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**HUNGER AND WORK**

*By the Same Author*

**LABOUR CONDITIONS IN WESTERN  
EUROPE**

**NEW FASHIONS IN WAGE THEORY**

# HUNGER AND WORK

*STATISTICAL STUDIES*

By

JÜRGEN KUCZYNSKI

*With a Foreword by*

R. COPPOCK

LONDON

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## FOREWORD

MR. KUCZYNSKI has performed a valuable task in preparing this statistical study under the title of "Hunger and Work." While the pangs of hunger, arising from the need for work, admit of a statistical approach, it is true that the unfortunate victims of our mad hatter's economic system enjoy no alleviation of their distress in the knowledge that this is supported by figures. Indeed, the author himself makes this clear, for he says that "this book is not written to tell the millions of underfed people that . . . they are underfed, for they know it themselves much better than anybody else." But these figures, if carefully studied, should convince the complacent, and should disturb even the conscience of a certain bishop who, securely tucked away from mundane temptations through the medium of about £60 per week, is reported to have attributed the under-nourishment of workers who get less than sixty shillings a week to their own dietetic mistakes. A really comforting thought, but so wide of the mark! Let no one, with information in front of him in such a convenient and easy form as this book provides, doubt the misery which abounds far too much even in these plenteous days of civilisation.

The author's case proceeds from the initial examination of what is familiarly known as the "Rowntree" standard, and he shows that this standard, inadequate as it is, cannot be reached by hundreds of thousands of workers in full employment—let alone by the unemployed. Mr. Kuczynski carefully examines the basic industries of the country—agriculture; textile; metal, engineering, and shipbuilding; mining; building; transport; food, drink and tobacco; brick, pottery, glass, etc.; public utility services; and clothing. What is this "Rowntree" standard? It is the standard

which Mr. B. Seebohm Rowntree, after laboured enquiry, found essential as the absolutely *minimum* one applicable to a family of two parents and three children ; and he established that, in the late autumn of 1936, the total necessary weekly expenditure of such a group was 53*s.*, an amount which at the end of 1937 had, by virtue of the increase in the cost of living, risen to 56*s.* 6*d.*

This, then, is the standard by which wages have been judged by Mr. Kuczynski, and his conclusions are as distressing as the conditions of those about whom he writes—namely, that a substantial part of the fully employed working-class population lack all but the most elementary necessities of life. How could it be otherwise when families get less than 56*s.* 6*d.* a week ?

In regard to the building industry, the inescapable conclusion is that about half of the total number of building trade workers—that is, the labourers—are living *under* the “ Rowntree ” minimum.

The last part of the book is usefully devoted to the proven thesis that the economic position of the workers in general has considerably deteriorated since the crisis year of 1931 ; that, relatively to the “ upper strata ” of society, whose riches have grown disproportionately, the position of the working class has become steadily and consistently worse.

One of the reasons given by the author for his study is the desire to rouse all concerned to fight for the general welfare of the people and for social justice. This is an object which should particularly appeal to Trade Unions and Trade Unionists. Trade Unions exist to improve and uphold the standard of life of their members. If they need fortifying with facts which no amount of argument can upset, this little book will provide the necessary evidence. Not only should Trade Unionists, to whom I heartily recommend this work, regard it as an invaluable aid, but the workers generally, many of whom have regrettably not seen the urgent necessity of joining with their fellow workers in organisation, should welcome the evidence collected on their behalf. Trade Unions, in so far as they succeed in bettering the economic lot of their

members, raise the whole standard of life for the general body of the working class.

The fight for the general welfare of the people and for social justice is not an isolated movement in working-class activity. The struggle is persistent, constant, and grim. The workers can afford to neglect no weapon in the economic battle they are compelled to wage. Their enemies are not really influenced by any consideration of sentiment, although they might pretend to be. This array of facts and figures presented so clearly involves the uncomfortable alternatives, on the part of those who are satisfied with existing conditions, of deliberately blinding themselves to the rottenness of things in the rather forlorn hope of justifying their sympathetic pretensions, or of openly disclosing themselves as class enemies.

The fight for social justice! How respectable it sounds! What professions of virtuous indignation does it not conjure up! But here is no calm dissertation on the wrongs of mankind; no abstract philosophising on evil. Here are hard facts showing that food is short; that housing is bad; that civilised man lacks that which makes him civilised in the best sense of this term—cultural amenities. The despairing cry of man is indeed for social justice. But the concrete expression of the struggle lies in the incessant Trade Union activity for higher wages, shorter hours, better conditions.

I hope every Trade Union will get this book.

R. COPPOCK.

*(General Secretary, The National Federation  
of Building Trades Operatives)*



## PREFACE

On January 24, 1938, the *Daily Herald* reported from Ipswich under the heading "Bishop blames the Poor":

"Working people are chiefly to blame for under-nourishment, believes the Bishop of St. Edmundsbury and Ipswich. During a conference on malnutrition here, yesterday, a woman jumped to her feet waving the letter in which Dr. Whittingham made this charge:

"'I think you are quite mistaken in your suggestion that there are 13½ million underfed people in this country,' wrote the Bishop.

"'On the contrary, the number who are underfed is really extremely small, and for the most part it is their own fault, because their money is unwisely spent.'"

This book is not written to convince people like the Bishop of St. Edmundsbury and Ipswich—who, by the way, according to the *Daily Herald*, receives about £60 per week.

This book is not written to tell the millions of underfed people that even according to official statistics they are underfed, for they know it themselves much better than anybody else.

This book does not even deal with all the underfed people in Great Britain. It deals exclusively with the workers. And for them chiefly it is written: to tell them in which specific industries workers are worst off, to give them a bird's-eye view of the whole situation, to put into their hands computations based on Government material which will help them in their fight for higher wages, to assist Trade Unionists in negotiations for better living conditions.

But the book is not written exclusively for the workers, nor exclusively for their representatives in the Trade Unions. It is written also to rouse all those who are ready to help the Labour Movement because their general welfare is intimately connected with that of the workers: small tradesmen, small craftsmen, teachers, physicians, etc. Finally, the book is

written for all those who, irrespective of their special interests, are ready to fight for the general welfare of the people and for social justice.

Chapter III of this book deals with conditions in individual industries, and since few if any know more about conditions in these industries than Trade Union officials, I have sent the individual sections of Chapter III to Trade Unions, who represent the workers in the industries dealt with, for comments and suggestions for improvement.

Most of the Trade Unions to which these sections of Chapter III were sent have found time to look them over, and almost all have approved of them. That does not mean that they take any responsibility for anything contained in these sections—but it does mean that they generally agree with what I say, and can see, to say the least, no fault in stating the case of the workers as I have done it.

The Trade Unions and Trade Union officials who approved of the respective sections sent to them are :

Mr. Arthur Shaw, C.B.E., J.P., General Secretary, National Union of Dyers, Bleachers and Textile Workers.

Mr. Andrew Naesmith, Secretary, Amalgamated Weavers Association.

Mr. L. E. Cobbett, Statistical Department, The Iron and Steel Trades Confederation.

Mr. Mark Hodgson, J.P., General Secretary, Boilermakers and Iron and Steel Shipbuilders Society.

Mr. Arthur Hollins, Secretary, National Society of Pottery Workers.

Mr. H. B. Pointing, National Union of Agricultural Workers.

Mr. W. Banfield, J.P., M.P., General Secretary, Operative Bakers, Confectioners and Allied Workers.

Mr. Bryn Roberts, General Secretary, National Union of Public Employees.

Mr. Geo. Chester, General Secretary, National Union of Boot and Shoe Operatives.

Mr. J. Nunn, General and Financial Secretary, Amalgamated Society of Leather Workers.

Mr. F. Wolstencroft, General Secretary, Amalgamated Society of Woodworkers.

Mr. R. Coppock, General Secretary, The National Federation of Building Trades Operatives.

The above and the following Trade Unions and Trade Union officials were good enough to supply me with wage statistical material and (or) to give me the benefit of their advice on certain points dealt with in the sections concerning the workers whom they represent :

Mr. John Price, Secretary, Political and Research Department, Transport and General Workers Union.

Research Department of the Amalgamated Engineering Union.

Mr. J. Marchbank, General Secretary, The National Union of Railwaymen.

Mr. W. Stott, General Secretary, Railway Clerks Association of Great Britain and Ireland.

To all of them I wish to express my sincere thanks for their help.

The reader of this book must bear in mind that it deals exclusively with workers, and that the final estimate as to the number of people living below the Rowntree minimum standard, below the Rowntree poverty line, refers only to the working class. Besides the workers there are quite a number of other people who are living below the poverty line, but whose living conditions are outside the scope of this enquiry.

JÜRGEN KUCZYNSKI.

*April, 1938.*

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## CHAPTER I

### THE COST OF LIVING

MR. B. SEEBOHM ROWNTREE, the greatest authority in this country on the study of the cost of living, says in his book *The Human Needs of Labour* :

“ . . . The basic fact is that to-day millions of working-class people in this country are inadequately provided with the necessaries of life, simply and solely because fathers of families are not in receipt of incomes large enough to provide the necessities of physical fitness for themselves and those dependent on them. Until this condition of things is remedied, the health standard of a large section of the population will remain low.

“ The following pages are an attempt to formulate a measuring-rod, to enable us to assess the wage necessary for physical efficiency ” (pp. 9-10).

How does the family budget look which Mr. Rowntree thinks will be the smallest possible for ensuring physical efficiency ? It is intended to cover the cost of living of a family consisting of the parents and three children. Quite rightly Mr. Rowntree's family consists of three children and not, as do the “ modern and up-to-date ” budgets of most Ministries of Labour in Europe and the United States, of two children only. For two children do not guarantee the reproduction of the population (death taking some away before they reach the age of puberty, others not being fertile, etc.), and thus any budget assuming two children as sufficient for a standard family assumes at the same time that the population, in the long run, is doomed to die out.

As to the food in the budget, Mr. Rowntree says that he has based his computations on the requirements of a worker doing moderate work, that is, work neither light nor heavy,

and that for light work less and for heavy work more food is needed than is put into the budget. Of the dietary selected he says :

“ It certainly cannot be called extravagant ; it errs, if at all, on the side of undue economy. Indeed, I should like to make it clear that I do not put it forward as the kind of dietary that I consider entirely satisfactory for unskilled workers. I do so rather as representing a standard below which no class of worker should be forced to live ” (p. 79).

The dietary is as follows :

<i>Breakfast</i>	<i>Dinner</i>	<i>Tea</i>	<i>Supper</i>
<b>SUNDAY</b>			
Tea, bacon, bread and margarine (or fried bread).	Roast stuffed breast of mutton, boiled onions, potatoes, baked apples.	Tea, bread and margarine, jam.	Lentil soup and bread.
<b>MONDAY</b>			
Porridge and skimmed milk, bacon, bread and margarine (or fried bread), tea.	Beef roll, mashed potatoes and salad, steamed date pudding.	Tea, bread and margarine, water-cress.	Lentil soup (remains) and bread.
<b>TUESDAY</b>			
Porridge and treacle, bread and margarine, tea.	Liver and bacon, braised onions, potatoes (baked) in jackets, chocolate custard.	Beef roll (remains) and salad, bread and margarine, tea.	Bread and cheese, cocoa.
<b>WEDNESDAY</b>			
Porridge and skimmed milk, bacon, bread and margarine (or fried bread), tea.	Hot-pot and swedes, baked milk (sago) pudding.	Tea, bread and margarine, jam.	Bread and cheese, cocoa.
<b>THURSDAY</b>			
Porridge and treacle, bread and dripping (or fried bread), tea.	Sausages, mashed potatoes and peas, baked apples.	Fried herrings, bread and margarine, tea.	Bread and cheese, cocoa.

<i>Breakfast</i>	<i>Dinner</i>	<i>Tea</i>	<i>Supper</i>
<b>FRIDAY</b>			
Tea, bread and dripping or margarine (or fried bread).	Minced beef and rice, swedes, open jam tart.	Bread and margarine, tea, jam.	Bread and cheese, cocoa.
<b>SATURDAY</b>			
Tea, bacon, bread and margarine or dripping (or fried bread).	Barley broth, beef stew, potatoes, rice pudding.	Kippers, bread and margarine.	Bread and cheese, cocoa.

The rent Mr. Rowntree computes on the basis of a three-bedroom non-parlour cottage. For :

“ It cannot seriously be argued that for a family of five or more physical efficiency can be secured along with common decency if less than three bedrooms are provided ” (p. 88).

In fixing the amount necessary for clothing, Mr. Rowntree’s “ purpose . . . is to arrive at the minimum sum which a working-class family must spend on such clothing as is necessary to keep the body warm and dry and to maintain a modest respectability ” (p. 94).

In the budget of personal sundries Mr. Rowntree includes quite rightly Unemployment and Health Insurance, contributions to sick and burial clubs, Trade Union subscription, a daily newspaper, wireless, beer, tobacco, presents, holidays, books, stamps, and writing-paper, travelling to and from work, etc.

The total costs of expenditures for a working-class family in the late autumn of 1936 Mr. Rowntree estimates as follows :

A WORKING-CLASS BUDGET, LATE IN 1936

<i>Items</i>	<i>Cost</i>
	<i>s. d.</i>
Food . . . . .	20 6
Rent . . . . .	9 6
Clothing . . . . .	8 0
Fuel and light . . . . .	4 4
Sundries—	
Household . . . . .	1 8
Personal . . . . .	9 0
	<hr/>
TOTAL	53 0



## HUNGER AND WORK

For the individual months since October 1935, the month-to-month changes being measured by the official cost-of-living index, the household expenses have developed as follows :

<i>Year and Month</i>		<i>Cost of Living</i>	
		<i>s. d.</i>	
1935	October . . . . .	51	3
	November . . . . .	51	11
	December . . . . .	51	11
1936	January . . . . .	51	11
	February . . . . .	51	11
	March . . . . .	51	7
	April . . . . .	50	11
	May . . . . .	50	11
	June . . . . .	50	11
	July . . . . .	51	7
	August ; . . . . .	51	7
	September . . . . .	51	11
	October . . . . .	52	4
	November . . . . .	53	6
	December . . . . .	53	6
1937	January . . . . .	53	5
	February . . . . .	53	5
	March . . . . .	53	5
	April . . . . .	53	5
	May . . . . .	53	8
	June . . . . .	53	8
	July . . . . .	54	9
	August . . . . .	54	9
	September . . . . .	54	9
	October . . . . .	55	10
	November . . . . .	56	6
	December . . . . .	56	6

The budget constructed by Mr. Rowntree is not as glaringly insufficient as that of some others who have tried to find out how cheaply a worker's family may live and still be a worthwhile object of exploitation. But it is still far from sufficient even to guarantee "the necessities of physical fitness": it does not, for instance, provide for any requirements of the mother who has recently given birth to a child; no provision

is made for fresh milk ; no consideration is given to the fact that sick persons need better food or may need more expensive remedies or treatment than are provided for by the payment of the statutory Health Insurance contribution and a weekly 1s. club fee to sick and burial clubs.\*

The food is arithmetically sufficient from a " health " point of view. Fitness, however, does not depend only upon the quantity of calories and vitamins but also upon whether one can always stand the same kind of cheap and, because of the poor ingredients, often badly tasting food ; no butter is to be used. The clothing allowance is extremely poor, and any one who goes about at all, daring occasionally to dress differently on Sundays, and aspiring to some kind of special clothing for sport, will have considerably to exceed the budget allowed by Mr. Rowntree

Nothing is provided for wear and tear of furniture ; only linen, pots, and pans may be repaired or occasionally even renewed. No money must be spent for educational purposes, for recreation (cinemas, etc.).

In selecting his budget as a standard, everybody will realise that I choose an extremely poor standard which cannot be regarded as desirable, but must really be looked upon as an insufficient minimum.

In addition to the computation of a family budget Mr. Rowntree has also constructed a budget for an independent woman worker. He does not deal with the question whether women should be paid the same as men for the same work ; he does not compute a budget for women who have dependents, who have to feed and clothe children or aged parents. He defines the principle on which he bases his calculation of a minimum wage for a woman worker as follows :

" That the wage should be sufficient to enable her to live in a decent dwelling, and to maintain herself in a state of full

\* Cf. the excellent letter of criticism by J. A. Berger in the *New Statesman and Nation*, May 8, 1937.

physical efficiency, with a reasonable margin for recreation and contingencies" (p. 106).

For the individual months since 1935, the independent woman's budget has developed as follows :

<i>Year and Month</i>		<i>Cost of Living</i>	
		<i>s.</i>	<i>d.</i>
1935	October . . . . .	29	9
	November . . . . .	30	2
	December . . . . .	30	2
1936	January . . . . .	30	2
	February . . . . .	30	2
	March . . . . .	29	11
	April . . . . .	29	6
	May . . . . .	29	6
	June . . . . .	29	6
	July . . . . .	29	11
	August . . . . .	29	11
	September . . . . .	30	2
	October . . . . .	30	4
	November . . . . .	31	0
	December . . . . .	31	0
1937	January . . . . .	31	0
	February . . . . .	31	0
	March . . . . .	31	0
	April . . . . .	31	0
	May . . . . .	31	2
	June . . . . .	31	2
	July . . . . .	31	9
	August . . . . .	31	9
	September . . . . .	31	9
	October . . . . .	32	5
	November . . . . .	32	10
	December . . . . .	32	10

The construction of the budget for a woman worker makes it still clearer than in the case of a worker's family that Mr. Rowntree accepts society as it exists to-day, and what he wants to be put in effect are some small reforms which guarantee with a minimum of expenditure the physical

efficiency of the worker and facilities to reproduce at least the present working population.

In comparing present-day conditions with the budgets constructed by Mr. Rowntree we are, therefore, merely comparing present-day realities and the ideas of Mr. Rowntree about minimum conditions as they should be in order to ensure continuance of capitalist business with a working-class population physically able to continue work and to reproduce itself.

Finally, Mr. Rowntree has constructed a budget for the agricultural worker. This is lower than that for the urban worker for the following reasons.

Mr. Rowntree assumes that the agricultural worker grows for himself some of the food he consumes. The rent is considerably lower in agricultural areas than in towns, according to Mr. Rowntree. Further, reductions are made by Mr. Rowntree in the expenses for gas and coal, for clothing, and for sundries. Altogether the reductions in the agricultural worker's budget amount to 12s., so that the total budget for an agricultural worker's family amounts to 41s. as compared with 53s. for a town worker's family.

For the agricultural worker's family, household expenditures since October 1935 moved as follows :

<i>Year and Month</i>		<i>Cost of Living</i>	
		<i>s.</i>	<i>d.</i>
1935	October . . . . .	39	8
	November . . . . .	40	2
	December . . . . .	40	2
1936	January . . . . .	40	2
	February . . . . .	40	2
	March . . . . .	39	11
	April . . . . .	39	4
	May . . . . .	39	4
	June . . . . .	39	4
	July . . . . .	39	11
	August . . . . .	39	11
	September . . . . .	40	2

## HUNGER AND WORK

<i>Year and Month</i>	<i>Cost of Living</i>	
	<i>s.</i>	<i>d.</i>
1936 October . . . . .	40	6
November . . . . .	41	4
December . . . . .	41	4
1937 January . . . . .	41	4
February . . . . .	41	4
March . . . . .	41	4
April . . . . .	41	4
May . . . . .	41	6
June . . . . .	41	6
July . . . . .	42	4
August . . . . .	42	4
September . . . . .	42	4
October . . . . .	43	2
November . . . . .	43	8
December . . . . .	43	8

In this connection I want to quote an article published in the *Land Worker*, September 1937, headed "Living in Country is not Cheaper":

"Men do not need as much money in the villages as in towns, because living there is cheaper."

"For years certain East Anglian electricity undertakings have been trying to get the right to reduce wages to their rural workers below town levels on the strength of this assertion. They wanted to cut more than a tenth of the town-rate off for places five miles distant from the centres of Norwich, Ipswich, and Yarmouth.

"Recently they brought the matter to arbitration. The electricity workers appealed to the N.U.A.W. for help in proving the falseness of this story about cheap village living.

"Bro. Rollinson, of Head Office, spent several days in collecting evidence about retail prices in Norwich and Norfolk villages. This evidence was summarised and included in a written statement prepared by the research officer of Trades Union Congress. Bro. Rollinson also gave evidence before the arbitration Board.

"After hearing all the witnesses for and against, the Board refused to make any alteration in the present practice of paying rural workers in electricity as much as the town workers get. They took the view that the undertakings had been unable to prove this story about cheaper living in the country.

"The written evidence produced on behalf of the workers emphasised the growth of large retail concerns with branch shops, of multiple stores, and of 'branded goods' with fixed national prices; and pointed out that all these influences tended to abolish any differences there may have been between town and country. Marketing Boards also mean that level prices are spread over larger areas.

"The village shopper loses because the range and variety of goods offered in local shops must be small. Again, the narrow margin of profit on 'branded goods' may mean an attempt to get a living from slightly higher prices than would otherwise be charged on articles in the supply of which there is little local competition.

"The village shopkeeper naturally finds the need for enterprise and skilful organisation of his business to cut down the 'overhead' charges less pressing than would be the case in towns; and the country housewife has to pay for this. It is a great convenience to have even a small shop with 'odds and ends' in a small village, but it is a privilege which often means extras on the town prices for similar goods, in order to keep the shop going at all.

"In assuming that the cost of living is lower in the country than in the towns, people may really be thinking of differences in the standard of life rather than differences in the costs of similar articles.

"If country people go to towns to get the advantage of cheaper prices there are the fares to be paid. What is saved in buying in markets, chain stores, or Saturday 'sell-offs' is wholly or partly lost in getting to and fro. This added expense applies to amusements. The townsman sees the pictures for 6d. or 1s., but there may be an eightpenny fare to add to that for the villager.

"In order to get a record of village prices some 200 forms, issued to suitable persons, were filled up and afterwards examined.

"Summing up the results, it may be said that the town areas showed more lower-priced goods could be obtained there (and this is important to those who must have the cheapest procurable), and there was a better range of choice. In many respects prices do not vary much between town and country, but the multiple shops give advantages to towns.

"Coal prices and charges for gas and electricity were definitely lower in Norwich than in the villages. Coal costing 2s. to 2s. 3d. in villages cost 1s. 10d. in Norwich. Gas is 11d.

in Norwich per therm, in Wroxham 1s. 2d., and Wymondham 1s. 3d. Electric light in Norwich is 5d. a unit, farther out 6d.—farther still 8d. For cooking the unit charge in Norwich is ½d. ; outside the town area it is 1d.

“ Farm workers and some other rural inhabitants have the advantage of cheap cottage rents, but it is possible to get a council house, uncontrolled (as to rent), in Norwich for 4s. 4d. a week ; in Wymondham—to take an example—the cheapest uncontrolled house is 5s. 3d. It must be kept in mind that the standard of cottage accommodation is definitely lower in country areas.”

In spite of the deductions he makes, Mr. Rowntree thinks it necessary to defend himself against objections that he assumes too good a life for the agricultural worker : “ I do not think that standard can be fairly criticised as being extravagant ” for “ it has been customary to expect them [*i.e.* the agricultural workers] to ‘ live rough ’ ” (p. 124).

I certainly do not think that the budget assumed by Mr. Rowntree is sufficient. I think that the agricultural worker should earn considerably more and live considerably better than Mr. Rowntree assumes. And yet, when in a later chapter we compare actual wages or wage rates with the budget which Mr. Rowntree calls a minimum budget, everybody will understand why I thought it worth while to compare the wages of agricultural workers with what Mr. Rowntree deems a minimum requirement for an agricultural worker’s family.

Before ending this chapter, it is of interest to quote another estimate of the cost of living published in the *Daily Herald*, November 12, 1937 : XYZ

“ was receiving 33s. 6d. a week relief, out of which he pays 12s. for rent, leaving little over £1 to keep the family.

“ ‘ That is sufficient for the necessities of life,’ said Mr. Fells, chairman of the Bench and Justice of the Peace, Ramsgate, to XYZ. ‘ You will be bound over for two years if you undertake to apply assistance which you receive for the benefit of your household and not use it frivolously.’ ”

"Mr. Fells said to me to-night: 'While I hope I did not convey the impression that I am not in sympathy with people who find themselves in such unfortunate circumstances, I still maintain that the money is sufficient to provide the necessities of life and keep the family [parents and two children] from destitution.'"

Comments are obviously superfluous.



## CHAPTER II

### WAGE STATISTICS IN GREAT BRITAIN

THERE exists no industrial country which can look back upon a history of wage statistics as rich in successful studies as Great Britain. But there are few which have neglected wage statistics recently as much as this country. Statistics in the United States and Canada are far superior in quality and quantity, and even German wage statistics are better than English.

There are two chief groups of wage statistics: statistics of actual earnings and statistics of wage rates.

Statistics of actual earnings on an extended scale have recently been collected by the Government in October 1928, 1931, and 1935. None of these sets of statistics is strictly comparable, since business conditions were quite different in each of these years, and therefore it is not possible to find out from these statistics whether earnings have tended to increase or decrease. No data on year-to-year changes are available, and no statistics of average wages during each of two succeeding business cycles can be computed from these statistics. But, with qualifications to be mentioned below, they may serve as a gauge of actual wage conditions in the period under review.

No other comprehensive statistics of actual earnings are available.

The Government statistics of wage rates are little better than those of earnings. They are published once annually at the end of the year. It is true, they are comparable—but one has to wait for a whole year until one again gets any information. There are general wage-rate indexes published, for instance by Professor Bowley, but they do not inform us about wage-rate movements according to industries. Monthly

compilations of "Principal Changes in Rates of Wages" permit only a rough calculation of changes within the year.\*

For individual industries data are published more frequently. The Government publishes quarterly statistics of earnings per shift in the coal industry—without, however, differentiating according to categories or age of the workers. Furthermore, the *Ministry of Labour Gazette* publishes monthly for a number of industries—cotton, wool, boots and shoes, bricks and pottery—statistics of percentage changes in employment and total wages paid. From these data it is possible to compute a monthly index of actual earnings. Curiously enough, this is not done regularly by any of the numerous organisations which should be interested in these figures. The British Iron and Steel Federation publishes monthly average earnings for the industry as a whole, useful figures regarded as reliable also by the Iron and Steel Trades Confederation,† but covering up, of course, the very great differences in earnings in the different parts of the industry and for the different workers' categories. Some Trade Unions publish at regular intervals comprehensive surveys of wage rates—an excellent quarterly survey is published, for example, by the Amalgamated Society of Woodworkers. Much material on wage rates can be collected also from the publications of Trade Boards, National Joint Councils, etc. But on the whole there can be no doubt that Great Britain is far behind Germany and especially the United States, and is also behind Canada, Czechoslovakia, and other countries as far as either Government or any other statistics of wages, earnings and rates are concerned. While in the nineteenth century England was in this respect the most progressive country, to-day she sadly lags behind.

The following investigation of wages and cost of living would best be based on a comparison between actual wages

\* The 22nd *Abstract of Labour Statistics, 1922-1936*, contains an index of wage rates by months for industry as a whole.

† In a letter to the author.

and the cost of living. And as far as possible we shall use in the first place statistics of actual earnings. Since these statistics are, however, rarely up to date, and since they are not comprehensive, we shall have to complement or replace them by statistics of wage rates published, in part by the Government, in part by the Trade Unions.

