

## INSTITUTE OF PERSONNEL MANAGEMENT

THE annual conference of the Institute of Personnel Management is one in which eminent speakers are given opportunities to suggest means whereby the good human relationships already prevailing in British industry are maintained and extended. This pattern, and its bearing on productivity, was followed at Harrogate during October 4-6, when some eight hundred personnel officers from a large number of industrial undertakings in Britain and Commonwealth countries assembled at the fortieth anniversary conference of the Institute.

The introductory address was given by the Earl of Verulam, managing director of Enfield Cables, Ltd., who drew upon experiences derived from visiting some sixty foreign countries during the past few years to show that British industry will only be able to capture export markets when there is quicker practical application of new ideas and patents and a much more radical approach to topics like packaging and advertising.

In a paper sparkling with wit and profound simplicity, Prof. M. Kendall discussed the application of statistical method to human problems.

First, he suggested that a statistical attitude could be a useful corrective to errors of the intuitive approach even on delicate matters involving personnel selection and management; secondly, that statistical laws could often provide a yard-stick even if they were only honoured in the breach instead of in the observance; and, thirdly, that some businesses and some situations are so complicated that only a statistical control of staff is possible, short of overloading the concern with personnel management to an unbearable extent. Thus, in the case of labour turnover, it seems the general rule that turnover is more rapid for women than for men, that there are enormous variations in the rate from one business to another, and that the younger age-groups are more mobile than the older ones.

From the statistics he obtains, the statistician is able to discern definite patterns of behaviour which are observed in other kinds of industrial behaviour such as accident proneness; from the evidence, some individuals would seem to be as liable to change their jobs frequently as others are liable to accidents. This suggests that it might be possible to find some single measure of turnover which would eliminate the effect of individual proneness and reveal the essential differences between firms, so that a manager who was worried about his turnover figures could compare himself with the average or with comparable businesses, and begin to locate the source of the trouble or discover whether the remedial measures were likely to have the right effect in the right age-groups.

Statistical method could also be applied to one of the most outstanding problems of industrial management, the question of relative wages. The political conception that all men should be paid alike has largely disappeared, while the old economic forces which used to determine relative earnings under a *laissez-faire* economy have also been largely removed. In their turn, these controls have not been replaced by others to determine the basis upon which the earnings of different categories of workers might be based. Here the problem of relative earnings might be set in a statistical framework which shows

that wage patterns follow the Pareto law, which was originally devised to govern the distribution of incomes. Despite the social revolution of the past fifty years, the law seems to have a kind of stability which is proof against even large changes in economic structure. In determining a fair wage structure, the Pareto law offers a standard by which to work and a yardstick by which to judge of the success and probable stability of the settlement.

Other fields where the statistician might have contributions to make to business organization are the optimum size of a business and the problem of centralization versus decentralization, the speed of diffusion of new ideas in different media which is important both inside and outside the business, the effect of medical advances on pension schemes and age of retirement; and there is a whole field of problems in business strategy, such as how to design an air service, which is generating a new subject known as linear programming. Prof. Kendall also described the application of statistical techniques to time studies and the selection of personnel.

A former adviser to the Government on important financial matters and now a director of several companies operating in the Far East, Sir Andrew McFadyean, examined the wider aspects of finance and full employment in a free society leading to a high and progressively higher standard of living. During the past few years a condition of full employment has been maintained whereby, according to a Nuffield College definition, the number of unfilled jobs has not been appreciably below the number of unemployed persons, so that any unemployment has been due to the normal lag between a person losing one job and finding another.

This period of full employment was the natural result of the release of civilian demand which was pent up during the years of war, the huge back-log of orders arising from the inevitable failure to maintain and renew plant and equipment, and of a policy which combined with a policy of cheap money a distaste for disinflationary measures. The rate of interest is all-important, since a very low rate of interest makes overdrafts easy; and, with prices rising, people are quite content, and even prefer, to put their reserves into stocks, rather than keep them in money; as soon as there is the slightest recession this begins to cause difficulty. When money becomes dearer, the difficulty may become acute. It also means, when there are more jobs than men, that employers pay quite a lot to keep their employees at almost any price. That is one of the tendencies which conflicts with what ought to be a feature of full employment, namely, much greater mobility of labour. Easy money also encourages spending, which is concentrated on consumer goods and conflicts with the desirability that people should save for capital purposes.

Full employment, as defined by Beveridge, depends, first, on a higher degree of discipline among workers, and on the capacity of management to meet new problems. Secondly, it depends on the formulation of some collective wage policy which would prevent one body of workers seeking a sectional advantage at the expense of all the others.

