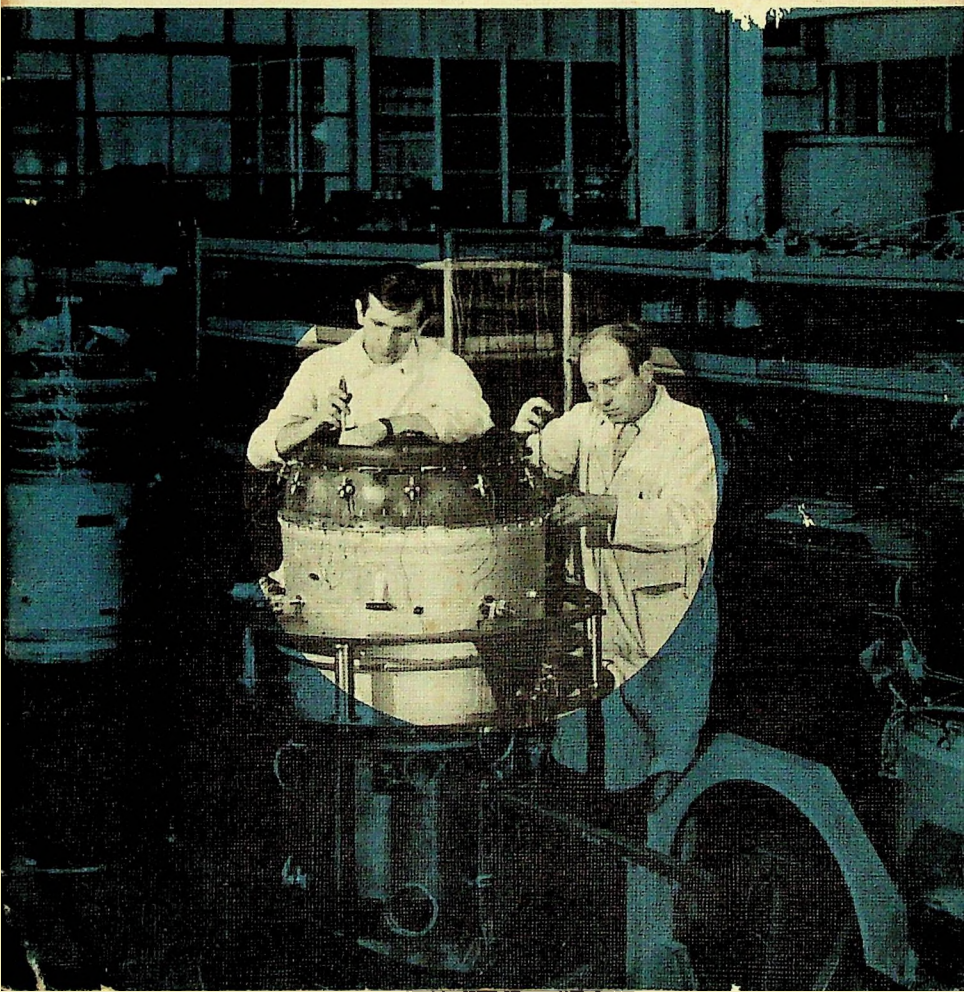
PROBE 8

Industry



Industry

PROBE is a series of short booklets which have been designed to provide school groups and teachers with information about important topics, as a basis for discussion.

No attempt is made to explore a topic exhaustively, nor do these studies claim to be any more than pieces of 'occasional' writing, to serve the needs of the moment. Their aim is merely to open up a particular subject and raise a few relevant questions. The title *PROBE* is meant to convey, not what the booklets do, but what its readers will want to do when they have read them.

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The Importance of Industry

In Great Britain, out of a total population of 66 million, there are 22 million employed in industry. These work in different sections as follows:

Agriculture, Forestry and Fishing	345,000
Mining and Quarrying	401,000
Manufacturing	8,432,000
Construction	1,429,000
Gas, Electricity and Water	369,000
Transport and Communication	1,564,000
Distributive Trades	2,582,000
Insurance, Banking etc.	971,000
Professional and Scientific Services	2,904,000
Miscellaneous Services	1,794,000
Public Administration	1,416,000*

For manual workers, the average working week is 38 hours, paid at 37p per hour. Clerical and administrative workers are paid by the week, the averages being £22.50 for men and £17.49 for women (1971 figures).

Moreover, this country depends for between a quarter and a half of its food on industrial exports to the tune of some £5½ million every month (and it is well known that this is still not enough to clear our debts).

*These figures are taken from Table 103 of the DE Gazette, February 1972

Its Growth and Development

ORIGINS

Our picture

An early steam engine. Our present industrial civilization can be thought of as beginning with the discovery of how to harness the power of steam. Previously the limits had been those of muscle power of man or horse or elephant, or the power of waterwheels or windmills. What further developments have there been in power engines? It could be said that man has always been industrial ever since he hit on the idea, for instance, of using one stone to chip another. Tools and machines are ancient, the hammer, the loom, the file, the grindstone.

Division of labour

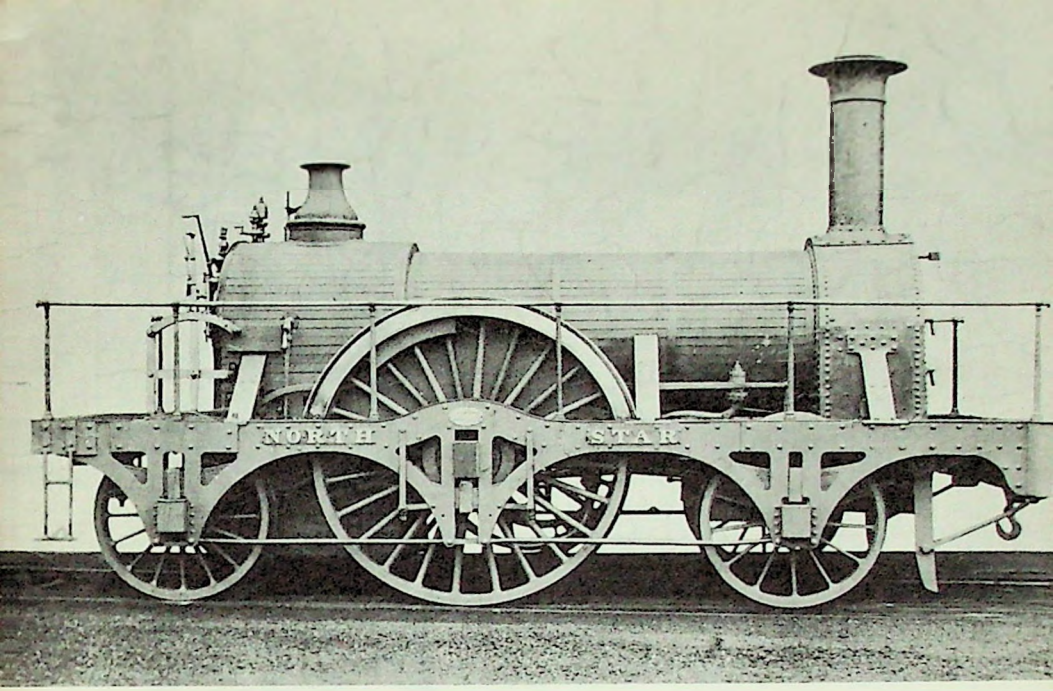
From very early times there have been those who do not make their food directly, either by hunting it or by rearing it or by growing it. Maybe in the beginning it was the same man who chewed the skins of the beasts he had killed in order to make his own clothes and the same man who chipped out his own flint arrowheads to go hunting again. But the weaver and the toolmaker soon emerge as full-time specialists. The family which can make the best cloth produces it for a whole village and the village in turn supplies food in exchange.