The character and implications of the individual wage statistics will be discussed when we deal with the individual industries. Only one collection of statistics will be discussed here, since we shall use it in quite a number of chapters and since it is the most authoritative collection of statistics of actual earnings in Great Britain. I refer, of course, to the Government's survey of actual earnings in October 1935.

Since it is not our purpose here to compare earnings in 1935 with earnings in former years, many of the objections which can be made against these Government statistics need not concern us. But one source of error as to the amount of actual earnings contained in the Government statistics must be discussed here.

In the official introduction to these statistics we read : \*

" Enquiry forms were addressed to all employers (in the industries covered) employing more than 10 workpeople, and to about 20 per cent. of the smaller firms, taken at random. . . ."

The reason why the establishments with more than 10 workpeople were covered in their entirety and those with fewer than 10 employees to the extent of only 20 per cent. probably was that the number of small establishments is very much higher than that of large establishments and that the work connected with such an enquiry would have been considerably greater if all the small establishments had been covered as well. And, indeed, one might say that while the work of the enquiry would have been added to considerably, the number of workers covered would not have increased accordingly, and therefore it might have been thought advisable to neglect, for instance, the wages of one-fifth of the workers in one in-

\* *Ministry of Labour Gazette*, February 1937.

dustry if the compilation of the statistics would then be completed three times as quickly. But this consideration cannot stand if we look at the following statistics : \*

AVERAGE WEEKLY EARNINGS IN ESTABLISHMENTS OF  
DIFFERENT SIZE

Industry	<i>Wages of Men 21 years and over</i>	
	<i>Establishments with 10 or more Workers</i>	<i>Smaller Establishments</i>
	<i>s. d.</i>	<i>s. d.</i>
Tailoring, retail bespoke . . . . .	69 4	59 6
Laundries . . . . .	59 6	47 0
Bread and flour confectionery . . . . .	63 4	55 6
Motor engineering . . . . .	78 5	55 9
Mill sawing and joinery . . . . .	61 1	58 3

These examples are sufficient to reveal what one should know anyway : that wages in small establishments are usually lower than in large establishments. Now we realise how seriously the Government statistics of actual earnings can be affected by the fact that only 20 per cent. of the smaller establishments, of those establishments, that is, which pay generally lower wages, have been covered by the investigation, while of the larger establishments all without exception were asked for information. The wage averages computed by the Government are in a number of cases considerably higher than the actual averages, because the Government sample has a bias in favour of the higher-wage-paying establishments. There cannot be any doubt among statisticians that actual earnings must have been in October 1935 considerably lower than is indicated by the Government survey.

While this mistake is not of great importance if one compares the development of earnings from one year to the next (because the mistake is repeated in the different years), it is of course of the highest importance if one wants to compare the earnings in October 1935 with the cost of living in 1935. Our investigation, therefore, is even more handicapped than would seem to be the case at first sight, since the best available statistics of actual earnings have a serious bias.

\* *Ministry of Labour Gazette*, February, March, April, May 1937.

### CHAPTER III

## WAGES AND COST OF LIVING IN INDUSTRY AND AGRICULTURE

### 1. WAGES AND COST OF LIVING IN THE TEXTILE INDUSTRIES

By far the widest basis for a comparison of wages and cost of living in the textile industries is offered by the Government enquiry into earnings and hours of work, undertaken in October 1935, the results of which were published in the *Ministry of Labour Gazette* for February 1937. Since the enquiry relates to actual earnings and actual hours of work it would be ideal for our purposes but for two reasons. First, it is somewhat out of date—but this can be partly remedied by additional consideration of the changes in wages made since then. Secondly, it covers establishments with less than 10 workers—that is, establishments which usually pay less than the larger ones—to a considerably smaller degree than those with 10 and more workers; but since according to the Fourth Census of Production for 1930 (cf. Part I, p. 3) only 15,577 persons or 1·5 per cent. of all those employed in the textile industries worked in establishments with less than 10 persons, this fault cannot affect the figures seriously.

In the following table I give the results of the Government enquiry, selecting from the tables the data for earnings of men 21 years of age and over and of women 18 years of age and over. I choose only these two categories because in the present study we are only concerned with the question: how many male workers get less than what is regarded as a minimum for raising a family, and how many female workers get less than is regarded as a minimum for an independent existence?

## AVERAGE WEEKLY EARNINGS IN THE TEXTILE INDUSTRIES

<i>Branches</i>	<i>Earnings of</i>	<i>Earnings of</i>
	<i>Men 21 years</i>	<i>Women 18 years</i>
	<i>and over</i>	<i>and over</i>
	<i>s. d.</i>	<i>s. d.</i>
Cotton carding, spinning, and doubling (including thread manufacture) . . . . .	49 6	27 6
Cotton weaving . . . . .	49 10	30 8
Cotton spinning and weaving (not separately distinguished) . . . . .	49 4	28 6
Cotton wool, surgical dressings, engine waste, etc., manufacture . . . . .	59 1	28 6
<b>TOTAL, Cotton</b> . . . . .	<b>49 9</b>	<b>28 8</b>
Wool sorting, carbonising, and scouring . . . . .	58 6	26 11
Wool combing and top making . . . . .	53 6	28 1
Worsted spinning and weaving . . . . .	55 8	30 6
Woollen spinning and weaving . . . . .	55 0	33 2
Woollen and worsted (not separately distinguished) . . . . .	57 11	32 0
Mungo, shoddy, and flock manufacture, rag grinding and carbonising . . . . .	51 7	25 2
<b>TOTAL, Woollen and Worsted</b> . . . . .	<b>55 3</b>	<b>31 3</b>
Artificial silk spinning . . . . .	67 3	29 9
Silk throwing, spinning, and weaving (including artificial silk weaving) . . . . .	66 10	31 1
Flax and hemp spinning and weaving . . . . .	45 0	23 6
Jute spinning and weaving . . . . .	48 10	32 5
Asbestos manufacture . . . . .	61 3	35 1
Hair curling, spinning, and weaving . . . . .	53 4	25 7
Preparing, spinning, and weaving of other or mixed fibres . . . . .	49 7	27 9
Hosiery manufacture . . . . .	72 3	35 8
Lace manufacture . . . . .	64 11	31 9
Carpet and rug manufacture . . . . .	61 10	36 9
Rope, cord, and twine manufacture . . . . .	53 8	27 3
Tapes and smallwares manufacture . . . . .	61 6	29 10
Elastic web manufacture . . . . .	56 8	30 3
Canvas goods (tents, tarpaulins, etc.) manufacture . . . . .	56 0	28 10
Hamming and embroidery . . . . .	54 6	28 6
Making of other textile goods (not dress) . . . . .	56 9	31 0
Textile bleaching, printing, dyeing, and finishing . . . . .	55 6	27 10

<i>Branches</i>	<i>Earnings of</i>	<i>Earnings of</i>
	<i>Men 21 years and over</i>	<i>Women 18 years and over</i>
	<i>s. d.</i>	<i>s. d.</i>
Velvet and fustian cutting . . . . .	59 0	27 0
Making-up and packing . . . . .	54 2	27 1
Miscellaneous textile (including combina- tions of above) . . . . .	55 2	29 9
<b>TOTAL, Textiles . . . . .</b>	<b>55 11</b>	<b>30 3</b>

Let us investigate first the wages of men. The cost of living, according to the computations of Mr. Rowntree and the cost-of-living index of the Government, amounted to 5*l*s. 3*d*. in October 1935. In order to find out the number of workers who get less than this minimum we put together first those branches in which according to the above table the workers earn, on the average, less than this amount :

**TEXTILE INDUSTRIES IN WHICH MALE WORKERS EARN A WEEKLY  
AVERAGE WAGE LOWER THAN THE COST-OF-LIVING MINIMUM**

<i>Branches</i>	<i>Number of Workers covered by the Government Enquiry .</i>
Cotton carding, spinning, etc. . . . .	27,214
Cotton weaving . . . . .	15,366
Cotton spinning, etc. . . . .	7,178
Flax and hemp spinning, etc. . . . .	7,632
Jute spinning and weaving . . . . .	5,421
Preparing, spinning, etc. . . . .	546
<b>TOTAL .</b>	<b>63,357</b>

In all these branches of the textile industry a worker working normal hours per week cannot earn enough to raise his family on a standard which is regarded even by Mr. Rowntree as a minimum. For though the actual hours worked per week are in some cases below the "normal working week," even a rise in the number of actual hours to the number of "normal" hours does not raise the weekly wage high enough to reach the figure of 5*l*s. 3*d*.

A small percentage of the above workers, however, worked over-time, and they, on the average, reached a wage above the minimum standard. On the basis of the Government data concerning hours of work we can compute this figure : it is 3,119.

To the number of workers not earning enough to raise a family on a minimum standard must be added all those workers who would earn more than that minimum if they worked all through the week, but who do not earn enough owing to short-time work. The following table gives all those trades in which the workers would earn this minimum in a normal working week and the percentage of workers working short-time, and the number of short-time workers covered by the Government enquiry ; left out from this list are the short-time workers in the silk-throwing and allied industries and in the hosiery manufacture industry, where the workers according to the Government enquiry earn on the average, even when doing short-time, more than 5*l.* 3*d.*

TEXTILE INDUSTRIES IN WHICH MALE WORKERS EARN DURING THE NORMAL WORKING WEEK THE MINIMUM OF EXISTENCE, BUT IN WHICH THE SHORT-TIME WORKERS DO NOT EARN THIS MINIMUM

<i>Branches</i>	<i>Percentage * of</i>	
	<i>Short-time Workers</i>	<i>Number of Short-time Workers</i>
Cotton wool, surgical, etc. . . . .	5·7	56
Wool sorting, etc. . . . .	11·5	103
Wool combing, etc. . . . .	17·4	1,191
Worsted spinning and weaving . . . . .	6·4	745
Woollen spinning and weaving . . . . .	10·5	1,808
Woollen and worsted, etc. . . . .	13·6	802
Artificial silk spinning . . . . .	2·3	188
Asbestos manufacture . . . . .	* 6·6	199
Hair curling, etc. . . . .	21·9	126
Lace manufacture . . . . .	16·3	506
Carpet and rug manufacture . . . . .	4·2	178
Rope, cord, and twine manufacture . . . . .	9·1	158
Tapes and smallwares manufacture . . . . .	9·6	62
Elastic web manufacture . . . . .	18·3	152

\* In this chapter, as in all other chapters of this book, we assume that the percentage figures for short-time and over-time given in the Government tabulations apply equally to men and women.



<i>Branches</i>	<i>Percentage of Short-time Workers</i>	<i>Number of Short-time Workers</i>
Canvas goods, etc. . . . .	10.0	159
Hemming and embroidery . . . . .	9.9	25
Making of other textile goods, etc. . . . .	13.8	47
Textile bleaching, etc. . . . .	30.3	13,283
Velvet and fustian cutting . . . . .	17.9	7
Making-up and packing . . . . .	25.2	546
Miscellaneous textile . . . . .	11.3	223
		TOTAL 20,564

To these should be added the workers in the mungo and shoddy department, who, according to the Government tabulation, earned on the average slightly more than the minimum, but who at the same time worked on the average more than the normal number of hours per week. They number 1,822, and deducting the number of workers doing over-time, we arrive at the figure of 1,478.

Putting all the different sets of figures together we arrive at the following table :

1. Workers who in a normal working week do not earn the minimum . . . . .	63,357
2. Workers in the mungo, etc., branch . . . . .	1,478
3. Workers who because of short-time do not earn the minimum * . . . . .	20,564
4. Workers who because of over-time earn more than the minimum † . . . . .	3,119

Altogether in October 1935 about 80,000 male workers aged 21 or more in the establishments covered by the Government enquiry earned less than the minimum regarded by Mr. Rowntree as necessary for a worker's family. 80,000 workers represent about 40 per cent. of all the male workers aged 21 years and more covered by the Government enquiry. If we apply this percentage to the total number of male workers 21 years of age and over actually employed in the textile industries (which is somewhat higher than that covered by the Government enquiry), we arrive at a total figure of about 135,000

\* In industries which on the average pay more than the minimum.

† In industries which on the average pay less than the minimum.

- *male textile workers, 21 years of age and over, who do not earn enough to raise their families on what Mr. Rowntree regards as a minimum standard.\**

Turning from men's to women's wages, we find that many more women than men do not earn enough according to the minimum standard set by Mr. Rowntree—and this in spite of the fact that the women's minimum in October 1935 was only 29s. 9d. (While the minimum for men refers to a standard necessary to raise a family, the minimum for women refers only to a standard of independent life for a grown-up woman without any dependants.)

In the following table I give all those branches, and the number of women engaged in them, in which women 18 years of age and over receive 29s. 9d. and less; I include two industries which pay 29s. 9d., because an inclusion of all establishments employing less than 10 workers in the Government enquiry would have brought down the average to less than 29s. 9d.

TEXTILE INDUSTRIES IN WHICH FEMALE WORKERS EARN A WEEKLY AVERAGE WAGE LOWER THAN THE COST-OF-LIVING MINIMUM

<i>Branches</i>	<i>Number of Workers covered by the Government Enquiry</i>
Cotton carding, spinning, etc. . . . .	48,241
Cotton spinning, etc. . . . .	14,640
Cotton wool, surgical, etc. . . . .	1,981
Wool sorting, etc. . . . .	93
Wool combing, etc. . . . .	3,128
Mungo, etc. . . . .	970
Artificial silk spinning . . . . .	4,910
Flax and hemp, etc. . . . .	20,779
Hair curling, etc. . . . .	465

\* As I explain in more detail in the Methodological Appendix to this chapter, the reader must bear in mind that I deal here and in the following pages with average wages. The number of workers actually receiving wages below the Rowntree minimum does not coincide with the total number of workers whose average wages are below it. For some of them may get a wage above the Rowntree minimum, just as some of the workers who belong to a group whose average wages are above the Rowntree minimum get wages below this minimum.

<i>Branches</i>	<i>Number of Workers covered by the Government Enquiry</i>
Preparing, etc. . . . .	217
Rope, cord, and twine manufacture . . . . .	3,559
Canvas goods, etc. . . . .	2,649
Hemming and embroidery . . . . .	3,234
Textile bleaching, etc. . . . .	12,340
Velvet and fustian cutting . . . . .	180
Making-up and packing . . . . .	2,222
Miscellaneous textile . . . . .	4,014
	<hr/>
TOTAL	123,622

In all these branches a woman worker working the normal number of hours per week cannot earn enough to live on a standard regarded as minimum by Mr. Rowntree. Though in some cases the average number of hours worked per week in October 1935 amounted to less than the normal hours, even a rise to the normal level would not have increased average earnings enough to reach the figure of 29s. 9d.

But the foregoing list has to be widened in order to include all those industries in which a high amount of over-time work (with a corresponding over-time pay, which I estimate at, at least, plus 20 per cent. per hour on the average) has unduly increased the average wage. For, even if the number of hours actually worked and the number of "normal" hours per week are the same, average actual earnings and average earnings for a full-time week do not necessarily coincide. The reason for this divergence is: if a worker works over-time, he often gets a supplement to the hourly wage rate, while if a worker works short-time he gets the same hourly wage as the worker working full-time. If, as so often occurs, the actual average number of hours worked is composed of a high percentage of short-time hours and a high percentage of over-time hours, then the average wage is composed of "normal hourly earnings" and a high percentage of over-time earnings; that means the average weekly wage is higher than it would be if all the workers were working normal hours, that is, neither short-time nor over-time. In the following

table I give those branches in which over-time work was so preponderant that over-time pay drove the average weekly wage above the Rowntree minimum while earnings for a normal week would be below this minimum.

INDUSTRIES IN WHICH OVER-TIME PAYMENTS RAISE AVERAGE  
EARNINGS ABOVE THE COST-OF-LIVING MINIMUM

<i>Branches</i>	<i>Per-centage working Over-time</i>	<i>Number of Workers</i>		<i>Workers earning Less than Minimum</i>
		<i>Total</i>	<i>On Over-time</i>	
Worsted spinning, etc. . . . .	34.9	31,509	10,996	20,513
Woollen and worsted, etc. . . . .	40.0	8,581	3,432	5,149
Tapes, etc. . . . .	9.2	2,483	228	2,255
Elastic, etc. . . . .	16.1	1,661	267	1,394
Making of other goods, etc. . . . .	31.2	2,937	916	2,021
		<b>TOTAL</b>	<b>15,838</b>	<b>31,333</b>

We now must add all those workers who if they worked full-time would earn on the average either the minimum set by Mr. Rowntree or more, but who owing to short-time earn less.

TEXTILE INDUSTRIES IN WHICH FEMALE WORKERS EARN DURING THE  
NORMAL WORKING WEEK THE MINIMUM OF EXISTENCE, BUT IN  
WHICH THE SHORT-TIME WORKERS DO NOT EARN THIS MINIMUM

<i>Branches</i>	<i>Percentage of Short-time Workers</i>	
	<i>Short-time</i>	<i>Number of Short-time Workers</i>
Cotton weaving, etc. . . . .	3.5	1,076
Woollen spinning, etc. . . . .	10.5	1,856
Silk throwing, etc. . . . .	8.9	1,255
Jute spinning, etc. . . . .	4.2	399
Asbestos manufacture . . . . .	6.6	79
Hosiery manufacture . . . . .	11.0	4,258
Lace manufacture . . . . .	16.3	488

TOTAL 9,411

Before we can finally tabulate the results of our investigation it is necessary to compute the figure of over-time workers who work in industries where the average wage falls below the minimum, but where the over-time workers reach or pass

this minimum. Their maximum number is 12,077, that is, this number, on the average, earn more than the minimum.

If we now tabulate the final results of our enquiry we arrive at the following figures :

1. Workers who in a normal working week do not earn the minimum . . . . .	123,622
2. Ditto (in industries where the average wage through over-time payments is inflated) . . . . .	31,333
3. Workers who because of short-time do not earn the minimum * . . . . .	9,411
4. Workers who because of over-time earn more than the minimum † . . . . .	12,077

Altogether in October 1935 over 150,000 female workers aged 18 and over in the establishments covered by the Government enquiry earned less than the minimum regarded by Mr. Rowntree as necessary for leading an independent life. Rather more than 150,000 female workers represent about 52 per cent. of all the female workers aged 18 years and over covered by the Government enquiry. If we apply this percentage to the total number of female workers of 18 years of age and over actually working in the textile industries, we arrive at a total figure of about 300,000 textile female workers, 18 years of age and over, who do not earn enough to live by themselves on the standard regarded by Mr. Rowntree as a minimum.

Considerably more detailed figures than for the industry as a whole are available for earnings of cotton weavers. This is due to the splendid efforts of the Amalgamated Weavers Association, which has taken a census of earnings of union members in Lancashire in February 1936 and in June 1937 ; the second census is far superior to the first, and we shall confine our investigation to this one.

An analysis of the 1937 census is all the easier since Mr. E. M. Gray, of the Economic Research Section of the University of Manchester, to which the results of the census had been

\* In industries which on the average pay more than the minimum.

† In industries which on the average pay less than the minimum.

turned over, has just published a detailed survey \* of earnings among the cotton weavers in Lancashire.

Almost all weavers under review worked on ordinary looms † and their earnings in 1937 were as follows : ‡

EARNINGS FOR FULL EMPLOYMENT, JUNE 1937				
Number of Looms	Number of Workers over 21 years of age		Average Earnings	
	Male	Female	Male £ s. d.	Female £ s. d.
1	8	383	2 2 2	1 9 8
2	395	1,978	1 18 10	1 9 5
3	1,185	8,185	1 17 5	1 11 3
4	6,067	19,423	2 0 3	1 17 9½
5	253	601	2 2 8½	1 18 11
6	2,825	4,913	2 6 8½	2 3 6½
7	5	3	2 16 4	2 10 3
8 and over	100	162	3 4 4	2 11 11
	10,838	35,648	£2 1 10	£1 16 7

According to the Government enquiry of October 1935, average wages for male weavers 21 years of age and over amounted to 49s. 10d. per week; the Union enquiry for June 1937 arrives at a wage of 41s. 10d. The chief reason for this difference is that the Ministry of Labour includes under the heading of "cotton weaving" the earnings of all workers in the weaving section, that is, in addition to the weavers' earnings also the earnings of overlookers, warehousemen, etc.; and the wages of the latter are, on the average, higher than the wages of the weavers.

In June 1937 the cost of living, according to Mr. Rowntree, amounted to 53s. 8d. for a worker's family, and to 31s. 2d. for an independent woman worker. While women's wages, according to the Union census, were on the average 36s. 7d., per week, that is more than the minimum required according to Mr. Rowntree, wages of men amounted to only 41s. 10d.,

\* *The Weaver's Wage: Earnings and Collective Bargaining in the Lancashire Cotton Weaving Industry, Manchester 1937.*

† An ordinary loom Mr. Gray defines as follows: a power loom which is non-automatic.

‡ Cf. *The Weaver's Wage*, p. 10.

or considerably less than the necessary minimum for raising a family. *Men's wages have to be increased by about 30 per cent. in order to enable them to raise a family on a standard which according to Mr. Rowntree is a minimum standard, and which in my opinion is quite insufficient.*

In the following table I give a more detailed survey of wages and cost of living for male weavers, and the number of workers living under these conditions, assuming that the distribution of weavers over the different looms is for all of them the same as in the Union census :

WEAVERS' FULL-TIME WEEKLY EARNINGS AND THE COST OF LIVING  
IN THE LANCASHIRE COTTON INDUSTRY, JUNE 1937

Number of Looms	Number of Workers	Earnings	Necessary Rise in Earnings *
		s. d.	Per cent.
1	—	—	—
2	700	38 10	38
3	1,950	37 5	43
4	9,950	40 3	33
5	350	42 8½	28
6	4,450	46 8½	15
7	—	—	—
8 and over	180	64 4	—

*About two-thirds of the weavers in the cotton industry need a rise in weekly full-time earnings of 33 per cent. or more in order to be able to spend as much even as Mr. Rowntree regards as a minimum for a worker's family.*

The first investigation upon which I based the investigation of earnings and cost of living refers to October 1935; the second covers a very small part of all textile workers and refers to June 1937. Is it possible to arrive at some estimate of conditions at the beginning of 1938? How have the earnings of textile workers developed since October 1935, and have

\* Necessary in order to reach what Mr. Rowntree regards as a minimum.

there been any considerable changes since June 1937 ?

The Government statistics of earnings in the textile industry were published in February 1937, and the following indications are given in order to bring the enquiry to some extent up-to-date : \*

“ In the textile group there have been increases of over 5½ per cent.† for most of the workers in the cotton-spinning industry, with additional increases for some of the lower-paid operatives ; of 10 per cent. for the great majority of those in the woollen and worsted industry ; of about 5 per cent. for workers employed in bleaching, dyeing, printing, and finishing ; of 4½ per cent. for jute workers ; and of various amounts for flax preparers and spinners in Northern Ireland.”

Since February 1937 the *Ministry of Labour Gazette* has recorded some major changes in wage rates for workers in the cotton industry in Lancashire, in the woollen and worsted and hosiery industries in England, in the textile bleaching, dyeing, finishing industries, etc., in Northern Ireland and some English districts, in the jute, flax, and hemp industries for Great Britain as a whole.

What is the significance of all these wage changes since October 1935 ? Have they increased full-time earnings more than the cost of living has increased ? According to the official index the cost of living has increased since October 1935 by about 10 per cent. Between October 1935 and the middle of 1937 wage rates and full-time weekly earnings probably have increased more than the cost of living. Since then, however, the cost of living has risen so rapidly that it has more than outdistanced the rise in wage rates and full-time weekly earnings.

On the other hand, short-time has probably declined since October 1935 and average actual weekly earnings, therefore, have risen more than full-time weekly earnings.

One may conclude perhaps as follows : Earnings of full-

\* Cf. *Ministry of Labour Gazette*, February 1937, p. 46.

† These and the following percentages refer to wage rates.



time employed textile workers to-day are lower as measured by the cost of living than in October 1935. Since, however, short-time has declined during the last 30 months, average actual real earnings per week are at the end of 1937 about the same as in October 1935—possibly lower, but not higher. And every month which passes brings a new increase in the cost of living, surpassing in effect all the wage-rate increases which are taking place at the same time.

*Our estimate for October 1935 that about half the textile workers (men 21 years or over, women 18 years or over) earn less even than what Mr. Rowntree regards as a minimum stands also for the beginning of 1938.*

Some statistical proof for this assertion can be found if, on the basis of the monthly publication of percentage-changes of employment and pay rolls in the cotton and wool industries and with the help of the official cost-of-living index,\* we construct, an index of actual money and real earnings.

**AVERAGE WEEKLY EARNINGS IN THE COTTON INDUSTRY**  
(October 1935=100)

<i>Year and Month</i>		<i>Average Weekly Earnings</i>	
		<i>Money</i>	<i>Real</i>
1935	October . . . . .	100	100
	November . . . . .	101	99
	December . . . . .	100	98
1936	January . . . . .	99	98
	February . . . . .	100	99
	March . . . . .	100	100
	April . . . . .	101	101
	May . . . . .	101	102
	June . . . . .	102	102
	July . . . . .	102	101
	August . . . . .	102	101
	September . . . . .	101	100

\* Cf. *Ministry of Labour Gazette*.

WAGES AND COST OF LIVING

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Year and Month	Average Weekly Earnings		
	Money	Real	
1936	October . . . . .	103	101
	November . . . . .	103	99
	December . . . . .	103	99
1937	January . . . . .	107	102
	February . . . . .	107	103
	March . . . . .	108	104
	April . . . . .	111	107
	May . . . . .	110	105
	June . . . . .	113	108
	July . . . . .	113	106
	August . . . . .	111	104
	September . . . . .	112	105
	October . . . . .	112	103
	November . . . . .	111	100
	December . . . . .	110 *	99

AVERAGE WEEKLY EARNINGS IN THE WOOL INDUSTRY  
(October 1935=100)

Year and Month	Average Weekly Earnings		
	Money	Real	
1935	October . . . . .	100	100
	November . . . . .	99	98
	December . . . . .	100	99
1936	January . . . . .	97	95
	February . . . . .	96	95
	March . . . . .	97	97
	April . . . . .	97	97
	May . . . . .	97	97
	June . . . . .	96	97
	July . . . . .	97	96
	August . . . . .	95	94
	September . . . . .	98	96
	October . . . . .	100	98
	November . . . . .	101	97
	December . . . . .	100	96
1937	January . . . . .	100	96
	February . . . . .	103	99
	March . . . . .	104	100

\* In January and February 1938 money wages declined further.

Year and Month	Average Weekly Earnings	
	Money	Real
1937 April . . . . .	105	101
May . . . . .	104	99
June . . . . .	104	99
July . . . . .	104	97
August . . . . .	103	96
September . . . . .	102	95
October . . . . .	101	92
November . . . . .	96	87
December . . . . .	94 *	85

While in the cotton industry we notice little change in the situation at the beginning of 1938 as compared with October 1935, workers in the wool industry have suffered a severe decline of real wages. On the whole, one probably is right in concluding that conditions to-day do not materially differ from conditions in October 1935.