The difficulties of the post-war period of full employment have suggested that its maintenance

requires repeated periods of mild inflation to prevent prices from falling, to create an illusion of high profits, and to stimulate industrial producers to greater activity. But the open and avid pursuit of a policy of inflation to maintain full employment defeats its own ends. The possibility of saving will be diminished by constantly rising prices and the willingness to save will be weakened by the knowledge that money is likely to lose some of its purchasing power. This would lead to social instability of the gravest character. The maintenance of full employment depends on the ability to produce what the consumer wants at a price which he is able and willing to pay; it depends also on production at a profit. Machinery cannot be maintained, still less scrapped and replaced by new equipment, and the progress of invention and discovery cannot be maintained, unless a proportion of the profits earned are regularly set aside for these purposes. It is questionable whether the necessary provision for full employment is being made when a company pays well over half its profits to the Chancellor of the Exchequer by way of income tax and profits tax, and when the nominal profits on which it is taxed are, to an important extent, fortuitous because the amount which can be deducted from gross profits set off as depreciation takes no account of the real replacement cost.

The great mass of net income to-day is in the hands of people who have not been used to saving, largely because, in the past, they had no opportunity. It is to be hoped that thrift may be established among the rising generation of wage earners. There are, however, two dangers. A Welfare State does not encourage thrift, and unless full employment can be maintained without inflation and the rise in prices which inflation entails, it will be impossible to conceal that what is saved steadily decreases in value, and that, therefore, it would be better for people to consume more and save less. Full employment may actually be incompatible with that high standard of living which is to-day connoted by the term 'Welfare State'.

Nor must the industrialist produce at a profit what the consumer can and will buy; the consumer to be satisfied with a large part of the production is the foreign consumer. In selling abroad, British exporters are exposed to the fierce test of competition. In the ultimate analysis, workers, managers and investors are driven back to achieving not merely greater production but also greater productivity. Moreover, unless financial measures are taken to preserve the momentum of full employment, the country will, in due course, be faced with a percentage of unemployment which will represent many less jobs than seekers for work.

Sir Andrew stated that the maintenance of full employment, even in Britain, is a world problem and not a purely British one. It is primarily an American one. Unfortunately, if and when expenditure on arms is radically reduced, no American party, and therefore no American administration, dare aim at taking all the steps necessary to maintain a high level of industrial activity in the United States; it would involve a technique of control without detailed intervention.

To conclude the Conference, Sir John Woods, former Permanent Secretary to the Board of Trade and now a director of the English Electric Co., Ltd., discussed ways and means of convincing British people that the maintenance of existing standards

of life depends upon their own efforts. Instead of the familiar slogan 'export or die', Sir John examined the role of imports in the British economy and suggested that the new slogan should be 'import or die'. Imports can now only be got from our own current labours. This, therefore, involves more production for export, and unless people were content with a good deal less for their own consumption, it means more total production. This larger total production has to be obtained at a time when means to buy the imports of materials for that production are lacking, and at a time when equipment—the actual capital equipment—is less than adequate because of what happened in the War.

Since the War there has been the greatest possible difficulty in obtaining imports. Throughout that period, import restrictions of one kind and another have been in force. Even that restricted volume of imports could not be obtained without assistance from overseas, and, for some time, credit from countries in the sterling area. In other words, the volume of our current foreign exchange earnings from exports has not been sufficient for the necessary, let alone the desired, volume of imports. Nor has there been at any time sufficient exchange reserves—particularly gold and dollar reserves—to tide us over for any period in which, for one reason or another (for example, a temporary falling-off in exports), our existing import bill could not be sustained out of current earnings. The gold and dollar reserves have been a barometer. There have been three crises since the War—in 1947, 1949 and 1951—and on each occasion the gold and dollar reserves drained away at an alarming rate.

The gold and dollar reserves are still not large enough to carry us over any period of recession which lasted for any length of time. In real purchasing power, the reserves are probably not worth more than a third to a half of what they were before the War, and the second cushion of the accumulated foreign investment does not now exist. If there should be an American recession of any length the prospects would be grave.

To-day there is some general awareness of the difficult and continuing national economic problem. Nevertheless, in spite of all that has been said and done on the subject of our national need for increased production and productivity, the basic truth has not been sufficiently absorbed. For example, it does not seem that the reports of the productivity teams have, in fact, been acted upon to any great extent. The argument has not gone deep enough into the community, and Sir John discussed reasons for this.

First of all, there is the essential difficulty of the subject. People really find it difficult to understand terms like inflation, deflation, exchange-rates, convertibility, tariffs and quotas, the terms of trade, and others. Moreover, these elements admit of different solutions.

Words like disequilibrium, balance of payments, the sterling balances, convertibility and GATT mean very little to the average person who is not forced to consider them as part of his occupation. Secondly, there has been too large an element of lecturing of the public—lecturing as opposed to discussion.

There is another class of difficulty which is more formidable. This is the fear of unemployment. The memories of 1931 are still very strong, and have

bitten very deep into the consciousness of people in Britain. These fears may not be wholly out of date. Britain is immensely dependent on world trading conditions, and if other countries will not, or cannot, buy our goods, or will not, or cannot, buy the primary commodities of the sterling area countries, recession and unemployment in Britain cannot be prevented. Our best chance of averting the worst consequences of a possible slump is to increase our present strength, and our reserves of strength, by following the doctrine of increased production and productivity.