Commerce

In the 7th century BC money was invented, with two important consequences:

(*a*) Saving was now possible. Instead of having to barter a jacket every time you wanted a joint of meat, you could sell several jackets, save the money and buy the meat as you required it.

(*b*) You could also lend money and/or borrow it. Credit was now possible.



For discussion

Suppose you own and work the village flour mill.

1 For whose benefit do you run it?

2 How much should you charge?

3 Maybe there's too much work and you take on an assistant. How much do you pay him?

4 Maybe there's still too much work and you need another set of grindstones. You haven't enough money yourself so you borrow some to buy the new machinery. Should you pay interest on this loan?

5 What does 'Loving your neighbour as yourself' mean in this situation?


SMITH

FACTORY AND CITY

Our picture

A typical town in the industrial north of England. The availability of new resources of power and materials enabled a concentration of production with corresponding efficiency.

Large towns are nothing new. The population of ancient Rome was 1,000,000 spread over four square miles. The traffic problem was so great that Julius Caesar prohibited the delivery of goods to shops during the hours of daylight. But what has been happening since the beginning of the 19th century is that more and more cities all over the world have been mushrooming in size. On the one hand, modern factories need thousands of people to operate efficiently; on the other the birth rate seems to ensure that there are always people to fill these jobs. The human race, the more it produces, the more it reproduces.

For discussion

1 List the relative advantages of living in a town or in a village.

2 Would you rather work in a factory or on a farm? Why?

3 What steps are being taken to preserve a balance between town and country?

4 Compared with medieval towns such as York or Ludlow, the industrial town in the picture is thoroughly drab. The rows and rows of houses lack beauty and colour and the factories are conglomerations of mere functional sheds. Need this be so? Would it cost more to design well? And if it did, would it be worth it? Who would pay?

Draw a series of maps showing the rapid growth of the town or city in which or near which you live. Suggested map dates: 1350 AD, 1600 AD, 1750 AD, 1800 AD, and each succeeding 50 years.

FINANCE

In the section on 'Origins' we supposed that the miller decided to float a loan in order to increase his capital investment. The cost of a modern production line runs into several millions of pounds which has to be raised by loan: you are invited to purchase a 'share' in the company, usually of between 25p and £1, in return for which you are paid a part of the profit the company makes.

Suppose you lend £1 and the company uses it. They might well pay you $7\frac{1}{2}\%$ annual interest on your loan (or $7\frac{1}{2}$p), though you would only actually receive about 5%, since the state would require the rest in tax.

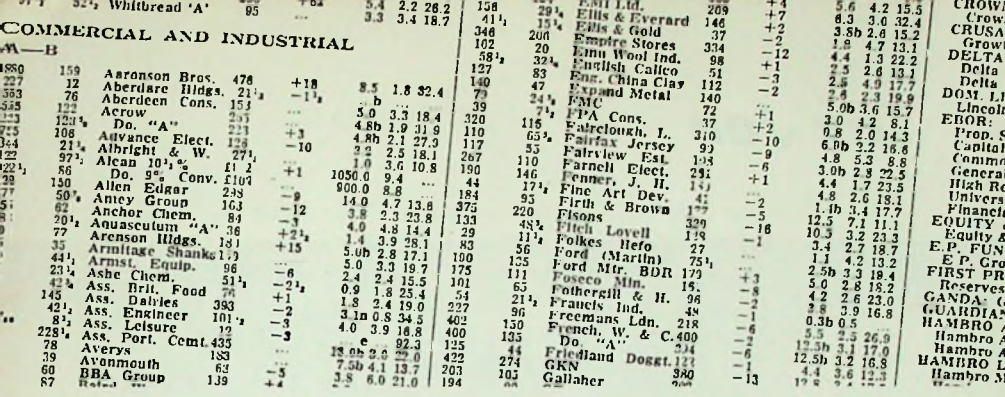
Of course if the company makes no profit, you get no interest on this sort of 'ordinary' share. You may decide you want your money back. How could the company pay you? Only by 'going bankrupt', selling off all its equipment at whatever price it can get and giving you and the other creditors a proportion of the amount realized. This way you might get say, 30p of your original £1 share.

More commonly, what you would do is to get someone else to take on your part of the loan. He would 'sell' your 'share'. If people thought that the company had a reasonable chance of recovering, you might get 75p for your '£1' share and if in the next year the company recovered and did make a profit, the new owner of the share would be paid his $7\frac{1}{2}\%$ on the original amount of the loan, namely the £1 (and not on the 75p which he actually paid for it).

If a company is doing well, of course, there will be many people anixous to 'buy a share' in it, so you might be able to sell your £1 share for £1.50. This way, as well as any interest you may have been paid, you would make 50% profit on your original loan, though again the state might well take a proportion as 'capital gains tax'.

£1 invested	Company uses	Dividend 5p	Share worth £1
£1 invested	Company collapses	Dividend nil	Share price 30p
£1 invested	Company struggling	Dividend nil	Share price 75p
£1 invested	Company prospers	Dividend 10p	Share price £1.50

Thus shares can be bought and sold, on the stockmarket or stock exchange. The most famous is in the City of London and runs as a sort of auction in constant telephone communication with stockbrokers and banks all over the country.