## 2. WAGES AND COST OF LIVING IN THE METAL, ENGINEERING, AND SHIPBUILDING INDUSTRIES

The most extensive investigation of actual earnings in the metal, engineering, and shipbuilding industries published in recent times is that of the Government undertaken in October 1935.†

It covers most of the establishments employing 10 and more workers. Of the smaller establishments only 20 per cent. were canvassed. Since they employed, according to the Fourth Census of Production, 1930 (cf. Part II), almost 150,000, or almost 10 per cent. of all workers in the industry, this omission can, in certain branches, seriously affect the general results.

Before we compare earnings with cost of living one problem must be considered. The cost of living estimate by Mr. Rowntree refers to workers doing "moderate" work. Now, in the industries under review, work is usually heavy. While

\* In January and February 1938 money wages continued to decline.  
† Cf. *Ministry of Labour Gazette*, April 1937.

one may say, perhaps, that most of the work in the textile industry is moderate (as compared with mining, for example), most of the work in the metal, engineering, and shipbuilding industries is undoubtedly heavy. Heavy work, however, requires more and better food, and therefore I have added 2s. to Mr. Rowntree's budget of expenditure.

In the following table I give the results of the Government enquiry, selecting from the tables the data for earnings of men 21 years of age and over and of women 18 years of age and over. I choose only these two categories because, in the present study, we are concerned solely with a comparison of the wages of adult workers and their cost of living.

AVERAGE WEEKLY EARNINGS IN THE METAL, ENGINEERING, AND SHIPBUILDING INDUSTRIES		
Branches	Earnings of	Earnings of
	Men 21 years and over	Women 18 years and over
	s. d.	s. d.
Pig iron manufacture . . . . .	65 11	24 7
Iron and steel smelting, rolling, etc.* . . . .	71 2	24 7
Slag and slag wool . . . . .	54 6	—
Non-ferrous metals :		
Extracting and refining . . . . .	64 9	27 10
Founding and finishing . . . . .	64 8	28 3
Rolling and tube and pipe making . . . . .	64 10	28 7
General iron and steel founding . . . . .	63 3	25 5
Chain and anchor forging and making . . . . .	58 10	33 0
Other forging :		
Firms employing 10 or more workers	69 6	28 2
Firms employing less than 10 workers	54 10	—
Tinplate and galvanised sheet manu- facture . . . . .	69 8	28 5
Iron and steel tube making . . . . .	64 7	27 0
Wire, wire-netting, and wire rope making . . . . .	65 11	27 4
Engineering :		
Agricultural engineering . . . . .	55 11	25 11
Aircraft manufacture . . . . .	74 10	32 9
Boiler and tank making . . . . .	68 1	30 0
Constructional engineering . . . . .	65 0	27 2
Electrical engineering . . . . .	66 11	30 9

\* A few firms in this group made returns covering blast-furnaces and iron and steel works not separately distinguished.

<i>Branches</i>	<i>Earnings of</i>	
	<i>Men 21 years</i>	<i>Women 18 years</i>
	<i>and over</i>	<i>and over</i>
	<i>s. d.</i>	<i>s. d.</i>
<i>Engineering—continued</i>		
Electrical and scientific instrument making . . . . .	70 7	32 1
Lift manufacture . . . . .	70 9	33 11
Locomotive engineering . . . . .	60 8	30 0
Marine engineering . . . . .	65 4	23 1
Motor engineering :		
Firms employing 10 or more workers . . . . .	78 5	35 3
Firms employing less than 10 workers . . . . .	55 9	27 3
Textile machinery making . . . . .	54 10	27 7
General engineering :		
Firms employing 10 or more workers . . . . .	66 0	32 9
Firms employing less than 10 workers . . . . .	61 7	30 4
TOTAL, Engineering . . . . .	68 10	32 7
Textile machinery accessories . . . . .	56 6	29 3
Heating and ventilating engineering . . . . .	68 1	29 11
Typewriters, calculating machines, etc. . . . .	69 9	29 9
Electric cable making . . . . .	61 10	29 0
Electric lamp manufacture . . . . .	71 9	36 3
Telephone and telegraph apparatus . . . . .	73 8	32 1
Railway carriage and wagon and tram building . . . . .	66 1	30 9
Cycle and motor accessories . . . . .	63 7	31 4
Shipbuilding and repairing . . . . .	62 0	28 11
Cutlery . . . . .	65 6	26 7
Files, saws, and other edged tools . . . . .	60 11	26 0
Pin making . . . . .	63 8	25 7
Needle and fish-hook making . . . . .	58 6	25 3
Metal bedstead and wire mattress making . . . . .	58 11	31 7
Bolt, nut, rivet, and screw making . . . . .	61 5	26 11
Brass and yellow-metal goods making . . . . .	64 2	29 2
Dies, coins, seals, and medals . . . . .	66 3	28 4
Gas and water-meter making . . . . .	71 9	32 1
Harness furniture, etc., making . . . . .	47 4	18 9
Iron and steel hollow-ware . . . . .	65 5	28 9
Japanning and enamelling . . . . .	63 10	29 7
Lock, latch, and key making . . . . .	56 1	27 10
Nail making . . . . .	58 11	24 8

<i>Branches</i>	<i>Earnings of Men 21 years and over</i>		<i>Earnings of Women 18 years and over</i>	
	<i>s.</i>	<i>d.</i>	<i>s.</i>	<i>d.</i>
Safe making . . . . .	60	10	28	6
Scale, weighing machine, etc., making . . . . .	69	7	26	9
Sheet-metal working :				
Firms employing 10 or more workers	67	4	30	0
Firms employing less than 10 workers	63	2	25	5
Tin box, canister, etc., making . . . . .	68	9	29	9
Small arms manufacture . . . . .	64	1	27	4
Stove, grate, and other light castings . . . . .	68	9	31	8
Typefoundry . . . . .	56	7	25	9
Jewellery making :				
Firms employing 10 or more workers	82	6	30	0
Firms employing less than 10 workers	73	2	33	1
Watch and clock making . . . . .	67	5	33	8
Gold, silver, electro-plate, etc. . . . .	64	6	27	4
Other metal :				
Firms employing 10 or more workers	65	1	29	3
Firms employing less than 10 workers	59	5	28	10
<b>TOTAL, Metal . . . . .</b>	<b>67</b>	<b>7</b>	<b>31</b>	<b>1</b>

Looking over the data for men's wages we find only one small industry in which workers working full-time do not earn the Rowntree minimum of 51s. 3d., even if we increase it, because of the heavy work usually done in this branch, to 53s. 3d. This one case is the harness furniture, etc., making branch. In all other industries average weekly earnings are above 53s. 3d.\*

But that does not mean that all men earn the required minimum. For a number of workers did not work full-time, but short-time. In the following table we give the average number of male workers working short-time and earning consequently less than the Rowntree minimum :

\* The Research Department of the Amalgamated Engineering Union (A.E.U.) comments quite correctly upon this statement: "A cross-section taken from the standpoint of the different occupations or from that of time workers and piece workers might show a larger number of workers below the 53s. 3d. minimum."

METAL, ENGINEERING, AND SHIPBUILDING INDUSTRIES IN WHICH MALE WORKERS EARN DURING THE NORMAL WORKING WEEK THE MINIMUM OF EXISTENCE, BUT IN WHICH THE SHORT-TIME WORKERS DO NOT EARN THIS MINIMUM

<i>Branches</i>	<i>Percentage of Short-time Workers</i>	<i>Number of Short-time Workers</i>
Pig iron manufacture . . . . .	2.1	224
Slag and slag wool . . . . .	30.3	239
Non-ferrous metals :		
Extracting and refining . . . . .	6.3	693
Rolling, etc. . . . .	6.1	415
General iron and steel founding . . . . .	16.1	6,163
Chain and anchor forging, etc. . . . .	4.8	157
Other forging * . . . . .	11.3	439
Other forging † . . . . .	7.6	38
Iron and steel tube making . . . . .	11.5	1,503
Wire, wire netting, etc. . . . .	6.5	581
Constructional engineering . . . . .	9.2	1,693
Agricultural engineering . . . . .	47.1	2,908
Motor engineering † . . . . .	2.7	51
Textile machinery making . . . . .	54.9	10,896
Heating and ventilating engineering . . . . .	2.8	129
General engineering † . . . . .	8.0	152
Textile machinery accessories . . . . .	19.7	919
Electric cable making . . . . .	3.8	379
Railway carriage, etc., building . . . . .	13.3	1,485
Cycle and motor accessories . . . . .	23.4	822
Shipbuilding and repairing . . . . .	16.1	7,310
Cutlery . . . . .	8.8	161
Files, saws, etc. . . . .	11.4	649
Needle and fish-hook making . . . . .	15.4	89
Metal bedstead, etc., making . . . . .	4.6	39
Bolt, nut, rivet, etc., making . . . . .	6.5	208
Brass, etc., making . . . . .	6.4	197
Dies, coins, seals, medals . . . . .	1.6	3
Iron and steel hollow ware . . . . .	13.1	395
Japanning and enamelling . . . . .	3.1	23
Lock, latch, and key making . . . . .	6.6	51
Nail making . . . . .	16.9	73
Safe making . . . . .	6.5	55
Sheet-metal working * . . . . .	9.6	1,358
Sheet-metal working † . . . . .	8.6	48

\* Firms employing 10 and more workers.

† Firms employing less than 10 workers.

<i>Branches</i>	<i>Percentage of Short-time Workers</i>	<i>Number of Short-time Workers</i>
Tin box making, etc. . . . .	11.3	171
Stove, grate, etc., castings . . . . .	9.3	791
Typefoundry . . . . .	45.0	109
Gold, silver, etc. . . . .	9.3	401
Other metal * . . . . .	7.1	1,547
Other metal † . . . . .	7.5	48
		TOTAL 42,125

Altogether about 5 per cent. of all male workers in the metal, engineering, and shipbuilding industries earn less than the minimum required even according to the computations of Mr. Rowntree. 5 per cent. of all the male workers aged 21 and over constitute over 90,000 workers.

While conditions among men are by no means as bad as in the textile industries, for example, women in the metal, engineering, and shipbuilding industries receive remarkably low wages. The difference between wage conditions for men and women is far greater in these industries than in the textile industries. While only in one very small industry do men receive for a full-time working week less than the Rowntree minimum, the number of metal, engineering, and shipbuilding industries which pay women below the Rowntree minimum is very considerable indeed.

In the following table I give all those branches, and the number of women engaged in them, in which women 18 years of age or over receive 3*l.* 9*d.* and less :

<b>INDUSTRIES IN WHICH FEMALE WORKERS EARN A WEEKLY AVERAGE WAGE LOWER THAN THE COST-OF-LIVING MINIMUM</b>	
<i>Branches</i>	<i>Number of Workers covered by the Government Enquiry</i>
Pig iron manufacture . . . . .	13
Iron and steel smelting, etc. . . . .	397

\* Firms employing 10 or more workers.

† Firms employing less than 10 workers.



<i>Branches</i>	<i>Number of Workers covered by the Government Enquiry</i>
Non-ferrous metals :	
Extracting and refining . . . .	376
Founding and finishing . . . .	2,943
Rolling, etc. . . . .	601
General iron and steel founding . . . .	1,378
Other forging * . . . .	91
Tinplate, etc., manufacture . . . .	1,343
Iron and steel tube making . . . .	271
Wire, wire netting, etc. . . . .	1,316
Agricultural engineering . . . . .	148
Boiler and tank making . . . . .	58
Constructional engineering . . . . .	70
Electrical engineering . . . . .	17,487
Locomotive engineering . . . . .	10
Marine engineering . . . . .	13
Motor engineering † . . . . .	36
Textile machinery making . . . . .	319
General engineering † . . . . .	27
Textile machinery accessories . . . . .	1,902
Heating and ventilating engineering . . . . .	447
Typewriters, etc. . . . .	404
Electrical cable making . . . . .	4,127
Railway carriage, etc., building . . . . .	65
Cycle and motor accessories . . . . .	3,740
Shipbuilding and repairing . . . . .	357
Cutlery . . . . .	1,433
Files, saws, etc. . . . .	1,215
Pin making . . . . .	252
Needle and fish-hook making . . . . .	1,049
Metal bedstead, etc., making . . . . .	744
Bolt, nut, rivet, etc., making . . . . .	2,782
Brass, etc., making . . . . .	2,349
Dies, coins, seals, medals . . . . .	84
Harness furniture, etc., making . . . . .	125
Iron and steel hollow ware . . . . .	1,790
Japanning and enamelling . . . . .	580
Lock, latch, and key making . . . . .	635
Nail making . . . . .	273
Safe making . . . . .	59
Scale, etc., making . . . . .	142
Sheet metal working . . . . .	6,814

\* Firms employing 10 or more workers.

† Firms employing less than 10 workers.

<i>Branches</i>	<i>Number of Workers covered by the Government</i>	
	<i>Enquiry</i>	
Tin box, etc., making . . . . .	3,934	
Small arms manufacture . . . . .	52	
Stoven, grate, etc., castings . . . . .	693	
Typefoundry . . . . .	21	
Jewellery making * . . . . .	1,734	
Gold, silver, etc. . . . .	2,776	
Other metal . . . . .	7,816	
	<b>TOTAL 75,281</b>	

Of the 224,008 female workers covered by the Government enquiry one-third are working in industries which, on the average, pay less than the Rowntree minimum for a full-time week. And this in an industry in which almost every branch pays to the men full-time weekly wages in excess of this minimum !

About one-third, to be exact 25,457, of the women receiving a full-time weekly wage below the minimum succeed in passing this minimum through over-time work.

To those industries which, according to the Government survey, pay average wages below the minimum must be added a number of industries for which the average is above the minimum, but only because of the great extent of over-time work.

**INDUSTRIES IN WHICH OVER-TIME PAYMENTS DRIVE EARNINGS ABOVE THE COST-OF-LIVING MINIMUM**

<i>Branches</i>	<i>Percentage working Over-time</i>	<i>Number of Workers</i>		<i>Workers earning Less than Minimum</i>
		<i>Total</i>	<i>On Over- time</i>	
Aircraft manufacture . . . . .	68.5	1,053	721	332
Electrical and scientific, etc. . . . .	41.0	9,320	3,821	5,499
Lift manufacture . . . . .	52.3	69	36	33
General engineering * . . . .	46.1	14,053	6,478	7,575
Telephone, etc., appa- ratus . . . . .	71.2	7,094	5,051	2,043
Gas- and water-meter making . . . . .	26.0	859	224	635
		<b>TOTAL 32,448</b>	<b>16,331</b>	<b>16,117</b>

\* Firms employing 10 or more workers.

In some of the industries which pay an average weekly, full-time wage above the minimum the extent of short-time is so great that a number of female workers do not earn this minimum; in the Government enquiry their number is 4,662.

Putting together the results from the Government enquiry we arrive at the following tabulation :

1. Workers who in a normal working week do not earn the minimum . . . . .	75,291
2. Ditto (in industries where the average wage through over-time payments is inflated) . . . . .	18,117
3. Workers who because of short-time do not earn the minimum * . . . . .	4,662
4. Workers who because of over-time earn more than the minimum † . . . . .	25,457

Altogether, in October 1935 over 70,000 female workers aged 18 or more in the establishments covered by the Government enquiry earned less than the minimum regarded by Mr. Rowntree as necessary for leading an independent life; 70,000 workers are 54 per cent. of all workers covered by the Government enquiry. If we apply this percentage to the total number of female workers aged 18 or over employed in the metal, engineering, and shipbuilding industries, we arrive at a total number of over 165,000 female workers who earn less than the Rowntree minimum.

*Adding male and female workers together we find that over 250,000 workers in the metal, engineering, and shipbuilding industries earn less than what Mr. Rowntree regards as a minimum.*

This figure is a minimum figure because it is not possible to estimate the relatively higher percentage of the 150,000 workers in small establishments who earn less than the minimum.

\* In industries which on the average pay more than the minimum.

† In industries which on the average pay less than the minimum.

The question arises, How have earnings developed since October 1935 ? It is well known, though no accurate statistics exist, that short-time has declined rapidly in the armament industry while in some other branches short-time has even increased recently because of raw material shortage. At the same time over-time has increased in quite a number of branches. As to wage rates, the *Ministry of Labour Gazette* of April 1937 remarks :

“ In a number of industries for which particulars are given below, rates of wages have increased since the date (October 1935) to which the enquiry related. In the manufacture of pig iron and in the smelting and rolling of iron and steel rates of wages have been increased by varying amounts in different districts. In the engineering industry, men have received an increase of 3s. a week, women 18 years and over 2s., and girls under 18 1s. a week. In shipbuilding there has been a general increase of 4s. a week for time-workers and of 8 per cent. for piece-workers. There have also been increases in other metal industries, including electric cable making, brass working, tube making, lock, latch, and key making, and chain making.”

And since April 1937 the more important increases in rates of wages occurred in the pig iron and steel industry, for patternmakers in many important engineering districts in England and Wales, in the shipbuilding and repairing industry, and in a number of small industries.

Have these increases \* brought wages to a level relatively higher than that of the cost of living ? This question can without hesitation be answered in the negative. Even in the iron and steel industry—which undoubtedly is, apart from the special armament industries, the best working industry at present—real wages, even if computed with the official cost-

\* The Research Department of the A.E.U. supplements our remarks as follows : “ War bonus has been increased by 6s. per week, nightshift and overtime allowances have been increased, and apart from the patternmakers' increase, the wage rates for various occupations have been raised in 41 out of the 222 districts of the A.E.U.”

of-living index, which indicates the rise of prices but very inadequately, show only a slight increase since October 1935.

According to the statistics of the British Iron and Steel Federation \* average weekly earnings (including over-time) developed as follows :

AVERAGE WAGES IN THE IRON AND STEEL INDUSTRY			
Month	1935	1936	1937
	£ s. d.	£ s. d.	£ s. d.
January . . . . .	—	3 5 9	3 9 9
February . . . . .	—	3 7 1	3 11 11
March . . . . .	—	3 7 0	3 11 2
April . . . . .	—	3 5 6	3 11 6
May . . . . .	—	3 7 3	3 10 2
June . . . . .	—	3 5 10	3 13 11
July . . . . .	—	3 7 9	3 15 0
August . . . . .	—	3 5 10	3 12 2
September . . . . .	—	3 9 9	3 18 0
October . . . . .	3 5 8	3 10 3	3 17 6
November . . . . .	3 6 4	3 10 7	3 18 2
December . . . . .	3 3 3	3 8 0	3 17 6

Taking October 1935 as a base, or 100, real average earnings developed quarterly as follows :

AVERAGE REAL WAGES IN THE IRON AND STEEL INDUSTRY			
Quarter	1935	1936	1937
First . . . . .	—	100	104
Second . . . . .	—	101	105
Third . . . . .	—	102	107
Fourth . . . . .	98	103	107

Even in this specially favoured industry, and though computed with the help of the insufficient official index of cost of living, † real wages have increased only by about 7 per cent. since October 1935.

If we take into account that in most other branches of the metal, engineering, and shipbuilding industries wages have not developed as favourably as in the iron and steel industry, if also we take into account that recently unemployment and

\* Cf. the *Monthly Statistical Bulletin* of the Federation.

† The insufficiency of this index has become so obvious that an official reconstruction of the index is being undertaken.

especially short-time have increased, and if we finally take into account that the percentage of women workers in these three industries has increased not inconsiderably, then it is obvious that conditions, in these three industries combined, to-day are worse rather than better as compared with October 1935. The chief reason for this development is, of course, the rapid rise in prices.

*One may conclude, therefore, that to-day about one-quarter of a million of the workers in the metal, engineering, and ship-building industries do not receive wages which are high enough to maintain them on a living standard which Mr. Rowntree regards as a minimum.*

### 3. WAGES AND COST OF LIVING IN THE MINING INDUSTRIES

Although mining undoubtedly is the most dangerous profession, the accident rate being higher than in any other industry, and although mining belongs to the most strenuous kind of labour done by workers, miners usually earn less than the average of industrial workers as a whole.

If we compare the earnings of miners with what Mr. Rowntree regards as the minimum amount necessary to raise a family—or in the case of a woman worker, in order to live independently—we must realise that Mr. Rowntree has computed such a minimum only for workers doing moderate work, and not for workers who carry out one of the heaviest tasks performed in industry. We shall, therefore, just as in the case of the metal, engineering, and shipbuilding industries, add 2s. per week to the Rowntree minimum for the additional labour force spent by the miner.

The statistical material available for the coal industry is so different from that which we have at our disposal for the other mining industries that it seems advisable to divide our investigation into two parts, the first dealing with the coal industry, the second dealing with all other mining and with the quarrying industry.

*A. The Coal-mining Industry*

The Secretary for Mines publishes quarterly and annual reports on labour conditions in coal-mines, which are satisfactory enough to serve as a basis for our investigation. This Government information is supplemented by most valuable statistical bulletins published by the Mine Workers' Federation of Great Britain.

According to the annual Report of the Secretary for Mines for the year ended December 31, 1936, annual earnings in 1936 were as follows :

ANNUAL EARNINGS PER PERSON EMPLOYED AT COAL MINES IN  
THE PRINCIPAL DISTRICTS OF GREAT BRITAIN

<i>Districts</i>	<i>Cash Earnings</i>			<i>Value of Allowances in Kind</i>		
	<i>£</i>	<i>s.</i>	<i>d.</i>	<i>£</i>	<i>s.</i>	<i>d.</i>
Northumberland . . . . .	120	10	1	13	10	4
Durham . . . . .	116	1	9	15	4	0
Yorkshire . . . . .	134	19	5	3	12	0
North Derbyshire and Nottinghamshire	129	13	10	3	13	8
South Derbyshire, Leicestershire, Can- nock Chase and Warwickshire . . . . .	137	8	3	4	10	4
Lancashire, Cheshire and North Stafford- shire . . . . .	137	3	1	0	8	0
South Wales and Monmouthshire* . . . . .	126	0	0	2	19	4
Cumberland, North Wales, South Staffordshire, Shropshire, Bristol, Forest of Dean, Somerset and Kent	136	10	0	3	2	8
Scotland . . . . .	146	9	1	0	10	8
<b>GREAT BRITAIN . . . . .</b>	<b>131</b>	<b>4</b>	<b>1</b>	<b>5</b>	<b>1</b>	<b>4</b>

If we add 2s. per week to the Rowntree minimum because of the especially heavy work of the miners, we arrive at a cost-of-living minimum for the year 1936 of about £141.

Only in two districts do miners' wages reach or exceed this minimum, in South Derbyshire, etc., and in Scotland. In both districts taken together about 130,000 miners are employed while the coal-mining industry as a whole employs about 740,000 miners.

*Thus we come to the conclusion that little more than one-sixth*

\* Year ended January 1937.

of all miners earn the cost-of-living minimum; while over 600,000 miners earn even less than what Mr. Rowntree regards as a minimum.

One may object to these figures on the ground that they include the earnings of women and juveniles. But the number of women in coal-mining is absolutely negligible, being below 1 per cent., and the number of juveniles, though not negligible, is not great enough to modify the result to any considerable extent.\*

How have wages changed since 1936? Complete data for the whole of 1937 are not yet available. The last quarterly figures available refer to the third quarter of 1937. According to these statistics † earnings developed as follows:

QUARTERLY CASH EARNINGS AND ALLOWANCES AT COAL MINES IN THE  
PRINCIPAL DISTRICTS OF GREAT BRITAIN, JULY-SEPTEMBER  
1937

Districts	Total		Number of Employed
	£	s. d.	
Nerthumberland . . . . .	35	18 11	40,545
Durham . . . . .	36	3 5	110,436
South Wales and Monmouth ‡ . . . . .	37	9 6	125,867
Yorkshire . . . . .	35	7 0	138,061
North Derbyshire and Nottinghamshire	37	11 2	79,923
South Derbyshire, Leicestershire, Can- noek Chase, and Warwickshire . . . . .	35	10 1	47,911
Lancashire, Cheshire, and North Staffordshire . . . . .	34	14 11	77,825
Cumberland, North Wales, South Staffordshire, Shropshire, Bristol, Forest of Dean, Somerset, and Kent . . . . .	36	7 2	36,374
Scotland . . . . .	37	14 8	83,592
<b>GREAT BRITAIN . . . . .</b>	<b>36</b>	<b>5 1</b>	<b>740,434</b>

\* The percentage of workers below the age of 20 years is only 14. Average earnings of juvenile workers, even if they were 20 per cent. below those for men 20 years of age and over, would thus influence average wages for all workers only to an extent of less than 3 per cent., and would affect our above statement and especially the following statement based on the 1937 figures only very little.

† Cf. Mines Department, Coal Mining Industry, Statistical Summary for the quarter ended September 30, 1937. Figures per quarter were computed from the official data for earnings per shift, total number of workers, total number of shifts.

‡ August, September, October.



If we compare this table with the previous one we find that earnings as a rule have increased. But the cost of living has increased too. The Rowntree minimum computed with the help of the official cost-of-living index was 54s. 9d. and if we add 2s. because mining is especially heavy work, was 56s. 9d. per week for the three months from July to September 1937. Converting this weekly figure into a quarterly one, we arrive at a quarterly cost of living of £37 5s. 10d.

Comparing the cost of living with actual earnings we find that in three districts average earnings are higher than the cost of living: South Wales and Monmouth, North Derbyshire and Nottinghamshire, and Scotland. It seems that one district more than in 1936 has passed the Rowntree minimum. But the figures for South Wales and Monmouth refer to August-October, and if we take into account the increase in the cost of living in October we find that the cost of living was slightly higher than the average earnings of the miners in South Wales and Monmouth. In Scotland earnings were higher than the cost of living in 1936 as well as in the third quarter of 1937. In South Derbyshire, etc., wages have declined below the Rowntree minimum, while in North Derbyshire they have passed it. Since in North Derbyshire more workers are employed than in South Derbyshire, the percentage of workers earning more than the Rowntree minimum has slightly increased between 1936 and the third quarter of 1937. But the change is not great, and, on the whole, our conclusion as to labour conditions in coal-mining which we reached on the basis of the 1936 figures still holds true to-day.

### *B. Mining (other than Coal) and Quarrying*

While statistics of earnings in the coal industry are comparatively better than those for other industries, statistics in all other mining industries and in the quarrying industry are just as bad as for other industries. The most recent statistics of earnings for any extensive sample available

are those contained in the Government survey for October 1935.\*

In the following table I give its outcome, selecting from the data those of earnings for men 21 years of age and over and for women 18 years of age and over. I choose only these two categories because in the present study we are concerned solely with a comparison of the wages of adult workers and their cost of living.

**AVERAGE WEEKLY EARNINGS IN MINING (OTHER THAN COAL)  
AND QUARRYING**

<i>Branches</i>	<i>Earnings of Men 21 years and over</i>	<i>Earnings of Women 18 years and over</i>
	<i>s. d.</i>	<i>s. d.</i>
Iron ore mining and quarrying . . . . .	53 1	—
Tin and copper mining . . . . .	57 11	—
Stone quarrying . . . . .	51 3	—
Stone cutting, dressing, and turning . . . . .	64 1	30 9
Slate mining and quarrying . . . . .	45 1	—
Slate cutting, dressing, and turning . . . . .	56 2	25 3
Salt mining and salt works . . . . .	60 9	29 10
Clay, sand, gravel, and chalk pits . . . . .	52 7	—
Other mining and quarrying, etc. . . . .	56 1	—

All women earn, on the average, less than the minimum of 31s. 9d. Twenty-five per cent., however, earn more through over-time work. Since according to Government statistics about 1,600 women aged 18 years and over are employed in these industries, about 1,200 receive less than what on the basis of the computations of Mr. Rowntree must be regarded as a minimum.