The more intractable difficulty is the 'group' interest. In trade and industry, there are two clearly marked *large* groups—management or employers on one hand, workers or trade unionists on the other. Each of these groups itself comprises many other economic groupings. There are often disagreements and rivalries, stresses and strains, between the various component parts of, as well as between, the two groups. It is noticeable, for example, how strongly the pattern of wage claims is influenced by a desire in one industry to maintain its relative position *vis-à-vis* other industries, as though the existing pattern must be right for all time.

Within the field of economic groupings, each individual will tend to concentrate his attention on the particular section, probably the nearest and smallest to which he belongs, and much less attention on other sections, even those that belong to the same general group. If, too, within each group (that is, management-labour) there are rivalries and dissents, it is the more likely that when the opposing sides meet, at whatever level, it will be in an atmosphere of antagonism or 'againstness'.

As a result there is a danger of opposing for opposing's sake, and of missing the opportunity to construct new ideas to meet new needs. If this view of the group interest is correct, society as a whole, which is the biggest group of all, will get relatively little attention or understanding. Yet it is now the supreme individual interest of everyone to look at the problem of the society as a whole, for now we are concerned with survival as a nation, and failure would bring disastrous economic consequences to all.

How is that understanding and recognition to be brought about? One way might be in small discussion groups of people in the same factory or shop. If anything of this kind were to be tried, it would have to be carefully prepared, and the people who led these discussions would have to be people of very high calibre. It would also have to be done with the complete goodwill of the management and of the union concerned.

The other main feature of the annual conference of the British Institute of Management is a series of sectional meetings at which topics of particular concern to personnel officers are considered. This year four such meetings were held, and were arranged on experimental lines in order to secure maximum 'audience participation'. The matters discussed were the use of wages as an incentive to higher production, the means of securing co-operative attitudes from workers, personnel management as a career and the improvement of selection methods for unskilled workers. The experiments, which copied techniques borrowed from the United States, were sufficiently successful to merit further trials.

T. H. HAWKINS

## THE CRAFTSMAN IN THE ENGINEERING INDUSTRIES

A PRESIDENTIAL address delivered to one of the major professional institutions is normally devoted to the subject which has engaged the greater part of its author's career, and not unnaturally the study of man and men is therefore a frequent theme. In his presidential address on October 16 to the Institution of Mechanical Engineers, Mr. A. Roebuck turned his attention to the importance of the craftsman in industry, the necessity of the professional engineer recognizing his importance, and the necessity for the craftsman to be taught more of the scientific principles upon which his trade is based. With these sentiments no one can quarrel; but when Mr. Roebuck suggests that "... without the craftsman . . . the work of professional engineers and technicians would be of no avail, but, on the other hand, if the craftsman is left to himself he will produce an answer", an emphatic protest must be made. The double training of the professional engineer, so rightly insisted upon by the major institutions, makes it possible for him to learn rapidly any craft that he may need to master, while frequently enabling him to devise methods of manufacture which do not call for craftsmanship. The state of development of the mechanical engineering industry compared with that of the electrical industry should serve to underline the dangerous fallacy that is being propounded by Mr. Roebuck, since the former still depends primarily on the craftsman at the bench and the latter on the professionally trained designer.

It is fashionable to deplore the lack of skilled craftsmen and draughtsmen in engineering works to-day, and it seems a pity that Mr. Roebuck in his address did not analyse this very serious problem; it is primarily in the industries which are dependent on the professional engineer and the scientific worker that a major attack on the problem of training craftsmen thoroughly is being made, and that the best craft training schools now exist on a wide scale.

Some twenty years ago another president of the Institution of Mechanical Engineers, Sir Richard W. Allen, wrote a paper in which he directed attention to the very thorough training in craftsmanship given in the German-speaking engineering world, and suggested that it might profitably be introduced in Great Britain. In Britain a boy becomes a "craftsman" by serving a five-year apprenticeship; in Germany and Switzerland the boy has to pass a trade test at the age of eighteen in order to become a journeyman, and a further test at twenty-one in order to become a master. The examiners are skilled men appointed for the district, and the apprentice must produce detailed note-books showing sketches and descriptions, duly signed by his foreman, of every job that he has done. Many members of the teams that visited German industry at the end of the Second World War were struck by the pride taken by German works-managers and directors, more often than not graduate engineers themselves, in their training shops, which were to be found even in the smallest firms.

If, as Mr. Roebuck maintains and all will surely agree, the skilled craftsman in a works is all-important, why is he not treated as such and put on the staff? Admittedly the attitude of the trade unions has not been helpful when the idea has been raised; but every engineer must have been disturbed at some