COMMERCIAL AND INDUSTRIAL

A—B

Aaronson Bros. 478 +18
Aberdare Hldgs. 21½ −1½
Aberdeen Cons. 153 ...
Acrow 235 ...
Do. "A" 223 ...
Advance Elect. 128 +3
Albright & W. 277½ −10
Alcan 10½% £1 ½ ...
Do. 9% Conv. £100 +1
Allen Edgar 238 ...
Amey Group 163 −9
Anchor Chem. 84 −12
Aquascutum "A" 36 −3
Arenson Hldgs. 181 +21½
Armitage Shanks 150 +15
Armst. Equip. 96 ...
Ashe Chem. 51½ −6
Ass. Brit. Food 78 −2½
Ass. Dairies 393 +1
Ass. Engineer 101½ −2
Ass. Leisure 12 −3
Ass. Port. Cemt. 435 −3
Averys 183 ...
Avonmouth 69 ...
BBA Group 139 −5

8.5 1.8 32.4
...b ...
5.0 3.3 18.4
4.8b 1.9 31.9
4.8b 2.1 27.3
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4.0 4.8 14.4
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5.0b 2.8 17.1
5.0 3.3 19.7
2.4 2.4 15.5
0.9 1.8 25.4
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15.0b 2.0 22.0
7.5b 4.1 13.7
2.8 6.0 21.0

Ellis & Everard 146 +7
Ellis & Gold 37 +2
Empire Stores 334 −2
Emm Wool Ind. 98 −12
English Calico 51 +1
Eng. China Clay 112 −3
Expand Metal 140 −2
FMC 72 ...
FPA Cons. 37 +1
Fairclough, L. 310 +2
Fairfax Jersey 93 −10
Fairview Est. 195 −9
Farnell Elect. 291 −6
Fenner, J. H. 143 +1
Fine Art Dev. 47 ...
Firth & Brown 177 −2
Fisons 329 −5
Fitch Lovell 178 −18
Folkes Hefo 27 −1
Ford (Martin) 75½ ...
Ford Mtr. BDR 179 ...
Fosseo Min. 15½ +3
Fothergill & H. 96 −8
Francis Ind. 48 −2
Freemans Ldn. 218 −1
French, W. & C. 400 −6
Do. "A" 334 −2
Friedland Dogst. 123 −6
GKN 380 −1
Gallaher 200 −13

5.6 4.2 15.5
6.3 3.0 32.4
3.8b 2.6 15.2
1.9 4.7 13.1
4.4 1.3 22.2
2.5 2.6 13.1
2.6 4.9 17.7
2.6 2.3 19.9
5.0b 3.6 15.7
3.0 4.2 8.1
0.8 2.0 14.3
6.0b 2.2 16.6
4.8 5.3 8.8
3.0b 2.8 22.5
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4.8 2.6 18.1
1.1b 3.4 17.7
12.5 7.1 11.1
10.5 3.2 23.2
3.4 2.7 18.7
1.1 4.2 13.2
2.5b 3.3 18.4
5.0 2.8 18.2
4.2 2.6 23.0
3.8 3.9 16.8
0.3b 0.5 ...
5.5 2.5 26.9
12.5b 3.1 17.0
12.5b 3.2 16.8
4.4 3.6 12.3

Our picture

Is part of the finance page of a typical national daily newspaper and it quotes the prices at which you could buy shares in the companies stated, together with notes as to whether these prices are rising or falling.

Most of the shares in British industry are owned, not by private individuals directly, but by insurance companies, pension funds, banks and so on who consider it wiser to make use of their clients' money in this way than to keep it in vaults.

For discussion

1 If you have savings should you
   (*a*) give them to someone in need, here or abroad
   (*b*) lend them without interest
   (*c*) lend them for the most profit?

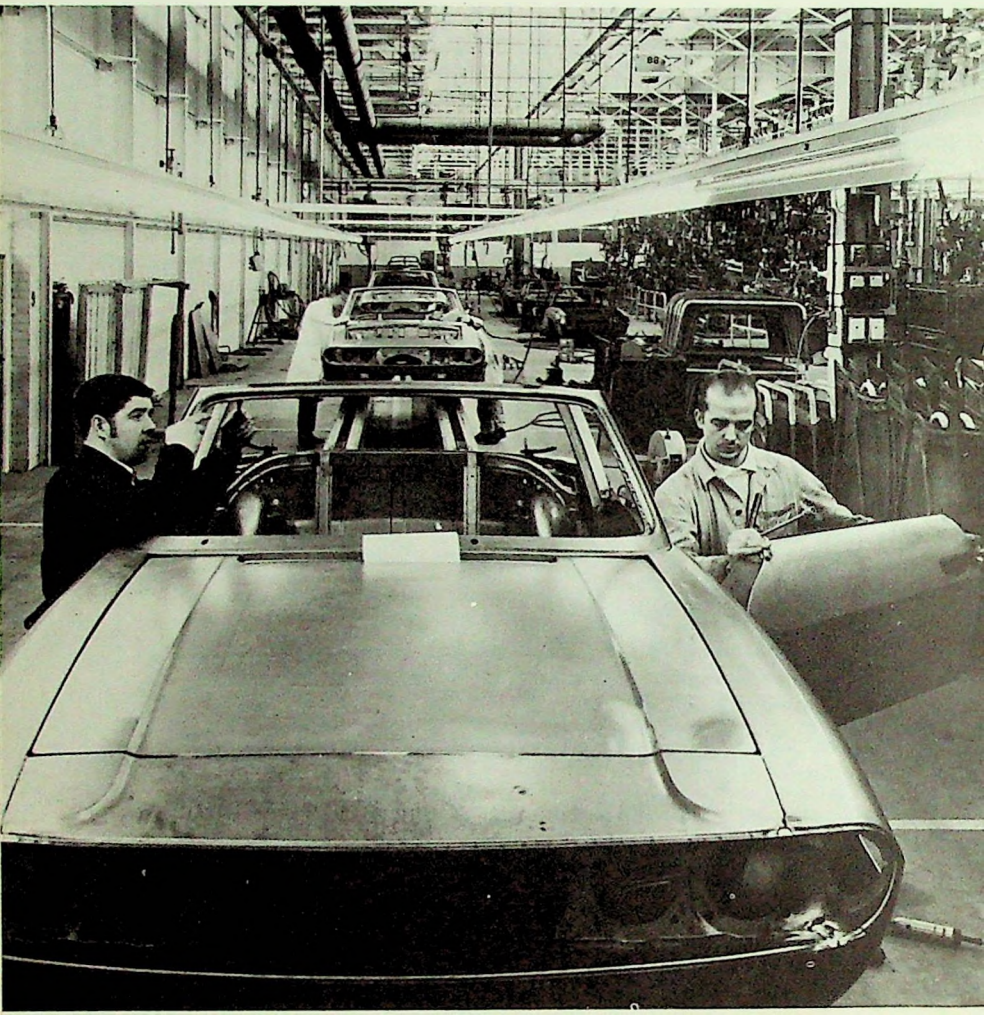
2 You expect to pay rent on a flat or a house which is not your own. Is it right to consider interest as rent which a company pays for money which is not its own?

3 Some people speak of dealing on the stock exchange as gambling. Is this so?

4 The state provides schools, hospitals, roads, pensions, defence and so on, and pays for them by taxation. If you receive interest would you like it heavily taxed? Would you like others' interest heavily taxed?