Among men conditions are almost as bad :

**MINING (OTHER THAN COAL) AND QUARRYING INDUSTRIES IN WHICH  
THE WORKERS EARN A WEEKLY AVERAGE WAGE LOWER THAN  
THE COST-OF-LIVING MINIMUM**

<i>Branches</i>	<i>Number of Workers covered by the Government Enquiry</i>
Iron ore mining and quarrying . . . . .	6,097
Stone quarrying . . . . .	18,286
Slate mining and quarrying . . . . .	5,420
Clay, sand, gravel, and chalk pits . . . . .	8,695
<b>TOTAL</b>	<b>38,498</b>

\* Cf. *Ministry of Labour Gazette*, May 1937.

In most of these industries, however, there are a number of workers doing over-time who earn, on the average, more than the cost-of-living minimum ; their total number in the Government survey is 5,086.

On the other hand, in a number of industries only over-time payments have driven the average earnings above the cost-of-living minimum.

**INDUSTRIES IN WHICH OVER-TIME PAYMENTS DRIVE AVERAGE EARNINGS ABOVE THE COST-OF-LIVING MINIMUM**

<i>Branches</i>	<i>Percentage working Over-time</i>	<i>Number of Workers Total</i>	<i>On Over-time</i>	<i>Workers earning Less than Minimum</i>
Slate cutting, etc. . . . .	26.3	272	72	200
Other mining, etc. . . . .	17.1	4,283	732	3,551
<b>TOTAL</b>		4,555	804	3,751

And finally, in some industries which pay an average wage above the cost-of-living minimum, a number of workers do not earn this minimum because of short-time.

**INDUSTRIES IN WHICH THE WORKERS EARN DURING THE NORMAL WORKING WEEK THE MINIMUM OF EXISTENCE, BUT IN WHICH THE SHORT-TIME WORKERS DO NOT EARN THIS MINIMUM**

<i>Branches</i>	<i>Percentage of Short-time Workers</i>	<i>Number of Short-time Workers</i>
Tin and copper mining . . . . .	3.1	23
Stone cutting, etc. . . . .	7.0	376
Salt mining . . . . .	11.7	303
<b>TOTAL</b>		702

Combining the results of our investigation into men's earnings we arrive at the following table :

1. Workers who in a normal working week do not earn the minimum . . . . . 38,498
2. Ditto (in industries where the average wage through over-time payments is inflated) . . . . . 3,751

3. Workers who because of short-time do not earn the minimum *	702
4. Workers who because of over-time earn more than the minimum † . . . . .	5,086

Altogether in October 1935 38,000 male workers, aged 21 and more, in the establishments covered by the Government enquiry earned less than what even Mr. Rowntree regards as a minimum. 38,000 workers represent almost 75 per cent. of all workers covered by the Government enquiry. If we apply this percentage to the total number of male workers, aged 21 and more, employed in the mining (other than coal) and quarrying industries, we arrive at a total number of about 60,000 male workers who earn less than the Rowntree minimum.

*Adding together the figures for males and females, we find that over 60,000 workers or about 75 per cent. of all workers in the mining (other than coal) and quarrying industries earn less than the Rowntree minimum.*

How have wages in these industries developed since October 1935? The *Ministry of Labour Gazette* in an attempt to bring these figures up to date says, in the May 1937 issue, very shortly: "In the mining and quarrying industries there have been increases in various districts." That is all. And for the rest of the year 1937 little more is to report. There have been a number of wage rate increases, but on the whole one can say that the increase in the cost of living during the last year has wiped out the gains in real earnings between the end of 1935 and the beginning of 1937.

### *C. Treatment of Non-metalliferous Mine and Quarry Products*

The source of our wage data for this industry is, as for many others, the Government report on earnings in October 1935.‡

\* In industries which on the average pay more than the minimum.

† In industries which on the average pay less than the minimum.

‡ Cf. *Ministry of Labour Gazette*, February 1937.

This report gives the following data concerning the earnings of adult men and women.

**AVERAGE WEEKLY EARNINGS IN THE TREATMENT OF NON-METALLIFEROUS MINE AND QUARRY PRODUCTS**

<i>Branches</i>	<i>Earnings of</i>	<i>Earnings of</i>
	<i>Men 21 years</i>	<i>Women 18 years</i>
	<i>and over</i>	<i>and over</i>
	<i>s. d.</i>	<i>s. d.</i>
Coke ovens and by-product works . . . . .	61 10	20 0
Patent fuel manufacture . . . . .	62 4	—
Cement manufacture . . . . .	65 11	26 3
Artificial stone and concrete manufacture . . . . .	58 9	27 4
Lime kilns and whiting works . . . . .	58 3	21 3
Abrasives and abrasive materials . . . . .	61 4	31 4
Other products of non-metalliferous mines and quarries . . . . .	57 7	29 9
<b>TOTAL, Treatment of above products</b>	60 8	29 1

Since for this industry we have also to add a supplement to the Rowntree minimum because of the heavy character of the work done in its branches, we can easily deal with the wages of female workers. There is no industry or branch in which women on the average receive the Rowntree minimum plus 2s.; 100 per cent. of all women workers receive, on the average, less than the minimum cost of living. According to the official employment figures about 2,500 women are employed in the treatment of non-metalliferous mine and quarry products. There are a number of female workers who because of over-time work earn somewhat more than the minimum, but their total number does not exceed 500.

Of the men, all earn, on the average, more than the minimum, even if we take into account the fact that average earnings are somewhat inflated through over-time payments. But, of course, a not inconsiderable number of short-time workers do not earn the minimum of existence.

INDUSTRIES IN WHICH THE WORKERS EARN DURING THE NORMAL WORKING WEEK THE MINIMUM OF EXISTENCE, BUT IN WHICH THE SHORT-TIME WORKERS DO NOT EARN THIS MINIMUM

<i>Branches</i>	<i>Percentage of Short-time Workers</i>	<i>Number of Short-time Workers</i>
Coke ovens and by-products works . . . . .	3.1	259
Patent fuel manufacture . . . . .	32.1	246
Cement manufacture . . . . .	6.0	514
Artificial stone and concrete manufacture . . . . .	6.1	528
Lime kilns and whiting works . . . . .	24.9	1,220
Other products, etc. . . . .	16.8	1,538
	<b>TOTAL</b>	<b>4,305</b>

4,305 workers do not earn their existence minimum because of short-time work. That is about 10 per cent. of all workers covered in the Government survey. If we apply this percentage to the total number of workers employed in these industries, we arrive at a figure of over 4,500 workers who do not earn the minimum necessary to raise a family.

In order to bring the 1935 figures up to date, that is up to February 1937, the *Ministry of Labour Gazette* remarks: "Other increases have included 1s. 2d. per hour for cement workers." But neither this increase nor others which have taken place since have improved the situation; on the contrary, the increase in the cost of living has led to an increasing discrepancy between earnings and the cost of living.

If we survey the mining industry as a whole, including the coal-mining industry, and if we compare earnings and the cost of living, then we are driven to the conclusion that the mining industry quite definitely belongs to the worst paying industries, that labour conditions as far as earnings are concerned are worse in mining than in most other industries—worse, for instance, than in the textile industries. The relatively better position which the English miner once

enjoyed, compared not only with miners in other countries but also with other industrial workers in Great Britain, has been lost completely. To-day the miner has the privilege of having one of the most dangerous and at the same time one of the worst-paid jobs! About four-fifths of all miners in employment—we are leaving out of account the unemployed miners—are not earning even what Mr. Rowntree, who has constructed a family budget which by all workers and friends of labour must be condemned as inadequate, regards as a minimum.

#### 4. WAGES AND COST OF LIVING IN THE CLOTHING INDUSTRIES

The Government survey of earnings in the clothing industries in October 1935 \* is seriously affected by the fact that the small firms are inadequately covered. On the average, according to the Census of Production, 1930 (Vol. I), about 20 per cent. of all employees in the clothing industries are working in firms with less than 10 employees.

In the tailoring, dressmaking, millinery trades, etc., about 25 per cent. of all employees are employed in small firms. The Government survey covers altogether 58,596 workers in the tailoring (retail bespoke), dress, blouse, and overall, and millinery (excluding the making of felt hats) trades. Since the survey gives separate figures for small and large firms, it is possible to determine the percentage of workers in small firms in these industries covered by the Government. The number of workers in small firms is 4,854, or only about 8 per cent. of all workers. The percentage is only about one-third of what it should be. And since, especially in the clothing industries, the small shops generally pay considerably lower wages than the large shops, this deficiency in the Government statistics must affect the official data appreciably. For the fur trade the Government survey does not give separate figures for small and large firms. But since the percentage of workers working in small firms is,

\* Cf. *Ministry of Labour Gazette*, February 1937.

according to the Census of Production, about 38 per cent., we can, even without any direct evidence, conclude for this industry too that the official figures for earnings are too high. And this holds more or less true for almost all branches of the clothing industries.

The following table shows the results of the Government survey relative to earnings for men 21 years and over and women 18 years and over.

## AVERAGE WEEKLY EARNINGS IN THE CLOTHING INDUSTRIES

<i>Branches</i>	<i>Earnings of Men 21 years and over</i>		<i>Earnings of Women 18 years and over</i>	
	<i>s.</i>	<i>d.</i>	<i>s.</i>	<i>d.</i>
Tailoring (ready-made and wholesale bespoke) . . . . .	67	6	31	11
Tailoring (retail bespoke) :				
Firms employing 10 or more workers	69	4	34	1
Firms employing less than 10 workers	59	6	32	0
Wholesale mantle and costume manufacture . . . . .	76	4	37	5
Dresses, blouses, and overalls :				
Firms employing 10 or more workers	65	10	35	9
Firms employing less than 10 workers	80	0	33	9
Shirts, collars, and underclothing . . . . .	62	10	30	2
Stays and corsets . . . . .	61	10	31	5
Handkerchiefs, scarves, and ties . . . . .	65	0	30	4
Millinery (excluding the making of felt hats) :				
Firms employing 10 or more workers	70	6	39	6
Firms employing less than 10 workers	—		36	9
Cloth clothing manufacture (unspecified or combinations of above) . . . . .	71	2	33	10
Straw hat manufacture . . . . .	87	10	44	10
Cloth hat and cap manufacture . . . . .	57	10	27	4
Felt hat manufacture . . . . .	70	1	30	2
Hat and cap manufacture (not separately distinguished) . . . . .	76	1	37	11
Glove manufacture (not knitted or rubber)	58	11	27	10
Boot, shoe, and slipper manufacture . . . . .	61	4	35	2
Boot and shoe repairing :				
Firms employing 10 or more workers	67	7	34	8
Firms employing less than 10 workers	60	5	30	8
Fur . . . . .	86	10	48	6



<i>Branches</i>	<i>Earnings of</i>	<i>Earnings of</i>
	<i>Men 21 years</i>	<i>Women 18 years</i>
	<i>and over</i>	<i>and over</i>
	<i>s. d.</i>	<i>s. d.</i>
Umbrella and walking-stick manufacture	51 8	35 3
Laundries :		
Firms employing 10 or more workers	59 6	28 1
Firms employing less than 10 workers	47 0	23 2
Dyeing and dry cleaning :		
Firms employing 10 or more workers	59 10	31 0
Firms employing less than 10 workers	53 6	35 0
Miscellaneous clothing (including combinations of above)	61 0	33 6
<b>TOTAL, Clothing</b>	<b>64 6</b>	<b>32 8</b>

There is only one industry in which men do not earn the Rowntree minimum of 51s. 3d. per week, i.e. laundries employing less than 10 workers; only 97 workers are covered by the Government survey in these laundry firms. In another industry, the manufacture of umbrellas and walking-sticks, average wages through over-time work are driven above the minimum, while in fact workers working normal working time or less actually receive less than the minimum. The total number of workers in this industry covered by the Government survey is 450, of whom 158 are working over-time.

In a number of industries the workers doing short-time do not reach the Rowntree minimum :

**CLOTHING INDUSTRIES IN WHICH MALE WORKERS EARN DURING THE NORMAL WORKING WEEK THE MINIMUM OF EXISTENCE, BUT IN WHICH SHORT-TIME WORKERS DO NOT EARN THIS MINIMUM**

<i>Branches</i>	<i>Percentage of</i>	<i>Number of</i>
	<i>Short-time</i>	<i>Short-time</i>
	<i>Workers</i>	<i>Workers</i>
Tailoring (retail bespoke) * . . . .	33.1	823
Tailoring (retail bespoke) † . . . .	39.4	423
Stays and corsets. . . . .	40.5	329
Cloth hat and cap manufacture . . . .	58.1	175
Felt hat manufacture . . . . .	13.7	337

\* Firms employing 10 or more workers.

† Firms employing less than 10 workers.

<i>Branches</i>	<i>Percentage of Short-time Workers</i>	<i>Number of Short-time Workers</i>
Glove manufacture (not knitted or rubber)	14.1	245
Boot, shoe, and slipper manufacture . . . . .	19.3	5,101
Boot and shoe repairing * . . . . .	13.5	170
Dyeing and dry cleaning * . . . . .	3.7	5
Miscellaneous clothing (including combinations of above) . . . . .	10.5	68
		TOTAL 7,676

If we add together all the workers who earn less than the Rowntree minimum we arrive at the figure of 8,065—7,676 short-time workers and 389 workers who even with full-time work do not earn the minimum. 8,065 represent about 12 per cent. of all the male workers 21 years of age and over covered by the Government survey. If we apply this percentage to the total number of male workers, 21 years of age and over, employed in the clothing industries, we arrive at a total figure of 18,000 male workers 21 years of age and over, who do not earn the Rowntree minimum. If we remember what was said above about the inadequate covering of small firms it will be obvious that in reality this figure is decidedly higher.

As far as women's wages are concerned, there are three industries in which earnings are below the Rowntree minimum of 29s. 9d.

INDUSTRIES IN WHICH FEMALE WORKERS EARN A WEEKLY  
AVERAGE WAGE LOWER THAN THE COST-OF-LIVING MINIMUM

<i>Branches</i>	<i>Number of Workers covered by the Government Enquiry</i>
Cloth hat and cap manufacture . . . . .	1,308
Glove manufacture (not knitted or rubber)	2,115
Laundries, 10 or more workers . . . . .	28,799
Laundries, less than 10 workers . . . . .	566
	TOTAL 32,808

\* Firms employing less than 10 workers.

In two industries over-time work drives the average earnings above the Rowntree minimum :

INDUSTRIES IN WHICH OVER-TIME PAYMENTS DRIVE AVERAGE EARNINGS ABOVE THE COST-OF-LIVING MINIMUM

<i>Branches</i>	<i>Percentage</i>	<i>Number of Workers</i>	<i>Workers</i>
	<i>working</i>	<i>On Over-</i>	<i>earning</i>
	<i>Over-time</i>	<i>Total</i>	<i>Less than</i>
			<i>Minimum</i>
Handkerchiefs, etc.	28.7	2,646	1,887
Felt hat manufacture	32.9	2,399	1,610
		TOTAL	3,497
		5,045	1,548

A number of workers employed in industries which on the average pay wages below the Rowntree minimum earn through over-time more than this minimum. Their total number is 5,443.

On the other hand, a number of workers employed in industries paying on the average more than the Rowntree minimum do not earn this minimum because of short-time :

CLOTHING INDUSTRIES IN WHICH FEMALE WORKERS EARN DURING THE NORMAL WORKING WEEK THE MINIMUM OF EXISTENCE, BUT IN WHICH THE SHORT-TIME WORKERS DO NOT EARN THIS MINIMUM

<i>Branches</i>	<i>Percentage of</i>	<i>Number of</i>
	<i>Short-time</i>	<i>Short-time</i>
	<i>Workers</i>	<i>Workers</i>
Tailoring (ready-made, etc.) . . . . .	36.9	12,966
Tailoring (retail bespoke) * . . . . .	33.1	1,625
Tailoring (retail bespoke) † . . . . .	39.4	495
Wholesale mantle and costume manufacture . . . . .	21.1	1,016
Dresses, blouses, and overalls * . . . . .	28.1	4,476
Dresses, blouses, and overalls † . . . . .	18.6	183
Shirts, collars, and underclothing . . . . .	30.8	6,042
Stays and corsets . . . . .	40.5	2,130
Millinery (excluding the making of felt hats) † . . . . .	4.0	11
Cloth clothing manufacture, etc. . . . .	17.9	2,769
Boot, shoe, and slipper manufacture . . . . .	19.3	3,776
Boot and shoe repairing † . . . . .	13.5	4

\* Firms employing 10 or more workers.

† Firms employing less than 10 workers.

<i>Branches</i>	<i>Percentage of Short-time Workers</i>	<i>Number of Short-time Workers</i>
Umbrella and walking-stick manufacture	4.5	34
Dyeing and dry cleaning * . . . .	18.6	645
Dyeing and dry cleaning † . . . .	3.7	6
Miscellaneous clothing, etc. . . . .	10.5	284
		TOTAL 36,462

If now we add together all the data on women's wages we arrive at the following result :

1. Workers who in a normal working week do not earn the minimum . . . . .	32,808
2. Ditto (in industries where the average wage through over-time payments is inflated) . . . . .	3,497
3. Workers who because of short-time do not earn the minimum † . . . . .	36,462
4. Workers who because of over-time earn more than the minimum § . . . . .	5,443

Altogether, in October 1935, over 65,000 female workers, aged 18 and over in the establishments covered by the Government survey earned less than what even Mr. Rowtree regards as a minimum for an independently living female worker. Over 65,000 workers are about 37 per cent. of all female workers aged 18 and over employed in the establishments covered by the Government survey. If we apply this percentage to the total number of female workers aged 18 and more employed in the clothing industries, we arrive at a figure of more than 130,000 female workers aged 18 and over who do not earn what Mr. Rowtree regards as a minimum.

In order to bring the October 1935 figures up to date, the *Ministry of Labour Gazette* summarises the changes between

\* Firms employing 10 or more workers.

† Firms employing less than 10 workers.

‡ In industries which on the average pay more than the minimum.

§ In industries which on the average pay less than the minimum.

October 1935 and February 1937, when the results of the 1935 survey were published, as follows :

“ In the clothing group there have been increases of 3s. a week for women in the boot and shoe industry, and of various amounts for workers in the retail bespoke tailoring trade.”

Since February 1937 a number of further wage-rate increases have taken place, but though up to the beginning of 1937 real earnings in the clothing industry have probably increased, since then, because of the rapid increase in the cost of living, they have decreased again. To-day conditions in the clothing industries are at best the same as in October 1935, and our findings, that *altogether about 150,000 workers, or about one quarter of the adult workers employed, in the clothing industries do not receive the Rowntree minimum* again holds true.

For the clothing industries, it is possible to utilise a second source of wage data which supplements the data on earnings given above: the minimum time rates of wages fixed for adult workers in Great Britain under the Trade Boards Acts of 1909 and 1918.\*

The branches of the clothing industry covered by these acts are so numerous that it is of great interest to compare the rate of wages fixed under a Government act and the cost of living as estimated by Mr. Rowntree. The weekly cost of living minimum for men who have to raise a family amounts according to the estimates of Mr. Rowntree, to 53s. 5d. in December 1936, and for women who want to live independently to 31s. per week. Since the rate of wages are fixed per hour and since at the same time the number of hours per week, in respect of which the rates of wages are normally payable, are fixed under the Trade Board Acts, I give in the following table the hourly rates and at the same time the hourly earnings necessary in order to earn within the specified number of hours per week the cost-of-living minimum computed by Mr. Rowntree :

\* Cf. 23rd Abstract of Labour Statistics, London 1937.

MINIMUM HOURLY TIME RATES FIXED UNDER THE TRADE BOARD ACTS AND THE COST OF LIVING

Branches	Hourly Time Rates Necessary for covering the Cost of Living			
	Males s. d.	Females d.	Males s. d.	Females d.
Boot and shoe repairing . . . . .	1 2½	10½	1 1½	7½
Button manufacturing . . . . .	1 1½	6½	1 1½	7½
Corset . . . . .	1 1	7	1 1½	7½
Dressmaking and women's light clothing : *				
Retail bespoke dressmaking . . . . .	1 0	{ 6½ 7 7½ † }	1 1½	7½
Other branches . . . . .	1 0	7 †	1 1½	7½
Dressmaking and women's light clothing : ‡				
Retail bespoke dressmaking . . . . .	1 0	{ 7 7½ † }	1 2	8
Other branches . . . . .	1 0	6½	1 2	8
Fur . . . . .	1 1	7½	1 1½	7½
Hat, cap, and millinery * . . . . .	1 0	7 †	1 1½	7½
Hat, cap, and millinery : ‡				
Wholesale cloth hat and cap making . . . . .	1 2	7½	1 2	8
Other branches . . . . .	1 2	{ 7 7½ † }	1 2	8
Laundry :				
Cornwall and North of Scotland . . . . .	1 1½	6½	1 1½	7½
Rest of Great Britain . . . . .	1 1½	7	1 1½	7½
Linen and cotton handkerchief and household goods and linen piece goods . . . . .	11½	6½	1 1½	7½
Ready-made and wholesale bespoke tailoring . . . . .	11	7 †	1 1½	7½
Retail bespoke tailoring* . . . . .	{ 11½ to 1 4½ † }	{ 7½ to 10 † }	1 1½	7½
Retail bespoke tailoring † . . . . .	{ 11 to 1 1 † }	{ 7 7½ }	1 1½	7½
Shirtmaking . . . . .	1 1	7 †	1 1½	7½
Wholesale mantle and costume . . . . .	11½	7	1 1½	7½

\* England and Wales.

† Dependent on areas as graded by the Trade Board, or on length of employment in the trade.

‡ Scotland.

The results of this survey are astonishing. There are 19 branches for which minimum wage rates are fixed. In 13 of them the rates fixed are below the minimum cost of living for men; and in 18, that is in all branches except one, the minimum rates fixed for women are lower than the cost of living minimum for women. There is only one branch for men and women which pays minimum rates higher than the Rowntree minimum. So extraordinarily low are the wages fixed under the Trade Board Acts! And this was the situation at the end of 1936. At the beginning of 1938, because of the rapid rise in the cost of living, the situation is still worse.

In one industry we can observe the development of earnings month by month since October 1935, when the Government survey was made. The *Ministry of Labour Gazette* publishes monthly the percentage changes in employment and total wages paid to workers in the boot and shoe industry; and from these data it is easy to construct an index of money and real earnings, the real earnings being computed with the help of the official cost-of-living index :

AVERAGE WEEKLY EARNINGS IN THE BOOT AND SHOE INDUSTRY  
(October 1935=100)

Year and Month	Average Weekly Earnings	
	Money	Real
1935 October . . . . .	100	100
November . . . . .	98	96
December . . . . .	98	96
1936 January . . . . .	95	94
February . . . . .	98	97
March . . . . .	98	98
April . . . . .	98	99
May . . . . .	99	100
June . . . . .	99	99
July . . . . .	98	97
August . . . . .	98	97
September . . . . .	99	97
October . . . . .	98	96
November . . . . .	97	93
December . . . . .	94	90

<i>Year and Month</i>	<i>Average Weekly Earnings</i>	
	<i>Money</i>	<i>Real</i>
1937 January . . . . .	94	90
February . . . . .	100	95
March . . . . .	*101	97
April . . . . .	102	98
May . . . . .	99	95
June . . . . .	100	95
July . . . . .	100	93
August . . . . .	100	93
September . . . . .	100	93
October . . . . .	100	91
November . . . . .	100	90
December . . . . .	98 *	88

Real earnings in the boot and shoe industry have declined since October 1935 by about 12 per cent.—and this chiefly because of the increase in the cost of living.

#### 5. WAGES AND COST OF LIVING IN THE FOOD, DRINK, AND TOBACCO INDUSTRIES

The investigation of the Government into earnings and hours in the food, drink, and tobacco industries belongs to the least satisfactory of the series of studies undertaken in October 1935.† The chief reason for this is the fact that the considerable rôle which small firms with less than 10 workers play in this industry is not reflected in the data collected. This can be easily shown by comparing the actual percentage of workers employed by small firms, and the percentage of such workers covered by the Government survey.

For three branches the Government gives separate figures for workers in small and for workers in larger firms.

<i>Branches</i>	<i>Percentage of Workers covered working in Small Firms</i>
Grain milling . . . . .	7 per cent.
Bread and flour confectionery . . . . .	12 „
Mineral and aerated waters . . . . .	13 „

\* In January and February 1938 money wages increased by about 3 per cent.

† Cf. *Ministry of Labour Gazette*, March 1937.



According to the Census of Production, 1930 (Part III), the percentage of workers employed by small firms was throughout the industry as a whole on the average about 20 per cent. In the above three branches the percentage was as follows :

<i>Branches</i>	<i>Percentage of Workers working in Small Firms</i>
Grain milling . . . . .	About 23 per cent.
Bread and biscuit trades . . . . .	" 37 "
Aerated waters, cider, etc. . . . .	" 27 "

If we now compare wages in small and in other firms we can see what a great influence the neglect of the small firms in the Government survey has upon the final wage averages.

<i>Branches</i>	<i>Average Weekly Earnings of Men 21 years and over s. d.</i>
<i>Grain milling—</i>	
Small firms . . . . .	48 10
Other firms . . . . .	63 6
<i>Bread and flour confectionery—</i>	
Small firms . . . . .	55 6
Other firms . . . . .	63 4
<i>Mineral and aerated waters—</i>	
Small firms . . . . .	54 1
Other firms . . . . .	57 8

If the Government survey had covered the small firms to an extent corresponding to their importance then average wages for all workers would quite certainly be lower than they appear in the official statistics. But this is not all. Of the small firms covered by the Government survey undoubtedly the greater part are paying higher wages than the average usual among small firms, since among the non-reporting non-covered firms are more sweated shops than among the small firms reporting to the Government.

Thus all the results we get from a study of the Government survey will be underestimates of the number of workers receiving wages lower than the Rowntree minimum.

In the following table I give the results of the Government enquiry, selecting from the tables the data for earnings of men 21 years of age and over, and of women 18 years of age and over. I choose only these two categories because in the present study we are only concerned with the question, how many male workers get less than what is regarded as a minimum for raising a family, and how many female workers get less than is regarded as a minimum for an independent existence ?

