Earnings of Management.* § 7 They include much "Rent" of rare natural abilities. § 8 Tendency of profits to diminish. pp. 135—145

CHAPTER XIII. RELATION OF NORMAL TO MARKET VALUE.

- § 1 Summary of the theory of Normal value. [§ 2 In nature changes re-act on one another.] § 3 The theory of Normal value a necessary introduction to that of Market value pp. 146—149

BOOK III.

MARKET VALUE.

CHAPTER I. CHANGES IN THE PURCHASING POWER OF MONEY.

- § 1 Influence on prices exerted by changes in the supply of the precious metals ; § 2 And by the modern system of credit. § 3 Commercial fluctuations ; Crises. [§ 4 Commercial depression gives rise to the false notion that there has been general Over-production. § 5 How a fall of prices injures traders, § 6 And thus makes the evils of commercial depression appear greater than they are.] pp. 150—157

CHAPTER II. MARKET FLUCTUATIONS.

- § 1 Introductory. § 2 Market fluctuations due to uncertainties of supply. § 3 The higgling and bargaining of the market. § 4 Fluctuations due to changes in demand. § 5 Fluctuations are great in trades which use much Fixed capital, § 6 And in trades which make Fixed capital. § 7 Commodities which have Joint expenses of production. § 8 Market Fluctuations in prices cause, and are not caused by, fluctuations in wages, [§ 9 Although a change of Normal Expenses of production is the cause of a change of Normal value.] pp. 158—167

CHAPTER III. INFLUENCE OF CUSTOM. LOCAL VARIATIONS OF PRICES AND WAGES.

- § 1 *Laws of Local Variation* of Normal prices. § 2 The value of land. § 3 Movements of prices in town and country. § 4 Local variations greater in Time-wages than in Task-wages. [§ 5 How such variations should be measured. § 6 The influence of the competition of rival producers in neutral markets.] § 7 Wages of women. § 8 Local variations of profits. § 9 Retail prices. pp. 168—179

CHAPTER IV. MONOPOLIES. COMBINATIONS.

- § 1 Complete and partial monopolies. How monopoly price is determined. § 2 A trade combination often aims at a partial monopoly. Difficulty of securing the adhesion of those already in the market. § 3 Difficulty of excluding competition from a distance. § 4 Markets under the control of a few dealers. § 5 Conditions of the success of a combination. § 6 Combinations among employers to lower wages pp. 180—186

CHAPTER V. TRADES UNIONS.

- § 1 Trades unions an outcome of the Anglo-Saxon spirit. § 2 Town guilds and Craft guilds. § 3 The mechanical inventions of last century brought about the modern wages question. The early history of Trades unions. § 4 Their objects. § 5 Their organization. § 6 Trades union congresses. Trades Councils. § 7 The hold that unions have on the best workmen. § 8 Cost of strikes. § 9 Union rules: Apprenticeships; § 10 A minimum wage; piece-work; § 11 The length of the day's work. § 12 The indirect influence of unions. § 13 Picketing: Rattening: the use of machinery pp. 187—198

CHAPTER VI. INFLUENCE OF TRADES UNIONS ON WAGES.

- § 1 The labourer's disadvantage in bargaining for wages. §§ 2, 3 It is not impossible for unions to obtain a general rise of wages; but this will not be permanent if the change diminishes the Wages-and-profits-Fund. [§ 4 "The Wages-Fund theory."] . pp. 199—205

CHAPTER VII. INFLUENCE OF TRADES UNIONS ON WAGES (CONTINUED).

- §§ 1, 2 The relations between different groups of workmen associated in the same process of production, compared with their relations to their employers. § 3 Conditions under which a union can obtain a rise of wages in a single trade. § 4 The relation of the moral to the economic elements of the problem pp. 206—213

CHAPTER VIII. ARBITRATION AND CONCILIATION.

- § 1 Boards of Conciliation and Courts of Arbitration. § 2 The general principle on which they should act. § 3 *Sliding scales*. § 4 Indirect benefits of Conciliation pp. 214—217

CHAPTER IX. CO-OPERATION.

- § 1 The ultimate aims of Co-operation. § 2 Industrial Partnership. § 3 Co-operative workshops. § 4 In what trades they are most likely to succeed. § 5 Their work in taking sub-contracts. § 6 Co-operative credit associations. § 7 Co-operative stores. § 8 The principles on which they are based. § 9 The advantages which they have in competing with shops. § 10 The probable future of the retail trade. § 11 The Co-operative Wholesale society. The Federation of Co-operators pp. 218—228
- INDEX pp. 229—231

* * A few discussions are included in square brackets to show that they should be omitted by beginners in the first time of reading. Words used in a technical sense are printed with capital initial letters.