5 Certain industries in this country are not financed by such public loans as we have described. Which are they? Should these also be made to show a profit?

The Job



MASS PRODUCTION

Our picture

Assembly line workers in a typical car plant. Their day begins at 7.30 a.m. and finishes at 4.15 p.m. with 15 minutes for breakfast at 9.30 a.m. and half an hour for dinner at 12.30 p.m. A typical job is to fix the wheel hub on the front axle. It takes a man about two minutes and he will usually repeat it 130 times a day. For this he is paid anything between £20 and £30 a week (less tax and so on).

Henry Ford was the first man to mass produce the motor car. The thought is something like this: if it takes one man a month to put together the ten thousand or more parts which go into a motor car, then one hundred men can put together two hundred cars a month, if they are organized so that each puts together only a hundred parts.

The result of such mass production is more products, more profits, more prosperity on the one hand but on the other, a supremely boring job where it is easy to feel that the individual is nothing more than a machine himself.

There are many other boring jobs besides those on assembly lines, such as copy typing, being a guard on the underground, operating punch cards for a computer or being a booking clerk. Although the old agricultural jobs might have had little interest, for example harvesting a hundred acre field with hand tools, at any rate they did not continue all the year round.

For discussion

1 Which would you choose, a highly paid boring job or one with more interest but less money? Remember that if you choose the first you will get used to having the money and it will be difficult to change your mind.

2 How far is boredom a mere attitude of the mind? What can you do to make a job less boring? If you can't be interested in your work, are you content to be interested in out-of-work activities?

3 Is there any job which is never boring?

4 Are there any alternatives to this sort of mass production?

PAYMENT

The old Coventry method is payment by results: a skilled man on piece work is timed. If this particular job takes him exactly two minutes, he haggles with the 'rate fixer' for a price. They may agree he is to be paid 2½p for each article he produces. By common consent a percentage would be added to this basic rate to allow time for personal breaks, adjusting the machine and so on, say 20% in all. If then on average he works 50 minutes in every hour he will make £6 in an eight hour day (less tax). If of course he now finds ways of working more quickly his pay will increase.

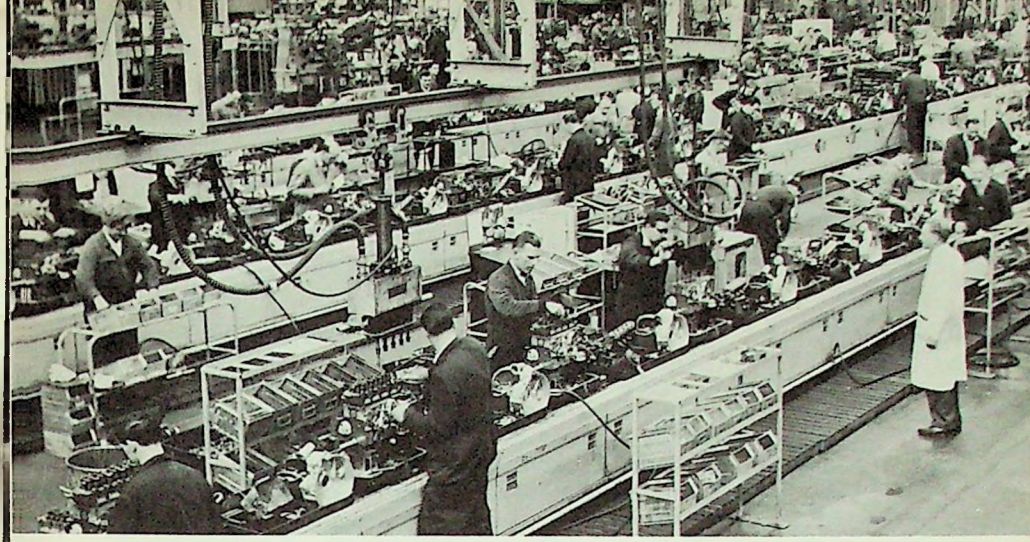
Piece work in fact often operates on a gang basis, whereby a dozen or so men all working on the same sections, say on the production line, pool their earnings, then share them out equally. This means that they are all interested in the price bargaining and all interested that every member of the gang should keep up with his work; no 'passengers' are tolerated.

Others in the factory are 'on the clock'. They are paid not for what they actually produce but for the time they spend at work, down to the nearest quarter of an hour. Hence the rows of time clocks and cards in so many factories, by which each employee registers his time of arrival and departure. A typical rate for a labourer may be between 40p and 75p an hour. Most factories now, however, use the 'measured day' work system, in which the employer virtually buys the employee's time at, say, £1 per hour, and can then say how he uses it. Thus the wages are not in dispute. The haggling here comes over the speed at which tasks are to be performed.

Many factories use a combination of systems. Employees will be guaranteed a certain minimum, say £13 a week for a man down to £5 for a girl of fifteen based on the hours they put in, and then they are given a bonus over and above this, according to their actual production.

If the demand for a company's products falls off, or if there is some interruption of essential supplies, 'short time' working is introduced to compensate for the loss of earnings; and in bad cases, numbers of workers may lose their jobs. Similarly, if you are off sick you receive no pay from the company.

Office workers, supervisors and managers, however, are paid by the week or the month. They may well earn less per hour, but are largely unaffected by short time or sickness.



In the vehicle industry in October 1970, average earnings per week for hourly paid manual workers was £32 for men, £17 for women, and for technical and clerical workers was £37 for men, and £17 for women.

For discussion

1 Which do you prefer of these three ways of payment?

2 Is it right that
   (*a*) others should be paid more than you or
   (*b*) you should be paid more than others? If you think it is, what reasons have you to support your view? Find further examples of wages of people you know and say whether you think they are fair.

3 Have you any objections to being timed at work or to 'clocking in'?

4 Should a single man be paid as much as a married man with several children?

5 Should women be paid the same as men for equal work?

6 How is it that housewives and children are not paid for the work they do about the home?

7 Find out from your local Ministry of Social Security the basis on which sickness and unemployment benefit is paid by the State.

The Organization

THE MANAGER

The first grade of manager is really the charge-hand who works at the same job himself as those under him, usually a group of about a dozen, and is paid in the same way, with about £2 per week extra. Next comes the foreman who spends most of his day on the shop floor but has an office nearby. His hours are similar to those of the shop floor worker. The manager at 'middle' or 'higher' level spends most of his day in offices or at conferences. His hours are usually from 9 a.m. to 5.30 p.m., though he will sometimes have to work late at the office. Unlike an hourly paid employee he is not paid overtime nor is his job over when he leaves the factory gates for there are often evening meetings to attend and much 'homework' to do in the form of preparation, reports and so on.