AVERAGE WEEKLY EARNINGS IN FOOD, DRINK, AND TOBACCO  
INDUSTRIES

<i>Branches</i>	<i>Earnings of Men 21 years and over</i>		<i>Earnings of Women 18 years and over</i>	
	<i>s.</i>	<i>d.</i>	<i>s.</i>	<i>d.</i>
Grain milling :				
Firms employing 10 or more workers .	63	6	29	1
Firms employing less than 10 workers .	48	10	22	8
Cereal foods and starches . . . . .	68	7	30	10
Cattle and poultry foods (not oil cake) .	59	11	31	7
Grain milling, cattle and poultry food, etc. (not separately distinguished) . . . . .	64	4	30	11
Bread and flour confectionery :				
Firms employing 10 or more workers .	63	4	27	5
Firms employing less than 10 workers .	55	6	26	8
Biscuits . . . . .	62	10	34	6
Sugar making and refining . . . . .	69	2	29	0
Sugar confectionery . . . . .	62	9	30	7
Jam and fruit preserving . . . . .	59	8	28	7
Cocoa and chocolate * . . . . .	72	2	35	7
Chocolate and sugar confectionery (not separately distinguished) . . . . .	65	7	32	6
Bacon, hams, lard, and sausages . . . . .	58	4	29	9
Fish curing . . . . .	59	7	27	6
Other meat and fish preserving and meat extracts . . . . .	60	7	29	6
Butter, cheese, condensed and dried milk .	59	2	28	9
Margarine . . . . .	64	8	28	1
Vinegar brewing . . . . .	64	4	27	4
Pickles, spices, mustard, etc. . . . .	60	6	26	10

\* The figures for this industry relate, in the case of one large firm, to a week in August, conditions in October having been abnormal.

## HUNGER AND WORK

<i>Branches</i>	<i>Earnings of</i>	<i>Earnings of</i>
	<i>Men 21 years and over</i>	<i>Women 18 years and over</i>
	<i>s. d.</i>	<i>s. d.</i>
Other food (including combinations of above)	62 9	28 8
Malting . . . . .	53 10	28 9
Brewing . . . . .	63 8	29 2
Distilling, rectifying, and compounding of spirits . . . . .	61 2	32 5
Cider . . . . .	52 9	25 3
Mineral and aerated waters :		
Firms employing 10 or more workers .	57 8	24 3
Firms employing less than 10 workers .	54 1	24 7
Bottling of beer, wines, spirits, etc. . . . .	58 9	27 4
Brewing and bottling combined . . . . .	64 8	28 1
Other drink (including combinations of above) . . . . .	62 5	26 2
Tobacco, cigars, cigarettes, etc. . . . .	79 7	39 7
	<hr/>	<hr/>
TOTAL, Food, Drink, and Tobacco	63 8	32 1

In looking over the wage data for men, we find only one branch paying wages amounting per week to less than the Rowntree minimum of 51s. 3d.: the grain milling industry, and here only the small firms. The number of workers employed by these firms and covered by the Government survey is 801—but if we apply the percentage of 23 (who really work in the small firms) to the number of workers covered working in other firms we arrive at the figure of 3,722, or excluding over-time workers who earn more, 3,063.

In the cider industry average earnings are above the average only because of the high percentage of over-time.

In all the other branches, according to the Government survey, average earnings reach or exceed the Rowntree minimum. In many of these industries, however, short-time work is done, and many of these short-time workers do not earn the Rowntree minimum, on the average.

FOOD AND DRINK INDUSTRIES IN WHICH MALE WORKERS EARN DURING THE NORMAL WORKING WEEK THE MINIMUM OF EXISTENCE, BUT IN WHICH THE SHORT-TIME WORKERS DO NOT EARN THIS MINIMUM

<i>Branches</i>	<i>Percentage of Short-time Workers</i>	<i>Number of Short-time Workers</i>
Grain milling *	3.3	367
Cattle and poultry foods .	6.3	227
Grain milling, cattle, etc. (not separately distinguished)	2.1	107
Bread and flour confectionery *	3.7	864
Bread and flour confectionery †	2.2	72
Biscuits	3.2	180
Sugar confectionery	12.2	386
Jam and fruit preserving	27.4	685
Chocolate and sugar confectionery, etc.	6.8	84
Bacon, hams, etc.	2.1	97
Fish curing	16.9	141
Other meat, etc., preserving	9.8	136
Butter, cheese, etc.	8.7	709
Margarine	2.5	16
Pickles, spices, etc.	22.4	90
Other food, etc.	6.4	507
Malting	3.3	84
Distilling, etc.	5.0	120
Mineral and aerated waters *	26.4	762
Mineral and aerated waters †	17.5	92
Bottling of beer, wines, etc.	11.3	432
Other drink, etc.	6.8	773
	<b>TOTAL</b>	<b>6,921</b>

Adding together all male workers who earn less than the Rowntree minimum, that is less than 51s. 3d. per week in October 1935, we arrive at the following table :

- |   |       |
|---|-------|
| 1. Workers who in a normal working week do not earn the minimum | 3,502 |
| 2. Workers who because of short-time do not earn the minimum    | 6,921 |

Altogether in October 1935 over 10,000 male workers aged 21 and more in the establishments covered by the Government

\* Firms employing 10 or more workers.

† Firms employing less than 10 workers.

enquiry earned less than the minimum regarded by Mr. Rowntree as necessary for a worker's family. 10,000 workers represent about 7 per cent. of all the male workers 21 years and over covered by the Government enquiry. If we apply this percentage to the total number of male workers of 21 years of age and over actually employed in the food, drink, and tobacco industries, we arrive at a total figure of about 19,000 food, drink, and tobacco workers, male and 21 years of age or over, who do not earn enough to raise their families on what Mr. Rowntree regards as a minimum standard.

In the food, drink, and tobacco industries conditions among the women workers are very much worse than among men. Assuming, with Mr. Rowntree, that about 29s. 9d. is necessary for a woman in order to live independently, we find a far higher percentage of women not reaching this minimum than we observed among men.

In the following table I include all branches in which women's earnings did not exceed the Rowntree minimum. (I include one branch in which women earn 29s. 9d. because the inclusion of an appropriate number of small firms would undoubtedly have brought down this average below 29s. 9d.).

**FOOD, DRINK, AND TOBACCO INDUSTRIES IN WHICH FEMALE WORKERS  
EARN A WEEKLY AVERAGE WAGE LOWER THAN THE COST-OF-  
LIVING MINIMUM**

<i>Branches</i>	<i>Number of Workers covered by the Government Enquiry</i>
Grain milling * . . . . .	994
Grain milling † . . . . .	36
Bread and flour confectionery * . . . . .	6,105
Bread and flour confectionery † . . . . .	773
Sugar making and refining . . . . .	838
Jam and fruit preserving . . . . .	6,100
Bacon, hams, etc. . . . .	945

\* Firms employing 10 or more workers.

† Firms employing less than 10 workers.

<i>Branches</i>	<i>Number of Workers covered by the Government Enquiry</i>
Fish curing . . . . .	1,199
Other meat, etc., preserving . . . . .	2,013
Butter, cheese, etc. . . . .	1,687
Margarine . . . . .	243
Vinegar brewing . . . . .	112
Pickles, spices, etc. . . . .	731
Other food, etc. . . . .	9,336
Malting . . . . .	16
Brewing . . . . .	878
Cider . . . . .	178
Mineral and aerated waters * . . . . .	1,312
Mineral and aerated waters † . . . . .	135
Bottling of beer, wines, etc. . . . .	2,790
Brewing and bottling combined . . . . .	1,193
Other drink, etc. . . . .	2,068
<b>TOTAL</b>	<b>39,682</b>

But this total of about 40,000 female workers earning on the average less than the Rowntree minimum has to be increased, for in a number of industries only a considerable amount of over-time work has driven the average earnings above the Rowntree minimum. Taking this into account we find that we must include as well in the above table the following branches :

**INDUSTRIES IN WHICH OVER-TIME PAYMENTS DRIVE AVERAGE EARNINGS ABOVE THE COST-OF-LIVING MINIMUM**

<i>Branches</i>	<i>Percentage working Over-time</i>	<i>Number of Workers Total</i>	<i>Workers On Over- time</i>	<i>Workers earning Less than Minimum</i>
Cereal foods, etc. . . . .	29.1	628	183	445
Cattle and poultry, etc. . . . .	40.6	570	231	339
Grain milling, cattle, etc. . . . .	35.9	410	147	263
Sugar confectionery . . . . .	41.3	8,472	3,499	4,973
Chocolate and sugar, etc. . . . .	53.4	4,012	2,142	1,870
<b>TOTAL</b>		<b>14,092</b>	<b>6,202</b>	<b>7,890</b>

\* Firms employing 10 or more workers.  
 † Firms employing less than 10 workers.

There are, of course, a number of industries in which the average wages of women workers are above the Rowntree minimum. In some of them, however, short-time robs a number of female workers of so much that at the end of the week they do not receive the Rowntree minimum wage.

INDUSTRIES IN WHICH FEMALE WORKERS EARN DURING THE NORMAL WORKING WEEK THE MINIMUM OF EXISTENCE, BUT IN WHICH THE SHORT-TIME WORKERS DO NOT EARN THIS MINIMUM

<i>Branches</i>	<i>Percentage of Short-time Workers</i>	<i>Number of Short-time Workers</i>
Biscuits . . . . .	3.2	355
Cocoa and chocolate . . . . .	1.1	46
Distilling, etc. . . . .	5.0	48
		TOTAL 449

Before we can finally tabulate the results of our investigation we must take into account the fact that there is a not inconsiderable number of workers who in a normal working week would not earn the Rowntree minimum, but who because of over-time earn more than this minimum. Their total number is 15,822.

If we now put together the different data we have taken or computed from the Government survey we arrive at the following table :

1. Workers who in a normal working week do not earn the minimum . . . . .	39,662
2. Ditto (in industries where the average wage through over-time payments is inflated) . . . . .	7,890
3. Workers who because of short-time do not earn the minimum * . . . . .	449
4. Workers who because of over-time earn more than the minimum † . . . . .	15,822

Altogether in October 1935 about 32,000 female workers aged 18 and over in the firms covered by the Government enquiry earned less than the minimum regarded by Mr. Rowntree as necessary for leading an independent life.

\* In industries which on the average pay more than the minimum.

† In industries which on the average pay less than the minimum.

32,000 workers represent about 37 per cent. of all the female workers aged 18 and over covered by the Government enquiry. If we apply this percentage to the total number of women workers aged 18 and over employed in the food, drink, and tobacco industries, we arrive at a total figure of almost 70,000 food, drink, and tobacco workers, female and 18 years of age and over, who do not earn enough to live by themselves on the standard regarded by Mr. Rowntree as a minimum.

*Adding male and female workers together we arrive at the grand total of almost 90,000 food, drink, and tobacco workers who earn less than what is regarded by Mr. Rowntree as a minimum. And this is the result of a Government survey which only inadequately takes into account conditions among the small, low-paying firms!*

How have earnings developed since October 1935? The *Ministry of Labour Gazette*, March 1937, which reports the Government survey, brings the data up to date as follows:

“In the food, drink, and tobacco group there have been increases of 2s. per week for men, 1s. 6d. for women, and 1s. for juveniles in the brewing industry at Burton-on-Trent, and increases for bakers in certain districts.”

This astonishingly meagre account of wage increases between October 1935 and March 1937 indicates that while the cost of living according to the Government index has risen about 4 per cent., wages have remained almost stable. Up to March 1937 therefore, we can safely assume that conditions among the workers in the food, drink, and tobacco industries have somewhat deteriorated.

And since March 1937? The *Ministry of Labour Gazette* reports the following important changes in wage rates:

Wage rates for bakers and confectioners have increased in a number of places; workers in the sugar confectionery and food-preserving industries have had a rise; the cocoa and chocolate confectionery manufacturing industry has raised



the wage rate; and finally wages for brewery workers in Sheffield and in Blackburn have been increased.

On the whole the last nine months of 1937 probably brought greater and more extended increases in wage rates for the workers in the food, drink, and tobacco industries than the preceding eighteen months. On the other hand, the cost of living rose just during those last nine months of 1937 considerably and wiped out most if not all the gains in wages. Looking back over the more than two years that have passed since the Government survey was made, one can conclude for the food, drink, and tobacco industries that conditions for the workers have somewhat deteriorated.

#### 6. WAGES AND COST OF LIVING IN THE BUILDING INDUSTRIES

In certain respects wage data for building workers are even more scarce than for workers in most other trades, for the Government survey of October 1935 is of very little value.\* The whole industry, employing more than a million workers, is in the Government survey divided into only three groups: building, public works contracting, and electrical contracting. The number of female workers in the building industry is negligible. Average earnings of men were, in October 1935, as follows:

AVERAGE WEEKLY EARNINGS OF MALE BUILDING TRADE WORKERS	
<i>Branches</i>	<i>Earnings of Men 21 years and over</i>
	<i>s. d.</i>
Building . . . . .	61 5
Public works contracting . . . . .	56 6
Electrical contracting . . . . .	73 6
	TOTAL 61 2

Building work is usually very heavy work, and the Rowntree minimum would have to be increased by 2s. since it applies only to moderate work. The cost of living, therefore, being according to Mr. Rowntree (including the additional 2s.)

\* Cf. *Ministry of Labour Gazette*, May 1937.

53s. 3d., one gains the impression that on the average all building trade workers earn at least this minimum—with the exception, of course, of a number of short-time workers. But such big averages, covering half a million to a million workers, are more or less meaningless and give extremely little information.

We must therefore turn to other sources of information about wage conditions in the building industry. Unfortunately, however, there are no other comprehensive statistics of earnings available, and we must confine our study to wage rates. An excellent survey of wage rates is provided by a booklet, published by the National Joint Council for the Building Industry, called *Gradings of Districts and Current Rates of Wages: From 1st February, 1937*. These rates were still in force at the end of 1937 and at the beginning of 1938.

The rates are fixed per hour, and we must therefore compute also an hourly cost-of-living minimum. If we compute the Rowntree minimum with the help of the official cost-of-living index for December 1937 we arrive at a figure of 56s. 6d. Since the work in the building industry, especially for navvies and labourers, is extremely heavy, we have to add, as in the case of the metal, engineering, and shipbuilding industries, 2s. to this weekly minimum, and thus arrive at the figure 58s. 6d. Since the number of normal hours per week varies, being in some places 44 and in others 46½, hourly earnings must either be 1s. 4d. (in the case of the 44-hour week) or 1s. 3d. (in the case of the 46½-hour week) in order to provide full-time weekly earnings which are at least as high as the Rowntree minimum, corrected for heavy work.

The following table shows the wage rates fixed by regions and zones (A, A1, A2, B, etc.) for skilled workers and for labourers and navvies :

HOURLY RATES OF WAGES IN THE BUILDING INDUSTRIES BY  
REGIONS AND ZONES, 1937

<i>Counties and Regions</i>	<i>Skilled</i>	<i>Labourers</i>
	<i>Workers</i>	<i>and Navvies</i>
	<i>s. d.</i>	<i>s. d.</i>
Northern Counties Region . . . . .	1 5 to 1 7	1 0½ to 1 2½
North-Western Region . . . . .	1 3½ to 1 7	0 11½ to 1 2½
Yorkshire Region . . . . .	1 3½ to 1 7	0 11½ to 1 2½
Midland Region . . . . .	1 4 to 1 7	1 0 to 1 2½
Eastern Counties Region . . . . .	1 3 to 1 7	0 11½ to 1 2½
Southern Counties Region . . . . .	1 3½ to 1 7	0 11½ to 1 2½
South-Western Region . . . . .	1 3½ to 1 7	0 11½ to 1 2½
South Wales and Monmouthshire Region . . . . .	1 3½ to 1 7	0 11½ to 1 2½
London Region :		
Within 12-mile circle . . . . .	1 8½	1 3½
From 12-mile circle to outer London boundary . . . . .	1 8	1 3

In none of the regions, districts, or zones do labourers and navvies earn enough during the normal working week, even if we measure "enough" by the standards set by Mr. Rowntree. In many regions there are zones in which even 12 hours over-time work per week are not sufficient in order to bring the weekly earnings of labourers and navvies up to the Rowntree standard.\*

\* Conditions have been changed only slightly by the increase in wage rates as from February 1, 1938.

One can estimate that about 50 per cent. of all workers employed in the building trades are labourers or navvies. Since more than one million workers are employed in the building industries, one can estimate that, deducting over-time workers and workers paid more than the rate, who earn more than the minimum, about 450,000 building-trade workers do not receive the Rowntree minimum. To these must be added most of the short-time workers in skilled trades and a number of skilled or semi-skilled workers who even in a full working week do not quite earn the minimum.

*Altogether one can say that about 500,000 building-trade workers earn less than the Rowntree minimum, exclusive, of course, as all our figures are, of the unemployed building-trade workers. Thus about half of all building-trade workers earn less than the Rowntree minimum.*

## 7. WAGES AND COST OF LIVING IN THE TRANSPORT INDUSTRIES

### A. Railways

The Ministry of Transport published in 1937 a most detailed survey of wages on the railways. Although many facts are lacking, especially as to the number of hours worked and the amount of over-time and short-time, every student of labour statistics will, on the other hand, be pleased by the great number of divisions and subdivisions of workers' categories for which wage data are presented. It would take too much space here to reproduce all the wage data presented and I must advise the reader to study the document itself.\* In the following pages we will deal only with those workers who earn less than the Rowntree minimum.

The wage survey refers to conditions during the week ended

\* Ministry of Transport, Railways (Staff): Return of Staff employed by the Railway Companies of Great Britain and of Staff employed by the London Passenger Transport Board in connexion with their Railways during the week ended March 13, 1937, compared with the week ended March 7, 1936. (A) Number of Persons Employed. (B) Rates of Pay and Average Weekly Salary or Wage of, and Average Weekly Payments to, certain Selected Grades. London, 1937.

March 13, 1937. The Rowntree minimum cost of living at that time was 53s. 5d., and for especially heavy work—and most work with the railways is especially heavy—it was 55s. 5d.

In the following table I give, together with the numbers employed, the occupations covered by the Government survey in which the workers do not receive the Rowntree minimum :

**WORKERS WHO EARN LESS THAN THE ROWNTREE MINIMUM OF  
EXISTENCE**

<i>Occupations</i>	<i>Number of Workers covered by the Government Enquiry</i>
Capstanmen, goods and cartage staff . . . . .	1,078
Carters and vanmen, traffic department :	
Horse parcels vanmen (provinces) :	
Class 1 stations . . . . .	628
Class 2 stations . . . . .	15
Carriage cleaners, carriage and wagon department	6,353
Carriage and wagon oilers and greasers, carriage and wagon department . . . . .	418
• Cranemen, goods and cartage staff :	
Not in charge of steam cranes and of electric and hydraulic cranes exceeding 5 tons capacity . . . . .	127
Crossing keepers, traffic department . . . . .	1,235
Engine cleaners, locomotive department . . . . .	2,804
Labourers :	
Locomotive shed staff . . . . .	2,616
Signal and telegraph staff . . . . .	1,904
Lampmen :	
Traffic department :	
Signal lampmen . . . . .	528
Station lampmen . . . . .	394
Carriage and wagon department :	
Carriage lampmen . . . . .	87
Locomotive shed staff . . . . .	49
Number takers, goods and cartage staff . . . . .	792
Permanent way men, permanent way department :	
Sub-gangers . . . . .	6,267
Lengthmen . . . . .	28,458
Labourers . . . . .	4,772
Porters, goods and cartage staff . . . . .	13,356

<i>Occupations</i>	<i>Number of Workers covered by the Government Enquiry</i>
<b>Porters (goods and passenger), traffic department :</b>	
Special . . . . .	128
Grade 1 . . . . .	2,304
Grade 2 . . . . .	12,419
Leading porters . . . . .	1,127
Horse and carriage porters . . . . .	63
Parcel porters, other than leading . . . . .	3,753
Letter sorters . . . . .	100
<b>Shunters (goods and passenger), traffic department, Class 4 . . . . .</b>	
	<b>1,948</b>
<b>Shunt horse drivers, goods and cartage staff . . . . .</b>	<b>243</b>
<b>Watchmen, goods and cartage staff . . . . .</b>	<b>44</b>
<b>Miscellaneous, locomotive shed staff :</b>	
Ash fillers and barmen . . . . .	472
Boiler washers . . . . .	1,224
Steamraisers, stores, issuers, toolmen . . . . .	1,753
Tube cleaners . . . . .	614
<b>Mechanics and artisans :</b>	
<b>Labourers :</b>	
Civil engineering . . . . .	9,109
Marine and dock . . . . .	1,115
General stores, stationery and sheet . . . . .	229
Strikers, civil engineering . . . . .	441
<hr/>	
<b>TOTAL 108,967</b>	

Some 110,000 of the railway workers covered by the Government survey earned in March 1937 less than the Rowntree minimum. Between March and the end of June the cost of living has increased by about 3 per cent. without an increase in the rates of wages on the railways. The cost of living, according to the Rowntree minimum, amounted at the end of June 1937 to 54s. 9d. and in the case of especially heavy work to 56s. 9d.

If we add to the above list of workers those who in March 1937 earned 55s. 5d. or more up to 56s. 9d., we arrive at the following table :

**WORKERS WHO AT THE END OF 1937 EARNED LESS THAN THE  
ROWNTREE MINIMUM OF EXISTENCE**

<i>Occupations</i>	<i>Number of Workers</i>
Earning less than Rowntree minimum in March	108,967
Carters and vanmen, goods and cartage staff :	
motor drivers, electric . . . . .	7
Permanent way men, permanent way department :	
relayers . . . . .	8,461
Porters (goods and passenger), traffic department :	
district relief porters . . . . .	425
Miscellaneous, traffic department :	
Cloakroom and lost property office atten-	
dants, other than leading . . . . .	294
Excess luggage collectors :	
Class 2 . . . . .	5
Carriage and wagon department :	
Coal and oil gas makers' assistants . . . . .	78
Mechanics and artisans: erectors, fitters' and	
turners' assistants, marine and dock . . . . .	80
<b>TOTAL</b>	<b>118,317</b>

Altogether almost 120,000 workers or more than one quarter of all the workers employed on the railways and covered by the Government enquiry earned less than the Rowntree minimum. *If we apply this percentage to the total number of workers employed, we arrive at a total of nearly 175,000 workers employed on the railways who earn less than the Rowntree minimum.* An astonishingly high figure for an industry which in all countries is regarded as one paying far better wages than the average of industry as a whole, and one moreover which is regarded as a key industry, containing an unusually high percentage of skilled workers; of workers, that is, who in many countries are regarded by anti-labour forces as most difficult to be roused to strike or any other form of action by labour against employers just because of their relative "respectability, achieved on the basis of comparatively high wages."

How have wages and cost of living moved between the end of June 1937 and the beginning of 1938? The cost of living

has risen by about 3 per cent. The Award of the Railway Staff National Tribunal has increased earnings on the whole by about 3½ million pounds, or by approximately 3 per cent. But the rise in earnings was distributed unevenly over the mass of railway workers; some, especially the lower paid ones, had a rise somewhat above 3 per cent., while for other groups the rise was less. But even a rise a little higher than that in the cost of living would not have increased the earnings of most of the lower paid workers to the extent necessary to attain the level of the Rowntree standard; while on the other hand a rise in earnings among the comparatively higher paid workers, which was less than that in the cost of living, might have driven further groups of workers below the Rowntree minimum.

While, therefore, on the whole, I come to the conclusion that in spite of the increase in earnings through the Award of the Railway Staff National Tribunal, conditions among railway workers have not improved because of the rapid rise in the cost of living during the second half of 1937, it is only fair to warn the reader that Mr. Marchbank, General Secretary of the National Union of Railwaymen, does not endorse this view. In his opinion it is too difficult to assess the changes brought about by the Award, and before drawing any conclusions he advises us to await the next official survey of earnings.

### *B. The Transport and Storage Industries*

For the investigation of wages and cost of living in the transport and storage industries we are obliged to resort to the Government enquiry into earnings of October 1935.\*

The enquiry gives the following data for earnings of adult male and female workers :

\* Cf. *Ministry of Labour Gazette*, May 1937.



AVERAGE WEEKLY EARNINGS IN THE TRANSPORT AND STORAGE  
INDUSTRIES

<i>Branches</i>	<i>Earnings of Men 21 years and over s. d.</i>	<i>Earnings of Women 18 years and over s. d.</i>
Cartage and haulage contracting :		
Firms employing 10 or more workers .	63 6	27 2
Firms employing less than 10 workers .	55 11	34 3
Omnibus and motor coach services (other than Local Authorities) . . . . .	74 4	32 9
Tramway services (other than Local Authorities) . . . . .	76 1	48 6
Tramway and omnibus services (Local Authorities) . . . . .	65 6	33 8
Harbours, docks, canals, etc. . . . .	70 6	24 3
Warehousing and cold storage . . . . .	60 6	29 9
TOTAL, Transport and Storage . . . . .	69 1	32 4

Since most of the work in this group of industries is unusually heavy we must add to the Rowntree cost-of-living minimum of 51s. 3d. for men and 29s. 9d. for women 2s. per week.

In none of the industrial groups do men earn on the average less than the Rowntree minimum. Of course, in some groups men working only short-time do, on the average, earn less than this minimum.

INDUSTRIES IN WHICH THE MALE WORKERS EARN DURING THE NORMAL  
WORKING WEEK THE MINIMUM OF EXISTENCE, BUT IN WHICH THE  
SHORT-TIME WORKERS DO NOT EARN THIS MINIMUM

<i>Branches</i>	<i>Percentage of Short-time Workers</i>	<i>Number of Short-time Workers</i>
Cartage and haulage contracting :		
Firms employing 10 or more workers .	4.2	1,088
Firms employing less than 10 workers .	6.7	152
Tramway and omnibus services (Local Authorities) . . . . .	4.6	2,872
Harbours, docks, canals, etc. . . . .	4.4	952
Warehousing and cold storage . . . . .	6.9	627
TOTAL		5,691

Altogether 5,691 workers earn on the average less than the Rowntree minimum; this figure represents something like 3 per cent. of all adult male transport workers. If we apply this percentage to the total number of adult male workers employed in the transport and storage industries, we arrive at a figure of over 20,000 workers who do not earn the Rowntree minimum.

While there was no industry in which the grown-up men earn on the average less than the Rowntree minimum, there are three industries in which women on the average do earn less than this minimum.

INDUSTRIES IN WHICH FEMALE WORKERS EARN A WEEKLY  
AVERAGE WAGE LOWER THAN THE COST-OF-LIVING MINIMUM

<i>Branches</i>	<i>Number of Workers covered by the Government Enquiry</i>
Cartage and haulage contracting * . . . .	134
Harbours, docks, canals, etc. . . . .	216
Warehousing and cold storage . . . . .	2,031
	TOTAL 2,381

634 of these workers earn on the average more than the minimum because of the over-time work they have to do.

In other industries a number of workers on short-time earn on the average less than the Rowntree minimum.

INDUSTRIES IN WHICH FEMALE WORKERS EARN DURING THE NORMAL  
WORKING WEEK THE MINIMUM OF EXISTENCE, BUT IN WHICH THE  
SHORT-TIME WORKERS DO NOT EARN THIS MINIMUM

<i>Branches</i>	<i>Percentage of Short-time Workers</i>	<i>Number of Short-time Workers</i>
Cartage and haulage contracting † . . . .	6.7	1
Omnibus and motor coach services, etc. . . .	2.7	53
Tramway and omnibus services, etc. . . . .	4.6	33
		TOTAL 87

\* Firms employing 10 or more workers.

† Firms employing less than 10 workers.