He has helpers in the form of a secretary, typists, filing clerks and so on, to assist with the more routine operations.

His job is to see that the company runs smoothly and that the different interests of production workers, sales staff, consumers and shareholders are kept in balance and satisfied.

There are two basic types of manager. The one sees himself as one who gives orders which are to be instantly obeyed without question like those of an old military commander on the battlefield. The other sees himself as one who takes the responsibility for final decisions after he has consulted all concerned about what ought to happen. 'The good leader has a genuine, genuine not professed, interest in the improvement and advancement of the people who are working in his group'—Dennis Head, Director of Personnel, Aero Engineering Division, Rolls Royce Limited, Derby.

The manager, like everyone else, is an employee of the company. Although not affected by sickness or short time, he may well find himself out of work if the company hits bad times or if, as a result of a merger, it transpires that there are too many managers.

For discussion

1 What do you expect of those who are set above you?
2 What may your managers expect of you?
3 Where should a manager's loyalty be in the first place?
4 Could industry do without managers – could the workers manage the factory?

COMMUNICATION

In any sizeable community, 'keeping in touch' is a problem. In a small firm, everyone knows the boss (for better or worse), not so in a school or a company of say a thousand employees and upwards.

All too often the impression is allowed to grow that the really vital decisions are made by faceless ones. Decisions about mergers, closure of plant and redundancies. 'We never see the managers, they don't understand us', is a typical shop floor cry.

Ignorance of what is going on produces rumours and fear. Many strikes are the result of bad communication. Indeed, sometimes the only way a worker has of finding out what is going on is to down tools.

An example of what perhaps ought to happen is given by Harry Moore, an industrial psychologist, who says that the general manager of Vauxhalls, Sir Charles Bartlett, used to talk directly to the whole of the works over the public address system. When a radio announcement was made shortly after the war, that the factories in the country would have to go on short time because of a fuel shortage (the fuel crisis), you can imagine the impact this had on the employees. Within half an hour of the broadcast, Sir Charles announced his policy over the public address system; he would give full pay for two weeks to everyone and joint consultation would take place that day to decide on future policy after those two weeks.

THE SHOP STEWARD

Although one hears of trade unions in the news and in the papers, if you work in industry the most likely form in which you will meet trade union activity is through the shop steward. Each group or 'gang' of about a dozen elect one of themselves as steward whose function is to look after their interests in cases of dispute and to improve the wages and conditions of those he represents. Three typical cases would be:

1 If a piece worker disagreed with the rate fixer over the amount fixed for his job.
2 If an employee was dismissed by the supervisor for persistently coming late, but felt he had a good excuse.
3 If a worker had complained to the foreman about a draught (or fumes, or the heat or oil on the floor) and nothing had been done.

Then a recognized 'procedure' would begin. The first step would be for the complainant to go, together with the steward, to see the foreman. Most grievances are in fact dealt with at this level, but if not, there is a series of steps to be taken culminating with several full-scale conferences.

The shop stewards of the factory usually have a meeting of their own once a week in their own time to discuss affairs of work. They elect one of their number as chairman, often called convenor or chief shop steward, who is a key man in a factory and who will spend quite a lot of his time in discussion or negotiation with managers.

There will often be many unions in a factory, for instance skilled men might belong to the Amalgamated Union of Engineering Workers (the AUEW), and labourers to the Transport and General Workers Union (the TGWU), and there will be a corresponding number of shop stewards. It is often suggested that there are too many unions, but where there is a good shop stewards committee, this matters little. Even if craftsmen and labourers are in the same union, they still have differences.

Shop stewards are not paid any extra for their work as shop stewards and it is sometimes hard to get a responsible person to take on the task. 'It's a dogsbody job' said one; 'you're just a can carrier, you get shot at from both sides, if you insist on the mens' demands with management, they say you are a troublemaker and if you accept a bit of the management's point of view, the men accuse you of selling them down the river. You can't win, but I suppose somebody has got to do it'.

For discussion

1 What qualities would you look for in a good shop steward?

2 What responsibility does the group have to the man they have elected?

3 In what circumstances might the steward find himself in an impossible position?

TRADE UNIONS

In the 18th and 19th centuries it happened all too often that even those who were lucky enough to have work were paid barely enough to live, and certainly not enough to support their families unless the children too went out to work. Add to this the existence of deplorable working conditions and very long hours. A 14-hour-day was not at all uncommon. Makers of matches were poisoned by phosphorus, calico bleachers were overcome by ammonia fumes, quarrymen died from the accumulation of dust in their lungs, miners perished through inadequate safety precautions. If anyone complained there was always another man out of work ready to take his job. Since all that a worker has to sell is his labour, the only pressure that workers could bring to bear was to band together and each agree not to work until conditions were improved. The bosses could reply to such a threat by a 'lock-out'. They would close the factory until such time as people were prepared to work on the bosses' conditions. Meanwhile, the strikers could starve (to this day a man on strike is not eligible for social security benefits, though his family may well be).

In this way trade unions were born. Their purpose was to unite members in their fight for better conditions and to collect funds in order to support them when it was necessary to strike. A typical union pays its members £5 a week when they are on official strike. It was an uphill struggle against successive governments who saw in them a threat to national security and prosperity in a day when only the propertied classes sent members to Parliament.

But none of these organizations formed by angry and desperate men left anything permanent behind it. The beginnings of our permanent trade unions structure must be sought elsewhere amongst the intelligent men of the skilled crafts being created by the Industrial Revolution. A few of these unions still survive today relatively unchanged, such as the Birmingham and Midlands Sheet Metal Workers Society, formed in 1859.

These unions were precisely the kind which are most looked askance at in certain quarters today. The members were craftsmen who had served an apprenticeship and in order to maintain or increase their own wage levels, one of their principal weapons was what we should now call 'restrictive practices'. They restricted apprentices and

rigidly guarded the demarcation of jobs which their own members alone were entitled to do in a factory.

They had faults. What were the benefits that they brought?

1 A permanent and coherent leadership. Unlike the early trade unions, these had regular subscriptions, rules and minutes and paid general secretaries who were eventually responsible for the first Trades Union Congress (TUC), in 1868.

2 They had a responsible attitude towards strikes. They did not avoid them but approached them with great caution, realizing the difficulties involved, and placed their main reliance on negotiation.

3 They realized the importance of public opinion and the necessity of proceeding in a democratic manner through the channels of political pressure in order to get Parliament to pass laws for the trade unions' benefit. They were amongst the agitators for the Second Reform Act of 1876 which gave the vote for the first time to many of their members.

4 It is largely as a result of trade union pressure that we have today such benefits as factory standards of safety, maximum permitted hours of work, redundancy pay, unemployment benefit, sickness benefit and a more humane legal code.

Our picture

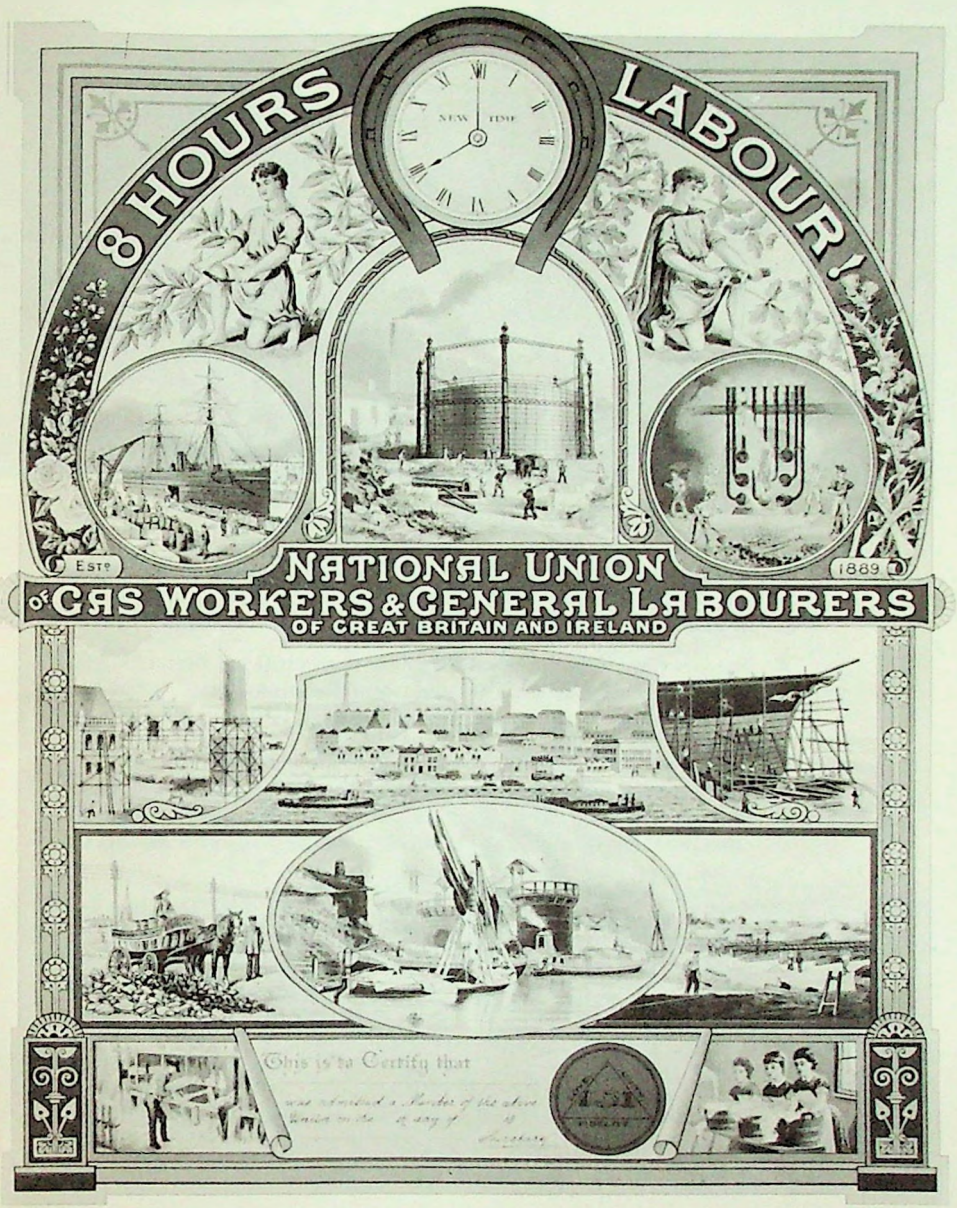
An individual's union membership certificate. These documents, usually about twenty inches wide and printed in colour, were clearly intended for display. They show something of the pride felt in membership.

For discussion

1 If employers in the past had 'treated others as they would have liked to be treated themselves', would trade unions have been necessary?

2 How far are many labour troubles a direct consequence of faults in the past?

3 Many factories operate '100% shops', which means that all who work in particular sections must be members of particular unions. This ensures that all who enjoy the benefits gained by the union in the past contribute to its future. It also reduces the possibility of 'blacklegs', men who go on working when the union is on strike.



Frank Taylor, Chairman of Taylor-Woodrow, talks to a striker at the Barbican site in London.

When there is a strike the factory is usually 'picketed', guarded by strikers to try to persuade others who are trying to go into work, to join them. Do you agree with this practice?

4 The position of the British trade union movement has been changed with the passing of the 1971 Industrial Relations Act. What are the provisions of that Act, and how justified is the reaction of the trade unions towards it?

5 There have been many strikes recently in which a small number of men, by stopping work, bring to a standstill tens of thousands of other workers who depend on them. Are they right to do this or should they 'keep their grievance to themselves'?

6 It is quite common for there to be inter-union disputes when the interests of different classes of workers are at stake. Who, for instance, should deal with electrical conduits, a pipe-fitter or an electrician? Note that such questions usually only flare up into an open clash when one or other is afraid of losing his job. How do you feel about this?

7 Read 1 Cor. 12 and relate it to the above. In what ways can our modern industrial society be described as sick? What general remedies can you suggest?

CONFLICT

Just as different people have different interests, so do different groups of people. In the flour mill, for example, with which we began, the miller and the labourer, the farmer and the buyer of the flour all have their points of view, to some extent in conflict. What the miller gains in higher charges, the farmer loses; what the housewife gains in lower prices, the miller loses, and so on. Nevertheless, they all have an interest in keeping the mill going. So, when considering the manager's role, we pointed out that it is in everyones' interest to keep the balance – a balance between employees, consumers, sales staff and shareholders.

It is not often appreciated that (except in very enlightened firms) the best industrial relations occur when there is both a strong management and strong unions, that is, when a balance of power obtains. If the unions are weak, wages and conditions can be held down unreasonably; if managements are weak, unions can press immoderate claims which the company, however efficient, cannot in the long run afford.

Our picture

A mass meeting of strikers at Liverpool Docks being addressed by a trade union official. The convenor and shop stewards stand around him. Note that no representative of the management is present. Why not?

For discussion

1 List the senses in which people are equal and unequal.

2 Say when conflict has good results and when bad.

3 What is the responsibility of unions in industry?

A Career in Industry

BEGINNINGS

Four case histories

Tony Raskin left school with few qualifications but at his school they did have an 'Enterprise' course, in which the pupils set up their own companies which were models of normal business ventures. Largely due to this, Tony did so well in his first year as a craft apprentice that he was promoted to a higher grade full apprentice; but Tony stresses that 'success or failure depends solely upon your attitude to work'.