Altogether 1,834 of the workers covered by the Government enquiry earn less than the Rowntree minimum. 1,834 is about 34 per cent. of all female workers covered. If we apply this percentage to the total number of female workers employed in the industry, we arrive at a grand total of about 12,000 female workers who earn less than the Rowntree minimum.

Since October 1935 some changes in wage rates have taken place. The *Ministry of Labour Gazette* reports on these changes up to May 1937 as follows :

“ In the transport group, drivers and adult conductors of municipal trams and omnibuses in the provinces have received an increase of 2s. 6d. per week and workers on trams and trolley-buses in London an increase of 4s. per week.”

In spite of these increases and of further increases since May 1937, conditions in these industries have not improved because of the rapid increase in the cost of living during 1937. On the whole the conclusions we drew from the Government survey in October 1935 still hold good to-day : a small percentage of the men receive less than the Rowntree minimum, while over one-third of all women workers are earning less than the cost-of-living minimum.

#### 8. WAGES AND COST OF LIVING IN THE PUBLIC UTILITY SERVICES

The majority of workers in these industries are in the employment of Local Authorities. It is, of course, of the greatest interest to observe how workers are paid in industries which, according to the belief of many, are not ruled by “ the greed for profit.”

The Government enquiry into earnings in October 1935 gives us all the information we need on the subject.\*

\* Cf. *Ministry of Labour Gazette*, May 1937.

## AVERAGE WEEKLY EARNINGS IN THE PUBLIC UTILITY SERVICES

<i>Branches</i>	<i>Earnings of</i>	<i>Earnings of</i>
	<i>Men 21</i>	<i>Women 18</i>
	<i>years and</i>	<i>years and</i>
	<i>over</i>	<i>over</i>
	<i>s. d.</i>	<i>s. d.</i>
Gas supply :		
Local Authorities . . . . .	63 2	24 4
Other . . . . .	64 9	28 7
Water supply :		
Local Authorities . . . . .	58 5	21 10
Other . . . . .	63 6	24 2
Electricity supply :		
Local Authorities . . . . .	67 8	27 5
Other . . . . .	68 7	24 4
Local Authorities (non-trading services) . . . . .	53 2	28 3
	57 10	28 2
TOTAL, Public Utility Services . . . . .		

This table will astonish many. First, we find that Local Authorities usually pay worse than private enterprise, though the difference is not as great as would appear from the above table because part of the difference is due to the fact that workers in establishments not run by Local Authorities have to work longer.\* Secondly, we find that in a group of industries in which Local Authorities have so large a share of control all women receive on the average earnings below the Rowntree minimum. And thirdly, the majority of the male workers received, in October 1935, only little more than the Rowntree minimum.

Analysing in more detail the earnings of male workers and taking into account the development of wage-rates and the cost of living during the last two years, we must come to

\* The difference is due chiefly to the fact that Local Authority establishments are situated chiefly in low-paying areas and/or employ more lower paid categories of workers, for the wage-rates paid in Local Authority and other establishments differ only by grade and area.

the conclusion that to-day the workers employed by Local Authorities in non-trading services receive on the average less than the Rowntree minimum. In October 1935 they received on the average 53s. 2d., that is 1s. 11d. more than the Rowntree minimum of cost of living at the time. In the meantime, because of the rise in the cost of living, the Rowntree minimum has reached the amount of 56s. 6d. Rates of wages of workers employed by Local Authorities would have to have increased by 6½ per cent. since October 1935 for the difference between their earnings and the Rowntree minimum not to have been wiped out. Now rates have not increased to that extent. Up to May 1937 all the important increases in wage rates for the group as a whole are summarised by the *Ministry of Labour Gazette* as follows :

“ In the gas industry workers of 18 years and over have received an increase of ½d. per hour or 4d. per shift, with proportionate increases for piece-workers, and there have been increases for workers in waterworks in several areas and for those engaged in the non-trading departments of a large number of Local Authorities.”

Since May 1937 there have been numerous increases in rates of wages in different localities, but altogether their weight was not great enough to increase full-time earnings as much as the cost of living has risen. We are, therefore, justified in counting the workers employed by Local Authorities in non-trading services among those who earn on the average less than the Rowntree minimum, with the exception, of course, of those workers who do over-time work.

The total number of workers in this industry covered by the Government enquiry was, in October 1935, 228,017. If we deduct from this figure the number of over-time workers in October 1935, we arrive at a total of 202,295 workers receiving less than the Rowntree minimum.

To this must be added the number of workers in other industries—gas, water, and electricity—who because of short-time earned less than the Rowntree minimum :

INDUSTRIES IN WHICH MALE WORKERS EARN DURING THE NORMAL WORKING WEEK THE MINIMUM OF EXISTENCE, BUT IN WHICH THE SHORT-TIME WORKERS DO NOT EARN THIS MINIMUM

<i>Branches</i>	<i>Percentage of Short-time Workers</i>	<i>Number of Short-time Workers</i>
Gas supply :		
Local Authorities . . . . .	3.3	808
Other . . . . .	1.5	620
Water supply :		
Local Authorities . . . . .	8.5	1,116
Other . . . . .	3.0	254
Electricity :		
Other . . . . .	5.8	900
	<b>TOTAL</b>	<b>3,698</b>

Altogether 206,000 workers in the public utility services are earning less than the Rowntree minimum: that is, about 55 per cent. of all workers covered in the Government survey. If we apply this percentage to the total number of workers employed in these industries *we arrive at a figure of 260,000 male workers, almost exclusively employed by Local Authorities, who are paid a weekly wage which cannot keep them fit for work.*

All the women receive, on the average, weekly earnings below what even Mr. Rowntree regards as a minimum. In some industries even those women who work over-time do not receive the Rowntree minimum. Only in the following industries do over-time workers receive, on the average, more than the Rowntree minimum :

INDUSTRIES IN WHICH FEMALE WORKERS EARN DURING THE NORMAL WORKING WEEK LESS THAN THE MINIMUM OF EXISTENCE, BUT IN WHICH OVER-TIME WORKERS EARN MORE THAN THIS MINIMUM

<i>Branches</i>	<i>Percentage of Over-time Workers</i>	<i>Number of Over-time Workers</i>
Gas supply :		
Other . . . . .	25.7	149
Electricity :		
Local Authorities . . . . .	35.1	85
Local Authorities (non-trading services) . . . . .	11.5	1,934
	<b>TOTAL</b>	<b>2,168</b>

18,135 less 2,168, or 15,967 workers covered by the Government enquiry earn less than the Rowntree minimum. 15,967 workers represent about 88 per cent. of all the workers covered by the Government survey, and if we apply this percentage to the total number of workers employed in this industry, we arrive at a grand total of little short of 30,000 female workers receiving less than the Rowntree minimum. And this in an industrial group which is controlled chiefly by the Local Authorities!

*Since October 1935 conditions have deteriorated rather than improved and to-day the percentage of women receiving less than the Rowntree minimum is probably above 90.*

In the December 1937 issue of the *Public Employees Journal* the National Union of Public Employees has published a most interesting survey of wages and cost of living in the Lancashire and Cheshire area. The investigation is directed against the zoning system which discriminates against workers on the wrongly assumed basis that in smaller towns and in the country living conditions are cheaper than in larger towns.

The first table gives wage rates by zones and we reproduce here those for ashbin-men who receive a middle rate :

Zone	Wages per Week s. d.	In per cent. of Zone A	Reduction from
			Rate in Zone A s. d.
A	56 6	100	—
A2	54 7	98	1 11
B	52 9	94	3 9
C	50 10	90	5 8
D	47 1	83	9 5
E	43 3	76	13 3

Wage rates in the lowest paying zone are lower by more than one quarter as compared with those in the highest paying zone. None of the rates, by the way, exceeds the Rowntree minimum of cost of living.

And now for the investigation of the cost of living in these different zones. As to food the conclusions are :

"That the prices of many staple articles of foodstuffs did not vary throughout the whole of the Lancashire and Cheshire area.

"That while the prices of other foodstuffs showed small differences between different localities, these differences tended to neutralise one another. Thus, while in a certain locality a given article was slightly dearer than in other districts, another article in that locality would be cheaper than in other districts."

The investigation of clothing prices is reported under the telling heading "No zone prices for clothing." Even more astonishing for many will be the outcome of the investigation into gas prices: "Gas—dearer in zones where wages are lowest." And a similar result is reported about electricity: "Electricity—cost more in low-paid zones." As to coal prices we read:

"The result showed that there was a really remarkable uniformity of coal prices throughout Lancashire and Cheshire."

And as for rents the survey showed that while there were variations as between the various zones, there were also big variations within a particular zone, while the proportion of uncontrolled (and therefore higher rented) houses was greater in the lower paid zones.

From this we see how important it would be to supplement our investigations into wages and the cost of living by another one showing how much the wages of different groups of workers are below the Rowntree minimum. That is, our investigation of the extent of poverty should be supplemented by one dealing with the intensity of poverty. It should be one of the foremost tasks of statisticians belonging to the Labour Movement to gather the material necessary for such an investigation and then to work it into a telling story of the misery and injustice prevailing to-day. The investigation of the National Union of Public Employees, discussed above, is an important step in this direction.



### 9. WAGES AND COST OF LIVING IN THE BRICK, POTTERY, GLASS, CHEMICAL, ETC., INDUSTRIES

The curious mixture of industries which the title of this chapter indicates is due to the fact that the Government survey of earnings in October 1935 \* combines them into one group. And if we look at the earnings received by workers in these industries we shall see that not only from the production point of view is there a certain similarity between these industries but also from that of labour conditions.

Earnings of adult male and female workers developed as follows :

<i>Branches</i>	<i>Earnings of Men 21 years and over</i>		<i>Earnings of Women 18 years and over</i>	
	<i>s.</i>	<i>d.</i>	<i>s.</i>	<i>d.</i>
Bricks and tiles (not glazed) and fire-clay goods . . . . .	56	11	27	0
Earthenware, china, porcelain, terra-cotta and glazed tiles . . . . .	63	0	27	11
Glass manufacture, including bottles . . . . .	66	7	24	11
Other products of clay and sand, etc. . . . .	66	2	31	11
Heavy chemical manufacture (including dyes and tar and wood distillation) . . . . .	66	9	27	1
Drugs and fine chemicals . . . . .	63	5	29	8
Fertilisers, disinfectants, glue, size, etc. . . . .	58	8	27	6
Other chemicals . . . . .	66	7	28	7
Explosives, ammunition, etc. . . . .	69	8	32	10
Paint, colour, varnish, white lead, and other lead compounds . . . . .	61	11	28	7
Oil oak manufacture and vegetable oil refining . . . . .	60	4	32	9
Animal fat extracting and refining . . . . .	63	3	28	8
Soap, candles, and glycerine . . . . .	67	3	31	9
Mineral oil refining . . . . .	64	7	26	8
Other and undefined oil extracting and refining . . . . .	63	2	30	0
Blue and polishes . . . . .	69	4	36	0
Ink manufacture . . . . .	78	11	31	9
Matches . . . . .	71	5	33	11
Other, and combinations of above . . . . .	64	5	32	2
<b>TOTAL, Brick, Pottery, Glass, Chemicals, etc.</b>	<b>63</b>	<b>0</b>	<b>29</b>	<b>5</b>

\* Cf. *Ministry of Labour Gazette*, February 1937.

Before we investigate the amount of earnings and the cost of living in the individual industries under review, a few explanations must be given about the cost of living. Mr. Rowntree, estimating the cost of living for workers doing moderate work, fixed the amount necessary to raise a family at 53s. per week for the late autumn of 1936; the corresponding figure for October 1935 would be 51s. 3d. For women Mr. Rowntree computed a minimum sufficient to guarantee an independent life and arrived at the figure of 30s. 9d. for late autumn 1936, that is, 29s. 9d. in October 1935. Now, in an earlier chapter, I explained that it was necessary to add something to these figures if the work done in the industry under review was especially heavy. In this chapter, where we have a mixture of quite different industries, we cannot add, as we did for instance in the case of the metal, engineering, and shipbuilding industries, 2s. to the Rowntree estimate for all industries and branches under review. We therefore have to choose from the industries under review those in which work is quite exceptionally heavy.

**INDUSTRIES IN WHICH WORK IS ESPECIALLY HEAVY AS COMPARED  
WITH OTHER INDUSTRIES**

Bricks and tiles (not glazed) and fire-clay goods.  
Glass manufacture, including bottles.  
Fertilisers, disinfectants, glue, size, etc.  
Explosives, ammunition, etc.

For these industries we assumed the cost of living to be 53s. 3d. and 31s. 9d. for the respective sexes in October 1935.

There is no industry in this group in which men do not receive, on the average, a weekly wage higher than the Rowntree minimum. On the other hand there are a number of industries in which men because of short-time work do not earn this minimum :

**INDUSTRIES IN WHICH MALE WORKERS EARN DURING THE NORMAL  
WORKING WEEK THE MINIMUM OF EXISTENCE, BUT IN WHICH THE  
SHORT-TIME WORKERS DO NOT EARN THIS MINIMUM**

<i>Branches</i>	<i>Percentage of Short-time Workers</i>	<i>Number of Short-time Workers</i>
Bricks and tiles (not glazed), etc. . . . .	10.9	4,650
Earthenware, china, porcelain, terra-cotta, etc. . . . .	9.8	1,033
Glass manufacture, including bottles . . . . .	2.9	497
Fertilisers, disinfectants, glue, size, etc. . . . .	2.8	101
Oil cake manufacture, etc. . . . .	3.1	151
Animal fat extracting and refining . . . . .	3.2	42
Mineral oil refining . . . . .	1.5	68
Other and undefined oil extracting, etc. . . . .	2.6	56
Other, and combinations of above . . . . .	4.2	186
		TOTAL 6,784

6,784 male workers receive on the average less than what even Mr. Rowntree regards as a minimum. These workers represent about 4 per cent. of the total of adult male workers covered by the Government enquiry. If we apply this percentage to the total number of male workers aged 21 or over employed in the industry we arrive at a figure of over 10,000 workers who do not receive the Rowntree minimum.

Considerably worse than among men are conditions among women. In a great number of industries women receive on the average less than the Rowntree minimum :

**INDUSTRIES IN WHICH FEMALE WORKERS EARN A WEEKLY  
AVERAGE WAGE LOWER THAN THE COST-OF-LIVING MINIMUM**

<i>Branches</i>	<i>Number of Workers covered by the Government Enquiry</i>
Bricks and tiles (not glazed), etc. . . . .	1,727
Earthenware, china, porcelain, terra-cotta, etc. . . . .	10,245
Glass manufacture, including bottles . . . . .	2,930

<i>Branches</i>	<i>Number of Workers covered by the Government Enquiry</i>
Heavy chemical manufacture, etc. . . . .	860
Drugs and fine chemicals . . . . .	8,643
Fertilisers, disinfectants, glue, size, etc. . . . .	686
Other chemicals . . . . .	334
Paint, colour, varnish, white lead, etc. . . . .	1,882
Animal fat extracting, etc. . . . .	430
Mineral oil refining . . . . .	45
<b>TOTAL</b>	<b>27,782</b>

A number of women in these industries, however, earn more than the Rowntree minimum because they work over-time. Their total number is 5,005.

On the other hand, there are two industries in which average earnings are above the Rowntree minimum only because of the great amount of over-time work done in these industries and actually average earnings of full-time as well as of short-time workers are below the minimum. These two industries, are (1) the explosives, ammunition, etc., and (2) the un-defined oil extracting and refining industry, employing in the establishments covered by the Government survey 2,661 workers, 1,643 of whom are earning less than the Rowntree minimum.

Furthermore, in a number of industries which pay to full-time workers, on the average, more than the Rowntree minimum, short-time workers do not earn this minimum :

**INDUSTRIES IN WHICH THE FEMALE WORKERS EARN DURING THE NORMAL WEEK THE MINIMUM OF EXISTENCE, BUT IN WHICH THE SHORT-TIME WORKERS DO NOT EARN THIS MINIMUM**

<i>Branches</i>	<i>Percentage of Short-time Workers</i>	<i>Number of Short-time Workers</i>
Other products of clay and sand, etc. . . . .	8.5	81
Oil cake manufacture, etc. . . . .	3.1	4
Soap, candles, and glycerine . . . . .	16.3	369
Blue and polishes . . . . .	27.4	515
Ink manufacture . . . . .	1.2	1
Matches . . . . .	70.6	892
Other, and combinations of above . . . . .	4.2	42
<b>TOTAL</b>		<b>1,904</b>

If we tabulate the final results of this study of women's wages we arrive at the following figures :

1. Workers who in a normal working week do not earn the minimum . . . . .	27,782
2. Ditto (in industries where the average wage through over-time payments is inflated) . . . . .	1,643
3. Workers who because of short-time do not earn the minimum * . . . . .	1,904
4. Workers who because of over-time earn more than the minimum † . . . . .	5,005

*Altogether in October 1935 over 25,000 female workers aged 18 or more earned less than what Mr. Rowntree regards as a minimum. Over 25,000 female workers are almost 70 per cent. of all female workers covered by the Government survey. If we apply this percentage to the total number of female workers aged 18 or more employed in these industries we arrive at a figure of over 50,000 female workers earning less than the Rowntree minimum.*

How have wages moved since October 1935 when the Government survey was undertaken? The *Ministry of Labour Gazette* supplements the information contained in the 1935 survey for the period of up to February as follows :

" Other increases have included . . . 1s. to 3s. a week for brickmakers, various amounts for pottery workers,  $\frac{1}{2}$ d. per hour or 5 per cent. for a large number of workers in the heavy chemical industry, 3s. a week for men and 1s. 6d. or 2s. for women in the manufacture of drugs and fine chemicals, 3d. per turn for flint glass workers, and various amounts for paint, colour, and varnish workers."

Since February 1937 further wage increases have taken place. But neither these increases nor the former have increased earnings to a level high enough above the also rising cost of living to ensure a more favourable relation between

\* In industries which on the average pay more than the minimum.

† In industries which on the average pay less than the minimum.

earnings and the cost of living. On the contrary, the little statistical proof which we have indicates rather a deterioration of conditions; indicates, especially for recent months, an appreciable decline in real earnings.

In the following table I give an index of actual money and real earnings of workers in the brick and pottery industries. These figures are based on the official statistics of changes in employment and total wages paid in these two industries; the percentage changes are published monthly in the *Ministry of Labour Gazette*. The money earnings were converted into real earnings with the help of the official cost of living index :

AVERAGE WEEKLY EARNINGS IN THE BRICK INDUSTRY  
(October 1935=100)

Year and Month	Average Weekly Earnings	
	Money	Real
1935 October . . . . .	100	100
November . . . . .	97	96
December . . . . .	99	98
1936 January . . . . .	96	95
February . . . . .	97	96
March . . . . .	101	101
April . . . . .	101	102
May . . . . .	104	104
June . . . . .	103	104
July . . . . .	104	103
August . . . . .	103	102
September . . . . .	103	101
October . . . . .	103	101
November . . . . .	101	97
December . . . . .	101	97
1937 January . . . . .	100	96
February . . . . .	104	100
March . . . . .	102	98
April . . . . .	106	101
May . . . . .	107	102
June . . . . .	106	101
July . . . . .	105	98
August . . . . .	104	97
September . . . . .	106	99
October . . . . .	107	98
November . . . . .	106	96
December . . . . .	106 *	95

\* In January and February 1938 money wages have increased by about 1 per cent.

It is obvious from these figures that real earnings have, in spite of certain increases in wage rates and, perhaps, some improvements as far as short-time is concerned, declined. That is, the relation between earnings and the cost of living in the brick industry undoubtedly has deteriorated as compared with October 1935.

AVERAGE WEEKLY EARNINGS IN THE POTTERY INDUSTRY  
(October 1935=100)

<i>Year and Month</i>	<i>Average Weekly Earnings</i>	
	<i>Money</i>	<i>Real</i>
1935 October . . . . .	100	100
November . . . . .	98	97
December . . . . .	98	97
1936 January . . . . .	93	91
February . . . . .	93	92
March . . . . .	95	95
April . . . . .	97	97
May . . . . .	98	99
June . . . . .	97	96
July . . . . .	101	100
August . . . . .	96	95
September . . . . .	98	97
October . . . . .	101	99
November . . . . .	101	97
December . . . . .	99	95
1937 January . . . . .	97	93
February . . . . .	98	94
March . . . . .	98	94
April . . . . .	102	98
May . . . . .	102	97
June . . . . .	103	99
July . . . . .	105	98
August . . . . .	102	95
September . . . . .	103	96
October . . . . .	103	95
November . . . . .	102	92
December . . . . .	99 *	90

Real earnings in the pottery industry have declined even more than in the brick industry. Undoubtedly the number

\* In February 1938 money earnings were about the same as in December 1937.

of workers receiving less than the minimum in this industry has increased since October 1935. On the other hand industries like that of manufacturing explosives will probably show some improvement and one may conclude perhaps that labour conditions in all the industries under review in this chapter are at least as bad to-day as in October 1935.

#### 10. WAGES AND COST OF LIVING IN THE PAPER, PRINTING, STATIONERY, ETC., INDUSTRIES

From the Government survey of earnings for October 1935 \* we at once realise that this industry pays comparatively better wages than most other industries :

##### AVERAGE WEEKLY EARNINGS IN THE PAPER, PRINTING, STATIONERY, ETC. INDUSTRIES

Branches	Earnings of Men 21 years and over		Earnings of Women 18 years and over	
	s.	d.	s.	d.
Paper and board making . . . . .	64	11	29	4
Wallpaper . . . . .	63	1	31	4
Cardboard boxes . . . . .	73	7	34	0
Paper bags, envelopes, and stationery . . . . .	72	2	31	9
Compressed paper and articles thereof . . . . .	62	1	31	9
Pencils, penholders, fountain pens, etc. . . . .	61	8	32	2
Other stationery and typewriting requisites . . . . .	73	2	32	2
Relief, die, etc., stamping . . . . .	72	9	32	8
Newspaper and periodical printing . . . . .	110	9	39	6
Book and music printing . . . . .	81	1	37	4
Printing, job and general work (including lithography, stereotyping, electrotyping, etc.) :				
Firms employing 10 or more workers . . . . .	88	11	34	9
Firms employing less than 10 workers . . . . .	68	3	29	8
Bookbinding, including account books . . . . .	79	10	37	11
Printing, undefined, and combinations of above :				
Firms employing 10 or more workers . . . . .	86	0	34	8
Firms employing less than 10 workers . . . . .	64	10	30	10
<b>TOTAL, Paper, Printing, Stationery, etc.</b>	<b>83</b>	<b>8</b>	<b>33</b>	<b>5</b>

\* Cf. *Ministry of Labour Gazette*, March 1937.



In all the branches male workers 21 years of age or over earn on the average more than the Rowntree minimum of 51s. 3d. per week. And even short-time workers earn, on the average, in all but the following branches, enough to raise a family on the Rowntree minimum.

PAPER, PRINTING, ETC., INDUSTRIES IN WHICH THE WORKERS EARN DURING THE NORMAL WORKING WEEK THE MINIMUM OF EXISTENCE, BUT IN WHICH THE SHORT-TIME WORKERS DO NOT EARN THIS MINIMUM

<i>Branches</i>	<i>Percentage of Short-time Workers</i>	<i>Number of Short-time Workers</i>
Paper and board making . . . . .	4.3	1,220
Wallpaper . . . . .	1.9	46
Compressed paper and articles thereof . . . . .	10.0	93
Pencils, penholders, fountain pens, etc. . . . .	6.6	18
		TOTAL 1,377

About 1.1 per cent. of all male workers 21 years of age and over earn a weekly income below the Rowntree minimum. Applying this percentage to the total number of workers employed in this industry, we arrive at the figure of almost 2,500 paper, printing, stationery, etc., workers who do not earn the Rowntree minimum.

Conditions among women are worse. In two industries, paper and board-making, and printing, job, etc., with firms employing less than 10 workers, average wages for women 18 years of age and over are below the Rowntree minimum. These two industries employ, in the firms covered by the Government survey, a total of 7,227 workers. 1,694 of them, however, earn somewhat more than the minimum because they are doing over-time work.

In one industry—wallpaper—over-time work has driven average wages above the minimum, although all the workers not doing over-time are earning less than the minimum. The total number of workers in this industry who do not earn the Rowntree minimum is, in the Government survey, 777.

In most of the other industries the short-time workers do not reach the minimum of 29s. 9d. per week :

PAPER, PRINTING, ETC., INDUSTRIES IN WHICH THE WORKERS EARN DURING THE NORMAL WORKING WEEK THE MINIMUM OF EXISTENCE, BUT IN WHICH THE SHORT-TIME WORKERS DO NOT EARN THIS MINIMUM

<i>Branches</i>	<i>Percentage of Short-time Workers</i>	<i>Number of Short-time Workers</i>
Cardboard boxes . . . . .	10.2	1,279
Paper bags, envelopes, and stationery . . . . .	3.7	202
Compressed paper and articles thereof . . . . .	10.0	98
Pencils, penholders, fountain pens, etc. . . . .	6.6	22
Other stationery and typewriting requisites . . . . .	7.0	499
Relief, die, etc., stamping . . . . .	5.9	16
Book and music printing . . . . .	11.7	40
Printing, job, etc., firms employing 10 or more workers . . . . .	4.0	221
Printing, undefined, etc., 10 or more workers . . . . .	4.4	640
Printing, undefined, etc., less than 10 workers . . . . .	6.3	17
		TOTAL 3,034

Altogether 9,344 or 16 per cent. of all female workers 18 years of age and over covered by the Government survey are earning less than the Rowntree minimum. Applying this percentage to the total number of female workers 18 years and over employed in these industries we arrive at the figure of about 20,000.

The wage increases which have taken place since October 1935 cannot have changed the situation materially and the percentages of workers earning less than the Rowntree minimum, which we found for October 1935, apply roughly also for the beginning of 1938.

## 11. WAGES AND COST OF LIVING IN THE WOODWORKING INDUSTRIES

The only comprehensive survey undertaken in recent years of earnings in the woodworking industry is that made by the

Government in October 1935.\* According to this survey earnings in the different branches of the industry were as follows :

AVERAGE WEEKLY EARNINGS IN THE WOODWORKING INDUSTRIES

<i>Branches</i>	<i>Earnings of</i>	<i>Earnings of</i>
	<i>Men 21</i>	<i>Women 18</i>
	<i>years and</i>	<i>years and</i>
	<i>over</i>	<i>over</i>
	<i>s. d.</i>	<i>s. d.</i>
Mill sawing and joinery :		
Firms employing 10 or more workers .	61 1	25 10
Firms employing less than 10 workers .	58 3	—
Coopering . . . . .	64 5	23 8
Wooden box and packing case making .	62 2	32 3
Basket making . . . . .	49 8	25 3
Cabinet and furniture making, upholstery, etc. :		
Firms employing 10 or more workers .	66 5	35 4
Firms employing less than 10 workers .	59 10	33 8
Bedding and mattress making (not wire) .	61 5	36 0
House and shop fitting, etc. . . . .	74 11	31 1
Carriage, cart, etc., building and repairing :		
Firms employing 10 or more workers .	71 4	30 11
Firms employing less than 10 workers .	57 6	35 0
Other woodworking :		
Firms employing 10 or more workers .	61 1	30 8
Firms employing less than 10 workers .	58 0	26 3
<b>TOTAL, Woodworking . . . . .</b>	<b>65 1</b>	<b>33 10</b>

With the exception of the basket-making industry male workers in all branches of the woodworking industry earn the Rowntree minimum of 51s. 3d. per week (in the mill-sawing industry we assume a minimum of 53s. 3d. because of the especially heavy character of the work done).