Christine Day is 20 but has responsibilities far above the average for her age, being a staff trainer in a large retail store. 'I enjoyed being a trainee here when I first came and I found the supervisors helpful and sympathetic. They made me feel accepted and wanted and this gave me tremendous encouragement. Then I had the chance to go on several short courses about leadership and these showed me how to take the same responsibility for those I now train as my own supervisors took for me. I try to give my trainees a pride in their work and a sense of efficiency.'

Twenty-year-old Norman Stevens began as an engineering craft apprentice, but those who were supposed to train him were too busy doing their own jobs. He started taking books to work, but the foreman complained and he had to learn how to look as though he was working without actually doing anything. The grievance procedure in this company took such a long time that people hardly ever used it. He got the impression that the managers who should have been in charge of his training were more interested in their own promotion than him, and when Norman finally gave in his notice, his manager asked him who he was.

Diana Lynden found difficulty in finding a job because of anti-feminine prejudice. 'When I did find one, the work I was given was far below my capabilities and I was restless and bored. I asked for something

I could get my teeth into but they told me I would have to wait until I was trained.'

She was a member of the trade union but their shop steward neither came round to ask opinions before she attended a meeting nor did she report back afterwards. Diana had been promised a meeting with the manager but after six months nothing had come of it, so she left.

For discussion

1 Do you agree with Tony that 'success or failure depends solely upon your attitude to work'?

2 What do you expect to
   (*a*) put into your job
   (*b*) get out of your job?

3 Here are some things to think about when choosing a job. Number the items according to how important you think each is and compare and discuss your list with others
   (*a*) Liking the job
   (*b*) Good conditions, holidays, etc.
   (*c*) A good boss
   (*d*) Security and a pension
   (*e*) Chance of promotion
   (*f*) Good pay
   (*g*) Feeling the job is useful
   (*h*) Pleasant workmates

TRAINING AND RETRAINING

Everyone is familiar with the idea of specific training before you can actually start a job, whether through apprenticeships, induction courses, day release or evening classes. But as more and more technological discoveries are made, so the availability of employment alters, and many skills become redundant while other, newer skills may need to be acquired.

Perhaps your school runs courses in shorthand, but how many offices want shorthand typists now that there are cheap tape recorders and dictation machines?

Printing used to be a highly skilled job, but now there are machines on which all you need to do is type what you want on the keyboard after pressing the appropriate button to show the size and type of printing you require. The machine does the rest.

And it is technically possible (though very expensive at the moment) to do away with the keyboard all together and simply have the microphone of a writing machine into which you will speak and the machine will of its own accord print what you say.

Our picture

This looks like an apprentice in the training section of any sizeable factory, but he is in fact at a government training centre run by the Department of Employment for the specific purpose of retraining those whose skills are now not required in the area where they live. Like any younger student, these course members receive an allowance to cover their cost of living and that of their dependants.

For research and discussion

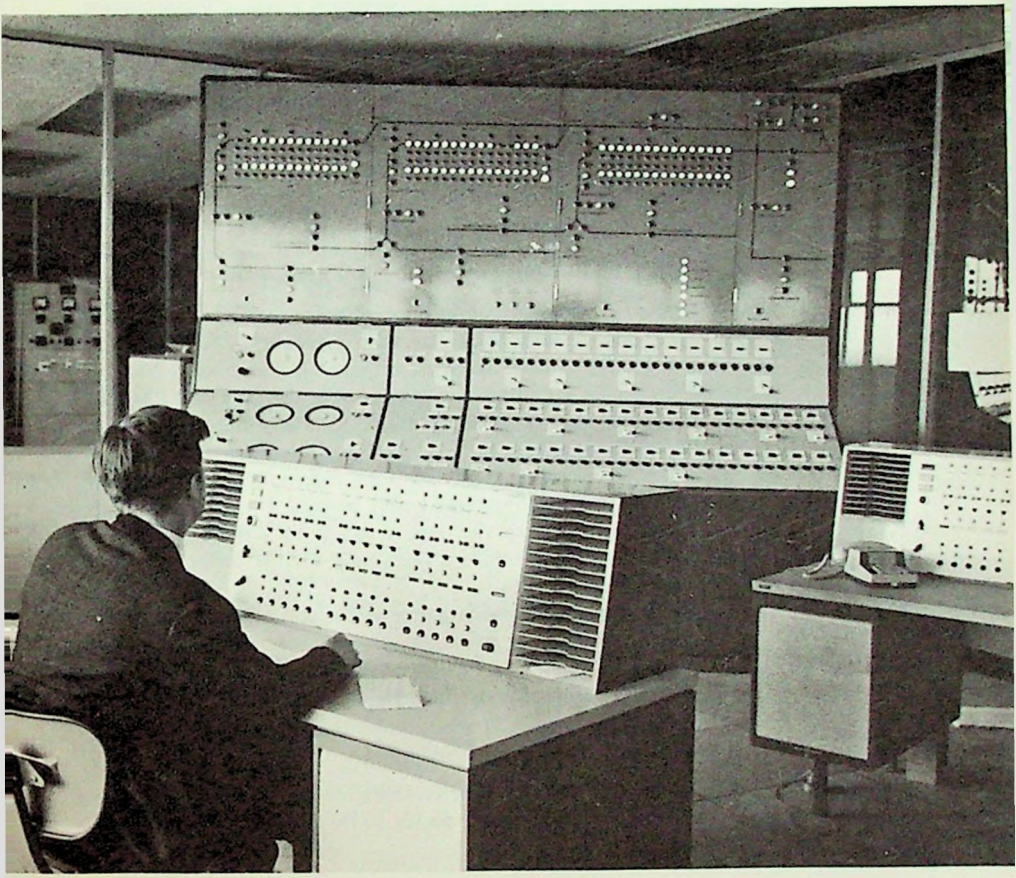
1 Make a list of redundant skills and add to it those you think will join it during your lifetime.

2 Do you think redundant people should be paid to retrain? How much, and by whom?

3 Would you feel a sense of shame at going to school again, or a sense of adventure?

AUTOMATION AND REDUNDANCY

I suppose the flour mill, with which we started, was the earliest form of automation. Wind or water power was used and a pair of mill wheels so driven could do the work of half-a-dozen grinding women. Obviously the discovery of steam power and electricity increased the



development of this process greatly, but later windmills had an equally important idea. A sort of rudder was tucked behind the main sails and this ensured that they were always facing into the wind. This means that the mill adjusted of its own accord to changes in its power supply.

'Automatically' means 'of its own accord'. Modern machines, instead of having buttons for someone to press, are told what to do simply by signals on a piece of magnetic tape or holes in a card. In other words, they are fully automatic. So, instead of having say, twenty button pushers in a factory, and one maintenance engineer, all that is now necessary is one punch card operator and one maintenance engineer.

Of course this means that most of the sweat and drudgery has now gone from work, but it also means that many of the workers have gone too.

For research and discussion

1 What automatic machines do you have at home?

2 Find out who the Luddites were. Do you agree with them?

3 A firm that makes plastic mouldings which they sell to car companies at 25p each has 50 men who together produce 24,000 a week. The men are paid £25 per week in wages. The firm now has the chance of introducing automatic machines at the cost of £100,000. These would be able to produce twice as many mouldings in a week and would only require 10 operators. The firm can:

   (*a*) give 40 men notice, together with redundancy pay (this is required by the government and is paid for by tax on all companies) and use the wages saved to pay for the new machinery. Once this had been paid for the profit could go to the shareholders.

   (*b*) as (*a*) but with the profit going to the ten men still there, in the form of higher wages on account of their increase in production.

   (*c*) keep on the 50 men, pay them the same as before but reduce their hours from 40 per week to 8.

   (*d*) reduce the price of the mouldings.

   Imagine that you are, in turn, a shareholder, a director and a worker. What should the firm decide to do and who should make the decision?

4 In the case of (*a*) or (*b*) above, the government could of course intervene by placing a heavy tax on the profits and then using the money to make payments to those who are still out of work. Would this be right? How much tax do shareholders have to pay on interest at the moment?

5 In the case of (*c*) above, if you were one of the workers what would you do with the rest of the week. Would you be glad or bored?

THE END OF IT ALL

The last question about automation, concerning the case when one has more leisure than working time, is serious, because most people eventually reach retirement age when indeed there is nothing but the rest of the week. Here is a picture of a typical works presentation to an employee who has reached the age of 65. His mates stand around while the supervisor says a few words and presents a certificate and perhaps a gold watch. Soon he will pack his mug and his overalls and pipe and join the home-going rush at 4.15 for the last time. How does he feel? Glad to be free? Pleased not to have to get up at six the next morning? Or sad to have nowhere to go? How much depends on his own attitudes?

For research and discussion

1 How many retired people do you know and how do they feel about being retired?

2 How should retired people be paid, by
   (*a*) their own contributions in the past, or
   (*b*) the company they worked for, or
   (*c*) their relatives, or
   (*d*) the state?
   How are they paid today? Where does the money come from?

3 'I'm going to take a well-earned rest and spend some time in the garden and read all the books I've never had time for.'

   'I don't know what I'm going to do, I feel like a bit of worn out machinery nobody wants anymore. They call it retirement but its just the scrapheap really'.

   What do you think?

THE DEPARTMENT OF EMPLOYMENT

Our picture

The section of this department which most people come across is the Employment Office. This is one of the interviewing rooms. An important part of the department's function is to help employees to find the work they are suited to best and to assist employers to obtain suitable workers. This particular man is looking for work in the engineering industry but he might just as well have been a builder, a draughtsman, a wool spinner or a displaced manager seeking an executive position.

School leavers will come across the department, not at the Employment Office, but through the Youth Employment Service which also deals with young people up to 18 and those from further education.

The DE also operates the government training centres where redundant workers can learn new skills, administers the Industrial Training Act by which companies are encouraged to provide further

training schemes for their own employees, and provides a disablement resettlement service which helps disabled persons to secure employment.

The department is obviously well placed to collect statistics on the availability of jobs and the level of wages in all parts of the country. It can be used by the government in considering national policy, for instance, that companies should be encouraged by incentives to open factories in areas of heavy unemployment. It attempts to administer the government's general policy that wage increases should be paid for not by increasing the price of the goods produced, but by producing and selling more of them. Other functions of the department include the supervision through factory inspectors of the laws on the safety, health and welfare of workers in industry and commerce; attempting to mediate in cases of dispute between different factions in industry; the administration of the law concerning payments for redundancy; the payment of certain social security benefits such as those for unemployment and (strangely enough) the issue of passports.

For research and discussion

1 What connection do you see between the function of the DE and the causes of the rise of trade unions?

2 What sort of opinion do people have of your local Employment Office?

3 Many people find jobs, not through the Employment Office but because they know someone, or their father or a friend takes them along to see his foreman who has the responsibility for hiring. Is this right?

4 One of the causes of bad relations and strikes is lack of security, fear of losing one's job. Should everyone be 'guaranteed' work or only guaranteed an allowance to live on?

5 'And who is my neighbour?' (Luke 10.29). Do you see the DE as a sign of a Christian country?

Industry in a Wider World

Our picture

A sugar plantation in Cuba. Sugar is one of the few things Cuba has to export in exchange for the lorries, medicines, radios, fabrics that she needs. Yet the demand for sugar is hardly increasing, partly because Britain produces a certain amount herself through subsidised sugar beet, and partly because of the growing use of artificial sweeteners. The price the British housewife pays for sugar has remained pretty steady for years. The same story might be told of many commodities; of jute from Calcutta or sisal from East Africa, once used to make sacks and rope, now overtaken by plastic and nylon, of cochineal from Mexico, which until the middle of the last century was in great demand as a cloth dye until various artificial chemicals were discovered.

So the problems of redundant skills are world wide, and world wide too is the drift of labour from the land, where increasingly one tractor does the work of half a dozen men and oxen.

In all the cities of the world, therefore, there is pressure to introduce industries in order to provide jobs for new immigrants. Yet this in turn produces problems, for when Hong Kong entered the cotton trade and exported to South-East Asia in order to buy rice, Lancashire mills which used to export there had to close down.

For research and discussion

1 What are the primary commodities for which there are no substitutes? Which countries produce these?

2 As the whole world becomes more and more industrialized, so it becomes more inter-dependent. Malayan tungsten goes in a British engine for a Swedish car which carries a German executive. List some of the imports which you come across today. What are our main exports?

3 Should Britain try to help foreign nations or get her own house in order first? If British industry is not thriving how are we in any position to give help? What do we actually give at the moment as a percentage of our total national budget?

4 Which is the best way of helping?
   (*a*) to give grants of money
   (*b*) to give equipment, wells, tractors and so on
   (*c*) to lend money at fixed interest
   (*d*) to invest money at no fixed interest, but with the possibility of a share if the foreign companies make a profit
   (*e*) to lend money interest free
   (*f*) to buy foreign manufactured goods whenever possible from the poorer countries and force British companies to concentrate on advanced technological goods which the poor countries cannot produce

5 'And who is my neighbour?'

For further reading

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E. R. Wickham, *Church and People in an Industrial City*, Lutterworth Press 1969.

PROBE

1 Population and Family Planning
2 Drugs
3 Racial Discrimination
4 Human Rights
5 Protest
6 Pop
7 Housing
Revolution (Probe Special)
8 Industry
9 Conservation