But in quite a number of industries the woodworkers receive less than the Rowntree minimum because of short-time :

\* Cf. *Ministry of Labour Gazette*, May 1937.

INDUSTRIES IN WHICH MALE WORKERS EARN DURING THE NORMAL WORKING WEEK THE MINIMUM OF EXISTENCE, BUT IN WHICH THE SHORT-TIME WORKERS DO NOT EARN THIS MINIMUM

<i>Branches</i>	<i>Percentage of Short-time Workers</i>	<i>Number of Short-time Workers</i>
Mill sawing and joinery *	6.1	1,949
Mill sawing and joinery †	6.1	91
Coopering	7.3	115
Wooden box and packing case making	12.0	421
Cabinet and furniture making, etc. †	10.5	146
Bedding and mattresses making, etc.	7.2	114
House and shop fitting, etc.	5.1	444
Carriage, cart, etc., building, etc.*	11.7	1,814
Carriage, cart, etc., building, etc.†	8.5	81
Other woodworking *	7.9	744
Other woodworking †	8.1	111
	<b>TOTAL</b>	<b>6,030</b>

If we add to these 6,030 workers 404 workers from the basket-making industry (excluding the over-time workers who receive more than the minimum) we arrive at a total figure of 6,434 workers (or 6 per cent. of all the workers covered by the Government survey) who receive less than the Rowntree minimum. And if we apply this percentage to the total number of grown-up male workers employed in the industry we arrive at a grand total of 8,500 workers who do not receive the Rowntree minimum.

Living conditions among women are, as in so many industries, considerably worse than among men. In four industries average earnings received are below the Rowntree minimum of 29s. 9d. and in three other industries workers doing no over-time receive less than the Rowntree minimum, average earnings being inflated above this minimum because of the large extent of over-time work.

\* Firms employing 10 or more workers.

† Firms employing less than 10 workers.

WOODWORKING INDUSTRIES IN WHICH FEMALE WORKERS EARN A WEEKLY AVERAGE WAGE LOWER THAN THE COST-OF-LIVING MINIMUM

<i>Branches</i>	<i>Number of Workers covered by the Government Enquiry</i>	
Mill sawing and joinery * . . . . .		196
Coopering . . . . .		11
Basket making . . . . .		326
Other woodworking † . . . . .		131
	<b>TOTAL</b>	<b>664</b>

85 workers in these four industries earn more than the Rowntree minimum because of over-time work.

INDUSTRIES IN WHICH OVER-TIME PAYMENTS DRIVE AVERAGE EARNINGS ABOVE THE COST-OF-LIVING MINIMUM

<i>Branches</i>	<i>Percentage working Over-time</i>	<i>Number of Workers on Over-time</i>		<i>Workers earning Less than Minimum</i>
		<i>Total</i>	<i>time</i>	
House and shop, etc. . . . .	45.2	460	208	252
Carriage, cart, etc.* . . . .	34.1	771	263	508
Other woodworking * . . . .	23.5	1,450	341	1,109
		<b>TOTAL</b>	<b>2,681</b>	<b>1,869</b>

Furthermore, in a number of industries female workers earn because of short-time less than the Rowntree minimum :

WOODWORKING INDUSTRIES IN WHICH FEMALE WORKERS EARN DURING THE NORMAL WORKING WEEK THE MINIMUM OF EXISTENCE, BUT IN WHICH THE SHORT-TIME WORKERS DO NOT EARN THIS MINIMUM

<i>Branches</i>	<i>Percentage of Short-time Workers</i>		<i>Number of Short-time Workers</i>
Wooden box and packing-case making . . . . .		12.0	69
Cabinet and furniture making, etc.* . . . .		6.0	33
Cabinet and furniture making, etc.† . . . .		10.5	21
Bedding and mattress making, etc. . . . .		7.2	196
Carriage, cart, etc.† . . . . .		8.5	1
		<b>TOTAL</b>	<b>320</b>

\* Firms employing 10 or more workers.

† Firms employing less than 10 workers.

If we add together all the figures for female workers who receive less than the Rowntree minimum we arrive at the following table :

1. Workers who in a normal working week do not earn the minimum . . . . .	664
2. Ditto (in industries where the average wage through over-time payments is inflated) . . . . .	1,869
3. Workers who because of short-time do not earn the minimum * . . . . .	320
4. Workers who because of over-time earn more than the minimum † . . . . .	485

*Altogether in October 1935 over 2,700 female workers in the woodworking industry or 23 per cent. of all the adult female workers covered by the Government enquiry earned less than the Rowntree minimum. And this in a survey which covers the small firms employing in some branches of this industry up to more than one-third of all the workers employed but only very inadequately ! If we apply the percentage of 23 to all the workers employed in this industry we arrive at a total of over 5,500 female workers earning less than the Rowntree minimum.*

The development of wage conditions since October 1935 is described by the *Ministry of Labour Gazette* as follows :

“In the furniture-making, mill-sawing, and packing-case making industries rates of wages have been increased by varying amounts in different districts.”

Though during the last months further increases in wage rates have taken place, the rise in the cost of living was such a rapid one that to-day conditions are at best not more favourable than in October 1935.

## 12. WAGES AND COST OF LIVING IN THE LEATHER INDUSTRIES

As in the case of most other industries we have to rely in our investigation on earnings and cost of living in the leather

\* In industries which on the average pay more than the minimum.

† In industries which on the average pay less than the minimum.

industries upon the survey made by the Government in October 1935.\*

According to this survey earnings of adult male and female workers developed as follows :

AVERAGE WEEKLY EARNINGS IN THE LEATHER INDUSTRIES

<i>Branches</i>	<i>Earnings of</i>	<i>Earnings of</i>
	<i>Men 21</i>	<i>Women 18</i>
	<i>years and</i>	<i>years and</i>
	<i>over</i>	<i>over</i>
	<i>s. d.</i>	<i>s. d.</i>
Fellmongery . . . . .	55 11	25 4
Tanning, currying, and leather dressing . . . . .	63 1	28 5
Saddlery and harness making . . . . .	61 9	33 0
Making of bags, trunks, and other leather goods . . . . .	60 0	29 10
Other, including combinations of above . . . . .	54 7	29 2
<b>TOTAL, Leather . . . . .</b>	<b>61 9</b>	<b>29 6</b>

There is no industry which does not on the average pay at least a weekly wage as high as what Mr. Rowntree regards as a minimum for men, 51s. 3d. per week. But a number of workers being put on short-time do not earn this minimum.

LEATHER INDUSTRIES IN WHICH THE WORKERS EARN DURING THE NORMAL WORKING WEEK THE MINIMUM OF EXISTENCE, BUT IN WHICH THE SHORT-TIME WORKERS DO NOT EARN THIS MINIMUM

<i>Branches</i>	<i>Percentage of</i>	<i>Number of</i>
	<i>Short-time</i>	<i>Short-time</i>
	<i>Workers</i>	<i>Workers</i>
Fellmongery . . . . .	21.7	233
Tanning, currying, and leather dressing . . . . .	12.1	1,882
Saddlery and harness making . . . . .	7.9	29
Making of bags, trunks, and other leather goods . . . . .	9.7	220
Other, including combinations of above . . . . .	14.9	218
<b>TOTAL</b>		<b>2,582</b>

Altogether 2,582 male workers out of 20,752 covered by the Government's survey do not earn what even Mr. Rowntree

\* Cf. *Ministry of Labour Gazette*, March 1937.

regards a minimum. If we apply the percentage of 12 which we find in the Government survey to the total number of male workers aged 21 or more employed in the leather industries, we arrive at a total figure of about 4,500 male workers who do not earn this minimum.

Considerably worse than among men are conditions among women. The Rowntree minimum of 29s. 9d. for an independent woman worker is not reached in even one half of the industries under review :

**INDUSTRIES IN WHICH FEMALE WORKERS EARN A WEEKLY  
AVERAGE WAGE LOWER THAN THE COST OF LIVING MINIMUM**

<i>Branches</i>	<i>Number of Workers covered by the Government Enquiry</i>
Fellmongery . . . . .	108
Tanning, currying, and leather dressing . . . . .	1,372
Other, including combinations of above . . . . .	517
	<hr style="width: 10%; margin: 0 auto;"/>
<b>TOTAL</b>	<b>1,997</b>

Among these female workers are 535 who on the average earn more than the minimum of existence because of over-time work.

In another branch average earnings appear inflated in the Government survey because of the large amount of over-time work. If one deducts the number of over-time workers in the making of bags, trunks, and other leather goods, the remaining number of 2,410 are such who on the average receive less than the minimum of existence.

There remains the saddlery and harness-making industry in which on the average only the short-time workers, 12 in number, receive less than the minimum of existence.

Adding together all female workers aged 18 or over who do not receive an average weekly wage which is at least as high as the Rowntree minimum one arrives at the figure of 3,884 or about 60 per cent. of all such female workers covered by the Government survey. If we apply this percentage to the total number of female workers 18 years or over employed in the leather industries, we arrive at a total number of



about 12,000 female workers who do not earn the minimum of existence. *Adding female and male workers together, we find that of all adult workers in the leather industries almost 30 per cent. do not earn what Mr. Rowntree regards as a minimum of existence.* And that although we have not taken into account that the 13 per cent. or so of the workers employed in small firms, which pay lower wages, have been covered by the Government survey only very inadequately.

In order to bring these somewhat out-of-date figures up to date the *Ministry of Labour Gazette* summarises the changes in wage rates between October 1935 and March 1937 as follows :

“In the leather-tanning industry men have received an increase of  $\frac{1}{2}$ d. per hour, women 1d. per hour, and youths  $\frac{1}{4}$ d. per hour ; while in fellmongery men have received 1d. per hour.”

There have been some further increases recently—but since the cost of living has increased so rapidly during 1937, any gains made in 1936 have since been lost to say the least. One, therefore, is justified in concluding : that if the situation has changed between the end of 1935 and the beginning of 1938 only for the worse, then the relation between actual earnings and the cost of living as revealed by the above computations is to-day probably still more unfavourable than 30 months ago.

### 13. WAGES AND COST OF LIVING IN AGRICULTURE

No group of workers is so little studied as the agricultural workers. The working and living conditions of these workers have been the subject of fewer statistical studies than those of any other group. No comprehensive data as to actual earnings have been made available for any year or month since 1919. The only thing known to everybody, even without statistical enquiry, is that “agricultural workers live even worse”—even worse than any other group of workers.

In contrast to actual earnings comprehensive data are available for minimum wage rates. The Agricultural Wages Board compiles yearly a table of Minimum Rates of Wages for ordinary adult Male and Female Workers employed in Agriculture in England and Wales. Although no data have yet been published for the end of December 1937, I am able to give a list of wage rates through the kindness of the National Union of Agricultural Workers.

Before we look at the following table we must realise how high the cost of living was at the end of 1937. Mr. Rowntree estimates the cost of living of agricultural workers for the late autumn of 1936 at 41s. Since then the cost of living has risen, and with the help of the Government index it is possible to bring the estimate of Mr. Rowntree up to date. For December 1937 the cost of living, based on the Rowntree estimate for 1936, was 44s. Mr. Rowntree assumes for his budget moderate work. But work in agriculture is never, even as compared *e.g.* with work in the iron and steel industry, moderate. It is decidedly heavy work. We therefore shall add, as we have done in all such cases, 2s. to the Rowntree minimum and thus arrive at a cost of living amount for the end of 1937 of about 46s.

The minimum wage rates at the same time were :

MINIMUM WEEKLY WAGE RATES FOR ORDINARY MALE WORKERS  
21 YEARS OF AGE AND OVER AT THE END OF 1937

<i>Region</i>	<i>Minimum Rate</i>
	<i>s. d.</i>
England :	
Bedfordshire and Huntingdonshire . . . . .	34 0
Berkshire . . . . .	33 6
Buckinghamshire . . . . .	34 6
Cambridgeshire and Isle of Ely . . . . .	35 0
Cheshire . . . . .	35 0
Cornwall and Isles of Scilly . . . . .	34 0
Cumberland, Westmorland, and Furness District of Lancashire :	
Summer . . . . .	34 6
Winter . . . . .	33 0
Derbyshire . . . . .	38 0

<i>Region</i>	<i>Minimum</i>	
	<i>Rate</i>	
	<i>s.</i>	<i>d.</i>
England :		
Devonshire . . . . .	34	0
Dorset . . . . .	33	0
Durham . . . . .	32	0
Essex . . . . .	32	6
Gloucestershire . . . . .	33	0
Hampshire and Isle of Wight . . . . .	33	0
Herefordshire . . . . .	34	0
Hertfordshire . . . . .	34	0
Kent . . . . .	34	0
Lancashire :		
South . . . . .	34	6
Remainder of area . . . . .	38	6
Leicestershire . . . . .	35	0
Lincolnshire :		
Holland . . . . .	36	0
Kesteven and Lindsey . . . . .	33	0
Middlesex :		
Summer . . . . .	36	5½
Winter . . . . .	35	0
Monmouthshire . . . . .	34	0
Norfolk . . . . .	34	6
Northamptonshire and Soke of Peterborough . . . . .	34	0
Northumberland . . . . .	32	6
Nottinghamshire . . . . .	34	6
Oxfordshire . . . . .	34	0
Rutland . . . . .	32	6
Shropshire . . . . .	34	0
Somerset . . . . .	34	0
Staffordshire . . . . .	34	0
Suffolk . . . . .	32	6
Surrey . . . . .	34	6
Sussex . . . . .	33	3
Warwickshire . . . . .	33	0
Wiltshire . . . . .	33	6
Worcestershire . . . . .	33	0
Yorkshire :		
East Riding . . . . .	35	6
North Riding . . . . .	35	0
West Riding . . . . .	36	0
Wales :		
Anglesey and Caernarvon . . . . .	32	0
Carmarthenshire . . . . .	33	0
Denbigh and Flint . . . . .	32	0

<i>Region</i>	<i>Minimum Rate</i>	
	<i>s.</i>	<i>d.</i>
Wales:		
Glamorgan . . . . .	34	6
Merioneth and Montgomery . . . . .	31	0
Pembroke and Cardigan . . . . .	33	0
Radnor and Brecon . . . . .	33	0

After having looked over this table the reader will easily understand why I accepted and used for this study the cost-of-living estimate of Mr. Rowntree for agricultural workers. Why enter into long discussions about the inadequacy and the injustice of Mr. Rowntree's special cost of living estimate for agricultural workers if even this inadequate estimate shows that agricultural workers should get a much higher wage than they actually get! In none of the areas surveyed would a wage rise of 7s. per week be sufficient to reach Mr. Rowntree's estimate of the cost of living and there is one region where only a rise of 50 per cent. would bring wages to the level desired even by Mr. Rowntree.

Minimum wage rates, fixed by the Government, are far below what even Mr. Rowntree deems a minimum budget in order to keep a worker and his family fit. Average rates for ordinary workers are computed by Mr. Pointing of the National Union of Agricultural Workers at 33s. 6d. as compared with the Rowntree minimum of 44s., to which must be added 2s. because agricultural work is not "moderate" but heavy.

Some may argue that the wages given above are minimum rates but that actual earnings are higher. Now it is common experience the world over that agricultural wages are in fact usually below the minimum rates, because up to now all supervisory bodies, whether trade union or Government institutions, are either too weak or too badly staffed to supervise properly the payment of minimum rates. But even if people want to argue that in England and Wales, on the average, actual wages paid exceed the minimum rate—nobody would dare to argue that they exceed these rates, on the average, by 10 or more per cent. And if they do not

exceed minimum rates by 10 per cent. then they are still far below the Rowntree minimum.

Not all agricultural workers are ordinary workers. Agriculture employs quite a number of skilled workers. But the wages of skilled workers are not much better than those of ordinary workers. If we assume that the wages of horsemen are, on the average, about 38s. to 39s. and wages of stockmen 40s. to 41s. 6d., a very generous estimate, even then an actual wage exceeding this rate by 10 per cent. would be insufficient as compared with the cost of living minimum.

I therefore must conclude : on the average all agricultural workers receive wages below what even Mr. Rowntree regards as a minimum.\* Moreover, female workers also receive so low a wage that even if we deduct a corresponding amount of Mr. Rowntree's minimum "because living in the country is cheaper" they do not reach what he regards as a minimum.

*Since about half a million adult workers † are employed in agriculture we come to the conclusion that about half a million agricultural workers do not receive even what Mr. Rowntree regards as a minimum.*

#### 14. UNEMPLOYMENT INSURANCE BENEFITS AND THE COST OF LIVING

By far the greatest "homogeneous group of workers" are the unemployed workers ; they all have "the same occupation" and they all get "the same wages." How do their "wages," i.e. the benefits paid out by the unemployment insurance, compare with the cost of living.

An adult worker with a wife and three children gets :

	<i>s. d.</i>
For himself . . . . .	17 0
For his wife . . . . .	9 0
For his three children . . . . .	9 0
	<hr/>
TOTAL	35 0

\* Even if we include certain benefits which occasionally must be added to the wages, such as a potato plot, milk at wholesale prices, etc.

† Including most of the workers employed in gardening and forestry.

This is the highest possible benefit payment he can receive and that only for a limited number of weeks. On the average, unemployed married workers with three dependent children get considerably less. No statistics of average payments are available, but few will doubt, that workers living under conditions as assumed above get on the average less than 30s. per week.

Adult women get 15s. per week unemployment benefit.

For agricultural workers the benefits are even lower. Adult men get 14s. plus 7s. for the wife and 3s. for each dependent child, while adult women get only 12s. 6d.

On the average, unemployed men and women get about half as much unemployment benefit as Mr. Rowntree computes as a minimum for moderate work. If we deduct about 2s. from the Rowntree minimum because unemployment corresponds to light and not to moderate work, then we come to the conclusion that adult unemployed workers receive on the average unemployment benefits amounting to little more than half the Rowntree minimum.

*The total number of adult unemployed of all kind varies at present around 1½ million. All of them, as we have seen, receive a weekly benefit far below the Rowntree minimum—far below any standard of living computed by even the most diehard anti-labour statistician.*

#### 15. 10,000,000 WORKERS BELOW THE POVERTY LINE

Chapter III has been no easy reading. Figures follow upon figures.

Each part of this chapter will for the most part interest only workers employed in the industries concerned and Trade Unions representing the workers in the industries dealt with.

But the outcome of this statistical work will also be justified, I hope, in the eyes of those who skip all those parts which are not concerned with "their own industry," when they arrive now at the last pages of this chapter. In these pages

I draw the conclusions, and these conclusions are so important, they give such a clear and at the same time sinister picture of living conditions among the working class, that most readers, whether they belong to the working class or not, must feel the need for action, or at least must sympathise with those who start action.

All the statistical material dealt with in this chapter is official Government material. There is no question of exaggeration on the basis of "one's own observations." No conclusions are drawn which are not obvious to everybody from the figures presented, from the very figures prepared by the Government.

The computations are simple ones, no use is made of higher mathematics and everybody can check them. None of the Trade Union officials to whom these chapters were submitted for comment asked a single question about the methods of computation.

Dry and somewhat laborious is the reading of this chapter and yet the conclusions drawn in the final pages must awaken most intense feelings in every decent person.

. . . . .

We have reached the end of our survey of wages and the cost of living in British industry. With the exception of the distributive and allied trades we have surveyed all the important industries; for the one left out unfortunately not enough data are available. But regrettable as this fact is, it does not influence the final results of our investigation.

In general we find that conditions among women are considerably worse than among men. There are not a few industries in which the great majority of men earn the (inadequate) Rowntree minimum for raising a family, whereas a considerable percentage of the women in the same industry do not earn enough to live independently by themselves.

Let us now tabulate the final results of our investigation according to the number and percentage of adult male and

female workers who do not earn even the Rowntree minimum. The following table gives the number and percentage of the workers covered by the different Government surveys, or by our own survey, who earn even less than the Rowntree minimum.

NUMBER AND PERCENTAGE OF WORKERS WHO EARN LESS THAN THE ROWNTREE MINIMUM

Industry	Male Workers		Female Workers	
	Number 1,000	Per cent.	Number 1,000	Per cent.
Mining, other than coal-mining, and quarrying . . . . .	38.0	75	0.5	75
Treatment of non-metalliferous mine and quarry products . . . . .	4.5	10	0.5	80
Brick, pottery, glass, chemical, etc.	7.0	4	26.5	70
Metal engineering, shipbuilding, etc. . . . .	42.0	5	70.5	55
Textiles . . . . .	82.5	40	152.5	50
Leather . . . . .	2.5	12	4.0	60
Clothing . . . . .	8.0	12	67.5	35
Food, drink, and tobacco . . . . .	10.5	7	32.0	35
Woodworking . . . . .	6.5	6	3.0	25
Paper, printing, stationery, etc. . . . .	1.5	1	9.5	15
Transport and storage (other than railways) . . . . .	5.5	3	2.0	35
Public Utility Services . . . . .	206.0	55	16.0	88
TOTAL . . . . .	414.5	18	384.5	45
Coal mining . . . . .	610.0	80	—	—
Building . . . . .	500.0	50	—	—
Railways . . . . .	175.0	25	—	—
Agriculture . . . . .	470.0	100	30	100

If we apply the percentage of 18, found in the establishments covered by the Government survey, to the total number of adult male workers employed in all industry with the exception of coal-mining, of building, railways, and agriculture, then we arrive at a figure of about  $1\frac{1}{2}$  million workers who earn less than the Rowntree minimum. If we then add those who do not earn the Rowntree minimum in coal-mining, in building, on railways, and in agriculture we arrive at a total figure of



about 3 million adult workers. To this figure must be added the number of unemployed adult male workers which is more than 1 million. Altogether we find that about 4 million adult male wage-earners in Great Britain earn less than the Rowntree minimum.

The percentage of women earning less than the Rowntree minimum in the establishments covered by the Government survey is 45. The number of women employed in other industries, in building, on the railways, and in mining is so small that it can be left out of account. Applying the percentage of 45 to the total number of adult women employed we arrive at a figure of about 1,800,000 female workers who earn less than the Rowntree minimum. To this must be added the number of unemployed adult women, which we can put at about a quarter of a million.

We thus find :

*Adult male workers earning less than the Rowntree minimum of existence : 4,000,000.*

*Adult female workers earning less than the Rowntree minimum of existence : 2,000,000.*

*6,000,000 adult workers do not earn even what Mr. Rowntree regards as a minimum.*

But there remains one more computation : not only the worker himself who finds too little in his pay envelope has to suffer. His whole family has to undergo privation. Of the 4 million adult male workers who earn less than the Rowntree minimum about 15 per cent. have three or more dependant children. Assuming, on the average, four children for these 15 per cent. we arrive at a total of 3.6 million workers, including their wives and children, who actually live on less than the Rowntree minimum. To this must be added the numerous families with only one or two dependant children who earn so much less than the Rowntree minimum for a family of five that they cannot bring up their smaller families on the Rowntree minimum calculated for a family with one or two children. Their number, including dependants, is about 2 millions. Furthermore we must take into account that

among the workers who earn more than the Rowntree minimum calculated for a family with three children there are a considerable number who have four or more children and who earn less than the Rowntree minimum, taking into account the greater size of their family. Their number, including dependants, is about  $1\frac{1}{2}$  millions. Then there are a number of adult female workers earning more than the Rowntree minimum for an independent existence but who, because they have people dependent upon them, earn less than what Mr. Rowntree would regard as a minimum for them. If to the above figures \* are added about  $2\frac{1}{2}$  million male and female workers who do not earn enough to live an independent existence we arrive at a figure of about 10,000,000 workers and dependants who live on a sum below the Rowntree minimum.

*10,000,000 working men, women, and children are living under such conditions that they cannot even keep fit for work, they are not able to recuperate completely from the exhausting work half of them are continuously doing, and they have to spend more strength than they can get back through the purchasing power they earn.*

10,000,000 working men, women, and children underfed, underclothed, under-housed at a time which is "generally regarded as prosperous"; at a time which is rightly regarded as one of record employment and, as post-war conditions go, of comparatively little unemployment.

10,000,000 working men, women, and children living below the poverty line—a poverty line drawn by somebody who can be described only as a man with little imaginative power; by somebody who having never lived on the standard he describes as above the poverty line has no idea to what a terrible life he condemns the workers if he characterises this standard of living as adequate for maintaining health and working power; briefly, for keeping the working population fit.

10,000,000 working men, women, and children—a gigantic figure. Nobody can realise what this means; nobody can

\* The figures given are minimum figures.

multiply in his heart and brain the feelings and thoughts of one of them by 10,000,000. But if only one-tenth of those who live more or less above the Rowntree minimum would realise one-tenth of what living below the poverty line means to one of those unhappy 10,000,000, and if this one-tenth then would act together with those 10,000,000, all united in a common front, conditions would change very quickly.

*Methodological Appendix to Chapter III*

As I have explained in the preface to this book, the various sections of Chapter III were sent for comment to a number of Trade Unions representing the workers in the industries dealt with. The part dealing with conditions in the Public Utility Services was sent to Mr. Bryn Roberts, General Secretary of the National Union of Public Employees, who in his reply raised an important methodological question :

“ For example you state that the number of workers in the Non-Trading Services covered by the Government enquiry was 228,017 and you deduct from this the number of over-time workers and so arrive at a figure of 202,295 persons who received less than the minimum standard. The assumption here is that *all* the workers in the non-trading services (except those who worked over-time) got less than the Rowntree minimum. This would not be accurate for, of course, some workers in the Non-Trading Departments at that time got over 60s. per week for a normal week's work. The explanation is that the figures of 53s. 2d. is arrived at by dividing the total earnings by the total number of persons employed and of the resulting figure (an arithmetical average) some persons would get higher and some lower wages even for a normal week's work, and it would not, therefore, be accurate to infer that only over-time workers earned more than the average.

“ Similarly, your figures for public utility services may be open to the same kind of criticism, for although the average figures here may be above the Rowntree standard, there would be a number of workers in receipt of wages below that standard in addition to the workers on short time. Averages always tend to obscure these points.”

There is nothing to be added to these criticisms of Mr.

Roberts. They are absolutely justified and the question is : Why did I compute the foregoing statistics in spite of these shortcomings ?

These shortcomings, naturally inherent in all computations based on average statistics, possess a consoling feature : they tend to compensate each other. While the average below the Rowntree minimum includes a number of workers who get more than the Rowntree minimum, the average above the Rowntree minimum includes a number of workers who get less than the Rowntree minimum. For this reason I was careful always to say "on the average" this and "on the average" that.

Should these inevitable shortcomings (which, I want to add, could not have been pointed out in simpler or clearer language than that used by Mr. Roberts), have deterred me from undertaking such a study ? I think not—for though the figures are not accurate "to the last decimal," they are accurate enough to give a general picture of conditions or, to make use again of the privilege of quoting Mr. Roberts :

"These are points which strike one, on reading through the chapter, but as I say, the general conclusions, in my view, are quite sound."

## CHAPTER IV

### SEVEN LEAN YEARS

ALMOST seven years have passed since the economic crisis reached a record level at which it remained for over a year. To-day production and employment are higher than ever before in the history of Great Britain. An extraordinarily rapid up-swing followed the turning point which we can place in the second half of 1932. In quite a number of industrial establishments production has doubled and trebled. A considerable number of new factories have been built and are working to-day at full capacity. Some industries, such as iron and steel industry, are experiencing a boom such as has never occurred in peacetime. In a number of places not only is employment higher than ever but even unemployment reaches pre-war levels.

Industrial profits have increased many times over and often reach heights previously attained only through colonial exploitation or during war years. Reserves have grown and often are sufficient to provide a dividend for some years ahead even if nothing is earned during the next few years.

At the end of this period of seven years, to be precise, beginning in the last third of 1937, certain developments became apparent which indicated that the end of the general boom had come. But that does not mean that profits already go down or even that industrial activity on the whole is slackening appreciably. The general rearmament activity dominates an ever-increasing section of industry. Even if there are black spots showing up again in industry and trade, even if unemployment is again on the increase, and even if some firms or even whole industries show a decline in general business activity and in profits—yet on the whole industry is still active enough to yield very high profits, and there are still

a considerable number of firms which, having booked orders for more than a year ahead, are suffering from a shortage of labour or raw materials and providing their shareholders with rosy prospects for a considerable time to come.

How have the workers of Great Britain fared during these seven years? How have their wages developed? What has been their share in the "growing prosperity"?

Looking back over the economic experience of the last 150 years we should expect, during such a period of increasing business activity, real wages to have increased considerably, the intensity of work to have increased as indicated by statistics of employment and production, and the share of labour in the national products to have declined.

How far do labour conditions during the last seven years prove to have been "normal", that is, usual during the periods of increased business activity of the last 150 years, and how far can we observe changes in the "behaviour of labour conditions"?

#### 1. THE DEVELOPMENT OF WAGES FROM 1931 TO 1937

The most important factor in the worker's life are the wages which he brings home at the end of the week. These wages are not rates, they are not hourly earnings. These wages are weekly earnings, influenced by short-time, by over-time, by illness, etc. Is it possible to find out how the weekly earnings which the workers brought home have changed during the years 1931 to 1937?

Anybody interested in this question will seek in vain through the whole literature, academic or labour, for data on this subject. No regularly published statistics of average earnings are to be found. And yet it is comparatively easy to compute a reasonably safe index of average weekly earnings even from Government statistics. That this has not been done is a sign of the low level of labour statistics in England; a branch of knowledge which during the whole of the nineteenth

century and still at the beginning of this century had so many able students. Any American student of labour statistics transplanted to England and given the task of constructing an index of average weekly earnings would seek, just as he does at home, where and how often the Government publishes data on employment and pay-rolls, and after examining the *Ministry of Labour Gazette* he would get to work. He would not be very satisfied with the material available, yet he would see at once that it is complete enough for the purpose and that he can check his figures every few years by the comparatively well-conducted Government enquiry into the earnings in almost all industries.

In the following table I give first the earnings per week for all those industries for which the *Ministry of Labour Gazette* publishes monthly data on employment and total wages paid. Since we want to check this index with the data on earnings published by the Government, the result of its enquiry into earnings and hours in October 1931 and October 1935, we compute an index of earnings for October of each year. We use 1931 as a base year simply because it is the first year under review.

AVERAGE WEEKLY EARNINGS IN OCTOBER  
(1931=100)

Year	Cotton	Woollen and Worsted	Boots and Shoes	Brick	Pottery
1931	100	100	100	100	100
1932	99	98	94	91	105
1933	96	103	95	100	108
1934	98	100	97	103	111
1935	98	104	100	103	113
1936	101	104	98	107	114
1937	111	105	100	110	116

In order to decide whether the sample used by the Government is really representative and whether wages really have moved by about the same amounts as indicated above, we shall check these figures by the results of the much more

comprehensive surveys of earnings in October 1931 and October 1935.

AVERAGE WEEKLY EARNINGS IN OCTOBER  
(1931=100)

<i>Industry</i>	<i>1931</i>	<i>1935</i>
Cotton . . . . .	100	98
Woollen and worsted . . . . .	100	104
Boots and shoes . . . . .	100	97
Brick . . . . .	100	101
Pottery . . . . .	100	102

With the exception of the pottery industry the differences are not very great. In the textile industries the two indices for October 1935 are identical; in the boot and shoe and in the brick industries the index in the first table is somewhat higher than that in the second. In the pottery industry, however, the figures differ considerably. Since it is impossible to decide whether this is due to the fact that the general survey of earnings in October 1935 includes besides pottery a number of similar industries or whether the sample of pottery firms reporting monthly to the Government is unrepresentative, we shall leave the pottery industry out of the computations that follow.

Beside the above statistics there are available adequate statistics of earnings for three more important industries.

The Ministry of Transport publishes for March each year statistics of average earnings for the conciliation staff and for the shop and artisan staff as well as for the staff entered at salaried rates :

AVERAGE WEEKLY EARNINGS ON RAILWAYS IN MARCH  
(1931=100)

1931 . . . . .	100
1932 . . . . .	95
1933 . . . . .	95
1934 . . . . .	96
1935 . . . . .	97
1936 . . . . .	99
1937 . . . . .	101 *

\* After the increase in rates through the Award of the Railway Staff National Tribunal the index goes up to about 103 or 104.



The British Iron and Steel Federation publishes monthly data on average earnings in the iron and steel industry :

AVERAGE EARNINGS IN THE IRON AND STEEL INDUSTRY IN  
OCTOBER  
(1931=100)

1931	.	.	100
1932	.	.	97
1933	.	.	109
1934	.	.	110
1935	.	.	116
1936	.	.	126
1937	.	.	136

And finally the Mines Department publishes quarterly a survey of earnings per shift and the number of shifts and men, so that it is easy to compute an index of quarterly earnings per man. The following table shows the index of quarterly earnings for the last quarter of the year, except for 1937 for which only the figures for the third quarter have yet been published. It is true earnings in the fourth quarter are usually somewhat higher, but as the cost of living has this year increased at least as much, the final index of real earnings will not be affected.

AVERAGE EARNINGS IN COAL MINING, 4TH QUARTER  
(1931=100)

1931	.	.	100
1932	.	.	100
1933	.	.	101
1934	.	.	105
1935	.	.	109
1936	.	.	118
1937	.	.	120

Unfortunately we have now exhausted the sources available ; no more regular statistics of earnings are published. But with important parts of the transport, textile and metal industries, with the whole of coal-mining, and with some other smaller manufacturing industries covered, it is possible to compute a combined index of weekly earnings which, though not of excellent quality, may serve as an indication

of the trend of earnings in British industry during the last seven years. In combining these seven indices into one I have given to each index the weight which corresponds to the number of workers employed by it. The combined index runs as follows :

INDEX OF AVERAGE WEEKLY EARNINGS IN BRITISH INDUSTRY  
(1931=100)

1931 . . .	100
1932 . . .	97
1933 . . .	99
1934 . . .	101
1935 . . .	104
1936 . . .	108
1937 . . .	113

During the year of depression, 1932, earnings still declined, but with the beginning of the up-swing weekly earnings began to increase too, and in 1937 money earnings were about 13 per cent. higher than in 1931.

Part of this increase is due to an increase in the number of hours worked ; part of it is due to a more strict observation of collective agreements by the employers under pressure from the Trade Unions which have grown in strength ; and part of it is due to the fact that wage rates have increased. A comparison between the development of wage rates and earnings is instructive in estimating the relative importance of the two more important factors :

EARNINGS AND RATES IN BRITISH INDUSTRY  
(1931=100)

<i>Year</i>	<i>Earnings</i>	<i>Rates</i>
1931 . . .	100	100
1932 . . .	97	98
1933 . . .	99	98
1934 . . .	101	98
1935 . . .	104	100
1936 . . .	108	103
1937 . . .	113	107

From 1931 to 1932 about two-thirds of the decrease in earnings is due to a decline in rates ; during the years 1933

and 1934 the gradual decline of short-time, and a certain increase in over-time work, are chiefly responsible for the increase in earnings, while the more general payment of wage rates as compared with the not infrequent infraction of the wage-rate agreements in 1931 and 1932 must not be forgotten. Between 1934 and 1936 about two-thirds of the increase in earnings is due to increased wage rates, one-third to a lengthening of the working day. Between 1936 and 1937 rates have increased about as much as earnings, an indication that the total number of hours worked per week has, on the average, not changed between 1936 and 1937.

On the whole one may say that only about one half of the increase in earnings between 1931 and 1937 was due to an increase in the rate of wages.

But money earnings are not of vital importance for the worker. Earnings are characterised not by their monetary denomination but by the amount of commodities one can buy with them. Of real importance are not money but real earnings. Real earnings can be computed, unfortunately, only with the official cost of living index which is generally regarded as defective, responding inadequately for instance during the last two years to the rise in prices. Computed with the help of the official index real earnings have developed as follows :

INDEX OF AVERAGE WEEKLY REAL EARNINGS IN BRITISH  
INDUSTRY  
(1931=100)

1931	.	.	100
1932	.	.	99
1933	.	.	103
1934	.	.	103
1935	.	.	105
1936	.	.	107
1937	.	.	105

Real earnings increased, after a small decline during the depression in 1932, continuously up to 1936. During 1937 they began to decline. The decline in 1937 is due chiefly to the inflation of prices in connection with the rearmament .

programme. This decline of real earnings in a period of increasing business activity is quite an unusual feature. But perhaps it is wrong to describe the autumn of 1937 as a period of increasing business activity. It is possible that in the light of later events one will be more justified in describing it as the beginning of a period of declining business accompanied by inflation. In this case the development of trade would follow along the lines of many former crises, not, however, under the shadow of a deflation but rather accompanied by an inflation.

To-day the purchasing power of the employed wage-earner is about 5 per cent. higher than during the crisis and depression—a very small gain within seven years. But this is not all. Naturally more work takes more out of the workers, requires more and better food, etc. *On the whole one may say that the real gain in the standard of living per employed worker during the last seven years has not been more than 3½ per cent., or about ½ per cent. per year; even if we measure real wages with the admittedly inadequate Government index. And this in a period during which real dividends and real profits doubled and trebled!*

## 2. THE DEVELOPMENT OF THE TOTAL NATIONAL WAGE BILL BETWEEN 1931 AND 1937

Much larger than the increase in money earnings per employed worker was the increase in the national wage bill. For the number of unemployed who found work during the last seven years has been considerable. While the earnings of the employed worker have risen only by about 13 per cent. the number of employed workers who receive these increased earnings has risen by about 21 per cent.

In the following table I give the indices of employment (computed on the basis of the figures which Mr. Colin Clark developed in his book *National Income and Outlay*), of earnings and of the national wage bill :

EMPLOYMENT, EARNINGS, AND NATIONAL WAGE BILL  
(1931=100)

<i>Year</i>	<i>Employ- ment</i>	<i>Earnings</i>	<i>National Wage Bill</i>
1931 . . .	100	100	100
1932 . . .	99	97	96
1933 . . .	101	99	100
1934 . . .	106	101	107
1935 . . .	110	104	114
1936 . . .	116	108	126
1937 . . .	121	113	137

The national wage bill to-day is by more than one-third higher than in 1931. About one-third of this increase is due to an increase in earnings, about two-thirds are due to an increase in the number of employed. If we compute the national wage bill in millions of pounds on the basis of Mr. Clark's estimate for 1931 we arrive at the following figures :

NATIONAL WAGE BILL IN MILLIONS OF POUNDS

1931 . . .	1,365
1932 . . .	1,310
1933 . . .	1,370
1934 . . .	1,455
1935 . . .	1,555
1936 . . .	1,715
1937 . . .	1,871

Altogether the national wage bill has increased since 1931 by about 500 million pounds. The total amount of money at the disposal of the workers, however, does not coincide with the national wage bill. The most important factor which has to be taken into consideration is the net amount of unemployment benefit, that is, the total of unemployment benefit paid out minus the contributions of the workers to the unemployment insurance. Taking this into account we arrive at the following figures :

## WAGES PLUS NET UNEMPLOYMENT BENEFITS

	<i>Millions of Pounds</i>
1931 . . .	1,400
1932 . . .	1,335
1933 . . .	1,390
1934 . . .	1,465
1935 . . .	1,565
1936 . . .	1,720
1937 . . .	1,880

If there were no unemployment the total wage bill would of course be much higher. In the following table I give the total national wage bill, how it would have looked if there had been no unemployment and no unemployment insurance payments by the workers. The wage losses through the unemployment insurance contributions are computed as follows: I added together on the one hand the worker's contributions to the insurance and half of the Government contributions, which I assumed comes from taxation of the workers.

TOTAL NATIONAL WAGE BILL IF THERE HAD BEEN NO UNEMPLOYMENT  
AND NO UNEMPLOYMENT INSURANCE CONTRIBUTIONS

	<i>Millions of Pounds</i>
1931 . . .	1,755
1932 . . .	1,695
1933 . . .	1,725
1934 . . .	1,765
1935 . . .	1,860
1936 . . .	1,990
1937 . . .	2,125

By deducting the figures of the total of wages and net unemployment benefit from the total national wage bill if there had been no unemployment and no unemployment insurance contributions we get the figures for the annual net losses of the workers through unemployment. The figures are :

## LOSSES THROUGH UNEMPLOYMENT

	<i>Millions of Pounds</i>
1931 . . .	355
1932 . . .	365
1933 . . .	345
1934 . . .	300
1935 . . .	295
1936 . . .	270
1937 . . .	245
	<hr/>
TOTAL	2,175

Total losses of the workers through unemployment amounted to about one and a half year's earnings. *In seven years the workers lost one and a half year's income through unemployment alone.* We have left out of account wage losses through accidents and illness, through strikes and lock-outs (strikes cause wage losses, forced upon the worker either because of attacks by the employers on the already much too low standard of living of the workers or because of the resistance of the employers against the attempts of the workers to improve their standard of living, which, even according to the computations of statisticians belonging to the same class and social group as the employers, are too low). If we had taken into account all these facts we would have found that the workers of Great Britain during the last seven years have lost not much less than two years' income.

But, one may object, is it not an unreal assumption to suppose that there is no unemployment and no unemployment contributions by the workers? Some may say, such a thing is possible only under a Socialist Government and it is only a sign of complete misunderstanding of economic conditions to assume for any society the possibility of seven years without losses through unemployment. But this is wrong. There is many a decade and many a country in which we find, under capitalism, seven-year periods almost without unemployment and without any unemployment insurance contributions.

That is right, many will say, but these periods are gone, they belonged to the nineteenth century.

And this is just the point I want to make. Only the fact that in the nineteenth century there were periods when wage losses through unemployment did not play any rôle justifies us in computing the losses through unemployment starting with the assumption that the workers did not need to pay any unemployment insurance contributions and were not unemployed. Therefore, our assumption is not unreal but will perhaps be called unhistorical. How can one, some will say, start with assumptions that are unhistorical? But are they unhistorical? If something has happened in the nineteenth century it is extremely unlikely that it will again happen, under the same conditions and circumstances in the twentieth century. But it is by no means necessary that conditions and circumstances must be exactly the same for it to happen again. Unemployment was low as long as society was ruled by progressive forces. These progressive forces were represented during the greater part of the nineteenth century by pure capitalist bourgeois society. To-day the progressive forces are represented by labour and still a considerable part of the bourgeoisie, chiefly the petty and middle bourgeoisie. There is no doubt that a Government corresponding in its composition and its backing, let us say to the first Blum Government, i.e. to the first Popular Front Government in France, backed by the wage workers, the blackcoat workers, the small farmers, tradesmen, craftsmen, a considerable part of the intelligentsia, and a fair sprinkling of the middle bourgeoisie, could reduce unemployment to as low a level as prevailed usually in the nineteenth century.

Therefore, we are justified in considering the losses unemployment has caused to the workers and in assuming at the same time that there is (in capitalist society), a distinctive possibility of eradicating these losses, that there is a prospect for the workers of an income corresponding at least to the present one minus the losses through unemployment.

Our figure of a wage income free from losses caused through



unemployment and from the payments of unemployment insurance contributions by the workers is, therefore, not a theoretical one taken from the sky in order to measure reality by an ideal, but it is a figure which should represent reality in the future with which we compare the reality of the present. And what this future reality means to the workers will become clear to everybody at once, if I explain that on the basis of the above figures the workers' wage income and his purchasing power during the last few years would have been by about one-fifth higher if there had been no losses through unemployment or unemployment insurance contributions. For the individual years the gain would have been :

**THE WORKERS' INCOME WOULD HAVE BEEN HIGHER IF THERE HAD BEEN NO UNEMPLOYMENT AND NO CONTRIBUTIONS TO UNEMPLOYMENT INSURANCE FUNDS BY**

1931 . . .	25-per cent.
1932 . . .	27 ..
1933 . . .	25 ..
1934 . . .	21 ..
1935 . . .	19 ..
1936 . . .	16 ..
1937 . . .	13 ..

*It is difficult to imagine what it would have meant to the working class if, during the last seven years, its income and purchasing power had been by about one-fifth higher than it actually has been. For millions it would have made all the difference between going hungry and being adequately fed. For millions of others it would have made all the difference between being adequately fed and having a meal which was not only sufficient but also gave pleasure. For millions it would have meant another child, books, better health, less anguish and disquiet—for half the population of these Isles it would have meant an infinitely better life than they have had.*

### 3. THE RELATIVE POSITION OF LABOUR

We have seen how labour has fared during the last seven years. We have seen how labour could have fared without,

the plague of unemployment. This plague is so terrible that short-time, wage-reductions and wage-increases, and many other factors influencing labour conditions appear beside it as of minor importance.

We must now see how labour has fared in comparison with the other classes and groups belonging to present-day society. Let us compare the development of the income of the workers and of the total national income.\*

THE WORKERS' INCOME AND THE NATIONAL INCOME IN MILLIONS  
OF POUNDS

<i>Year</i>	<i>National Income</i>	<i>Workers' Income</i>
1931 . . .	3,890	1,400
1932 . . .	3,845	1,335
1933 . . .	3,960	1,380
1934 . . .	4,240	1,465
1935 . . .	4,530	1,565
1936 . . .	4,850	1,720
1937 . . .	5,200	1,880

The percentage which the workers' income forms of the national income was during the seven years under review as follows :

THE WORKERS' INCOME IN PER CENT. OF THE NATIONAL INCOME

1931 . . .	36 per cent.
1932 . . .	35 "
1933 . . .	35 "
1934 . . .	35 "
1935 . . .	35 "
1936 . . .	36 "
1937 . . .	36 "

Similar tabulations can be found in quite a number of books on the national income ; and always we find the satisfactory conclusion drawn : the share of labour in the national income has been maintained, has increased slightly, or has declined only negligibly. Sometimes such statistics can prove for

\* For the years 1931-1935, cf. the above-mentioned book by Colin Clark ; for 1936 estimate of the Westminster Bank, in its monthly *Review*, June 1937 ; 1937 my own estimate.

half a century or so that the share of labour in the national income has been maintained. Is this true? It is just as true as if one found that a worker with three children gets just the same income as when he was married and had no children, and concluded therefrom that his income has remained unchanged, and hence that he should be just as well off to-day as formerly.

What is so conveniently forgotten is that the number of workers has not only increased absolutely but also in relation to the total population. And this holds true not only for comparisons between let us say to-day and fifty years ago, but also for comparisons between to-day and 1931.

In the following table I give an index of the national income per head of the population and of the average wage and unemployment benefit income per unemployed and employed worker.

INCOME PER HEAD OF POPULATION AND PER WORKER  
(1931=100)

Year	Income Per Head	Income Per Worker
1931 . . .	100	100
1932 . . .	98	95
1933 . . .	101	98
1934 . . .	108	103
1935 . . .	116	109
1936 . . .	122	118
1937 . . .	130	126

The income per head of the population has increased more than the income per worker. But this really does not quite show the comparative development of the income of the workers and the rest of the population because in the national income is still included the workers' income. What we must really compare is the income per worker and per non-worker. Only if we do this, and if we then divide the one by the other, can we get an approximately adequate indication of the relative position of labour during the years under review. In the following table I give this index of labour's relative position.

## LABOUR'S RELATIVE POSITION

1931 . . .	100
1932 . . .	94
1933 . . .	95
1934 . . .	93
1935 . . .	93
1936 . . .	95
1937 . . .	94

*It is obvious from the above table that labour's relative position within society has not improved, has not even remained stable, but has deteriorated quite decidedly. While real wages, according to official statistics have increased by about 5 per cent., the relative position of labour has deteriorated by about 6 to 7 per cent. And this in spite of the fact that the income of more than a million workers has approximately doubled or even more than that because they have found work.*

## 4. EMPLOYED AND UNEMPLOYED WORKERS

And this brings us to another comparison. How have those workers fared who were employed in 1931 and all through the following years ?

THE RELATIVE POSITION OF EMPLOYED WORKERS  
(1931=100)

1931 . . .	100
1932 . . .	97
1933 . . .	96
1934 . . .	90
1935 . . .	89
1936 . . .	88
1937 . . .	85

*The relative position of the majority of the workers, of the workers who were employed in 1931 as well as in 1937, has deteriorated very considerably. It is lower to-day than seven years ago by about 15 per cent. Profits, dividends, and interest payments have increased so much more than the wages of the employed workers that their relative position has grown worse from year to year. To-day the relative share of the*

employed workers in the national product is about three times lower than their purchasing power is higher.

What does this mean? It means that in spite of the fact that the "piece of cake" which the employed worker gets has grown by 4 per cent., the cake itself has grown so much more that the piece which the worker gets forms a smaller part of the whole cake than before. Or, to express it more simply: the rich are not only getting ever richer, but they are getting richer, relatively, even more quickly! The abyss between the Two Nations is growing in size.

And how has the position of those workers who remained unemployed developed? Let us assume a worker is unemployed; let us further assume that for the whole time he is in the "extraordinarily favourable position" of getting always the highest possible unemployment benefit. He then would have received:

In 1931 . . .	100
„ 1932 . . .	92
„ 1933 . . .	92
„ 1934 . . .	97
„ 1935 . . .	103
„ 1936 . . .	103
„ 1937 . . .	103

The real income of these "most favoured" unemployed workers would be:

REAL INCOME OF THE UNEMPLOYED WORKERS  
(1931=100)

1931 . . .	100
1932 . . .	94
1933 . . .	97
1934 . . .	102
1935 . . .	106
1936 . . .	103
1937 . . .	98

*Living conditions of the unemployed to-day are worse than during the crisis. Their purchasing power is lower to-day than seven years ago. The poorest among the poor have become even*

poorer. The rise in prices has robbed them of part of the ridiculously small benefits they get from the unemployment insurance.

And accordingly their relative position has grown worse—even worse than that of other workers. If we use 1931 as a base, or 100, the relative position of the unemployed workers to-day is 78!

The only group of workers who really have benefited, and quite naturally so, from the increase in business activity are those who in 1931 were unemployed but then found work and received regular wages like all the other workers regularly employed.

Thus we can sum up: *the employed workers receive to-day real wages about 5 per cent. higher than in 1931—a ridiculously small amount which might very well turn into a decline in purchasing power if the rapid increase of the cost of living during 1937 were measured by a better index than the present one constructed by the Government. The relative position of the employed workers has deteriorated rapidly.*

*The unemployed workers receive to-day lower real benefits than in 1931 and their relative position has deteriorated even more rapidly than that of the employed workers.*

Only the position of workers who in 1931 were unemployed and who to-day are employed is both absolutely and relatively better to-day than seven years ago.

To round off the picture I give an index of industrial production per worker:

INDUSTRIAL PRODUCTION PER EMPLOYED WORKER

(1931=100)

1931	.	.	100
1932	.	.	101
1933	.	.	104
1934	.	.	111
1935	.	.	115
1936	.	.	119
1937	.	.	121

The production per worker has increased by more than one-fifth, he has produced from year to year more—and his

share in the product has declined : a development not at all peculiar to the last seven years ; a development to be witnessed through the last 150 years. But this, of course, does not mean a development which will continue for the next 150 years, or even merely for the next seven years. Much can be done to change the situation by a concerted move for the improvement of labour conditions on the part of all interested in this improvement : by the workers who want to get more purchasing power ; by the shopkeepers whose sales increase with the increasing purchasing power of the workers ; by teachers, physicians, etc., whose income increases with the increasing purchasing power of the workers and shopkeepers ; by writers whose books sell better ; briefly, by all who are for the masses and against the few.

#### 5. LABOUR'S SHARE IN THE INDUSTRIAL PRODUCT

We have found that labour's share in the national product has declined considerably while at the same time labour has produced more and more per man.

It is now necessary to investigate labour's share in the industrial product of the nation. I have given a detailed explanation of how to do this\* and some controversy † has arisen about the methods I used. In the following I am using a simplified method, which in my opinion is not quite as thorough but will suffice for the present purpose : I divide real wages per worker by the industrial product per head of the population.

In applying this method to the official figures of production and population, of wages, of employed and unemployed workers, we arrive at the following results :

\* Cf. *Labour Conditions in Western Europe, 1820-1935*, p. 27 f.

† Cf. for instance Prof. Bowley's *Review of Labour Conditions*, etc., in the *Journal of the Royal Statistical Society*.

LABOUR'S SHARE IN THE INDUSTRIAL PRODUCT, 1931-1937  
(1931=100)

Year	Share of the Employed Workers	Share of the Employed and Unemployed Workers
1931 . . . . .	100	100
1932 . . . . .	100	98
1933 . . . . .	99	99
1934 . . . . .	89	93
1935 . . . . .	85	90
1936 . . . . .	79	88
1937 . . . . .	75	85

Labour's share in the national industrial product has declined even more than labour's share in the national income. The reason for this difference lies in the fact that the national income derived from industrial production, i.e. from that source at which the workers work, has increased considerably more than the rest of the national income. *There is no branch of national activity which contributes so much to the relative deterioration of labour's position as just that branch in which labour is employed, in which labour is exploited, in which the worker toils from the beginning until the end of his life.*

## 6. SUMMARY

The time has come to summarise the results of this study of seven lean years for British labour. In the following table I put together the data for the first and the last of these seven lean years.

LABOUR'S "PROGRESS" IN SEVEN YEARS OF "GROWING  
PROSPERITY"

	1931	1937
Weekly earnings . . . . .	100	113
Weekly real earnings . . . . .	100	105
Labour's income (million pounds) . . . . .	1,400	1,880
Losses through unemployment in seven years . . . . .	£2,175,000,000	



	1931	1937
Labour's share per cent. of national income	36	36
Labour's relative position . . . . .	100	94
Relative position of employed labour . . . . .	100	85
Real income of unemployed workers . . . . .	100	98
Industrial production per employed worker . . . . .	100	121
Labour's share in the industrial product . . . . .	100	85
The share of the employed workers in the industrial product . . . . .	100	75

Seven lean years ? Yes ! or rather seven leaner and leaner years ! And the next seven years ? Many economists, and among them the best, predict a new crisis in the near future. The next seven years will not be lean ; they will either be hell or, under pressure of mass action in a Popular Front, they will bring progress—at last !

**CHECKED**  
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