

Industrial Relations and Social Security

THE HUMAN FACTOR IN SCIENTIFIC MANAGEMENT

By F. H. SEXTON.

IN recent years the scientizing of every phase of production has developed with amazing rapidity. We have made some progress in industrial relations between management and labour but we are still a long way from industrial democracy. Advances have been most uneven and the leading employers are a long way ahead of the rank and file. The hard-boiled boss is still with us but labour legislation, popular sentiment, and union policies are trimming his claws.

Needless to say, there have been and still are many employers who have adopted certain portions of a scientific management program which increase their profits but they neglect to carry out the policy in its entirety. They are the ones who seek to exploit the worker as a producer and who do not seem to have any interest in the employee as a human being. These men have been responsible for giving this form of management a very unsavoury reputation with labour organizations. There are other employers who have gone far beyond any legal requirements and the commonly regarded considerations in securing as complete satisfaction as possible for their workers in earning power, enjoyment of their jobs, continuous employment, general welfare, and old age pensions. The human factor in the leading corporations of today is looked after by a department which usually is given the title of Personnel or Industrial Relations Department. The person in charge is usually a specialist in psychology who has proved his capacity for dealing fairly, intelligently and sympathetically with all kinds of people.

EDITOR'S NOTE: F. H. Sexton, LL.D., is president of the Nova Scotia Technical College. The above article is part of a paper given at the Maritime Conference on Industrial Relations in Halifax in October 1937.

Of course it is only a large plant that can afford to set up a department or even hire a person who has no other duties than to look after the human aspects of the enterprise. In smaller concerns this falls on the superintendent or the manager, but he is supposed to have the attitude and employ some of the methods which have been found valuable in making the workers efficient and contented. The main objectives are to secure people fit for the jobs, train them on the jobs and to build the general morale of the workers to the highest possible point.

The first consideration of an employer is to secure a worker who is fitted for the job. The selection used to be more or less a rough, hit-or-miss affair which depended on the snap judgment of the foreman, the recommendation of an employee, or other casual reason. The high degree of specialization and the heavy investment in equipment which are common today, make it necessary to select new employees with an extra degree of care. The best workers usually produce two to three times the amount of the output of the poorest ones so that this reduces overhead costs per unit from one-third to one-half. In late years management has learned the indirect costs of labour turnover. For labourers the expense of replacing a man and breaking in the new one may be as low as \$5.00. For a department store clerk it is usually as much as \$50.00, while for a sales representative it may be as much as \$1000 or \$2000. The worker's welfare also requires that he be placed in a job for which he is well fitted and that he can successfully hold.

In matching men and women with jobs it is necessary to analyze both as far as possible. This is now done and a specification is drawn up for each job showing the physical, mental, and personal qualities necessary for success in the work. Industrial psychology has made

great progress in the last few years in developing reliable tests for finding objective values in traits, aptitudes, and skills. The field has been only partly explored, but it is becoming common to have applicants for certain kinds of work submit themselves to a series or battery of tests which will give the employment representative a basis on which he can form a fairly sound judgment as to the fitness for definite occupations. Public utility companies and department stores have been leaders in this practice. Even such occupations as motormen, switchboard operators, taxicab drivers, weavers, and cigarette packers are now satisfactorily chosen on the basis of special tests. A manufacturing concern has found that it can choose apprentices on the results of a test that takes 30 minutes as well as by means of a whole year's tryout in the factory. We may expect to see the application of these methods expand rapidly with the development of reliable tests.

Physical examination is becoming more common in occupations where this is of primary importance. This is usually not carried out until the applicant has been deemed fit for employment on the basis of other qualifications. For aeroplane pilots the examination is exceptionally broad and severe. In Ontario all men who apply for jobs as hard rock miners must submit to an X-ray examination to prove they have no weakness or lesions in their respiratory organs. Very often physical defects are found which do not affect the employee's efficiency and he is able to have these remedied later and thus increase his general well-being. Many workers and labour unions have strong objections to the physical examination because it is feared that rejection will result if the person is not perfect health, or that some defect will be used to refuse a job to the man who may have a position as a labour leader.

When a worker is hired it is the usual practice to spend some time and effort in introducing him to his job and helping him to adjust himself to it. He is given an explanation of the real aims and policies of the enterprise and his sphere

of action and responsibility is gone over in detail. This is often supplemented by giving him a specially prepared booklet with his name on it which contains the same information and can be read over at his leisure. A personal introduction to the man under whom he will work is made by the personnel interviewer. This official introduces him in turn to the others with whom he will work and tells him of the plant routine such as regulations, time clocks, safety rules, methods of securing pay, etc. He is followed up and visited on the job by the personnel department during the period immediately after he is taken on the payroll to find out if he is satisfied and also is satisfactory to his foreman.

Transfers and promotions are usually a responsibility of the personnel department and often involve problems more ticklish to handle than the actual hiring of the worker. They are generally carried out with great care to be sure that justice is done to the individuals concerned and to the general aim of improving plant morale.

Policies in different firms vary a great deal in delegating authority for the discharge of a worker. The day has gone by when a foreman can summarily fire a man in a fit of temper or for personal prejudice. In some concerns it is only the employment department that has the power to discharge. This means that no one can be dismissed without a hearing and gives a worker a little more security. Even when he voluntarily quits his job he must check out through the personnel department and give his reason for going. This gives a good chance for a check-up on the general labour policy of the company.

The necessity for training the worker to perform his task well is also recognized and provided for in some measure. The specialization in jobs has made part of this problem comparatively easy. There are now many operations with machines which can be learned thoroughly in a few days or weeks. The newcomer can be placed as a helper with a competent operator and soon become fully able to fill the job. Some firms maintain what

they call a "vestibule" school in which an instructor is given a number of machines and the duty of making the learners capable operators under actual working conditions. There has been a tendency for industry to abandon the old-fashioned apprenticeship of three or four years for preparing skilled craftsmen in certain trades. Only a few of the larger and more progressive firms continue this form of training, and the state through its public education service has organized technical courses to fill this need. At the present moment there is an acute shortage of skilled mechanics and there is a general demand for a revival of apprenticeship.

Safety work is now a common policy in almost all establishments and becomes more efficient in each succeeding year. The consideration given to it points clearly to the general concern of management in the worker's welfare.

There are many human instincts outside of the primitive drives for food, shelter and clothing that call for continuous satisfaction. The wage incentive may be the principal one that drives men to work and keeps them at it, but careful investigation has proved that it is not as powerful as it is usually supposed to be. There are many other desires that call for fulfillment such as to be recognized as of some worth, to construct creatively, to be free of supervisory control, to be gregarious. It is doubtful if industry can be organized at present to satisfy these, but with the increased leisure that is coming with the shorter working week each person can find the opportunities outside the job to develop his own special ambitions.

We have just passed through the severest depression the world has known in recent centuries, and have learned many valuable lessons from this period of adversity. We are now in a period of moderate prosperity, but are facing problems of finance, production, unemployment, and distribution that seem to defy complete solution. Labour is becoming militant and aggressive and

social legislation involving heavier contributions from production through increased taxation is extending rapidly. There are some signs that labour may try its strength in the political arena in the United States, but it seems to have enough influence with the governments in Canada so that it can secure most of its reasonable demands through social legislation. There is no serious sign of revolution in either country. Management in the industries of North America is meeting heavier responsibilities with a fair measure of success, but is finding it more difficult to produce large dividends. The tables are now turned and labour is making management sweat for its wages.

It seems clearer than ever that the solution of the difficulties of economic society lies in greater production and lower prices. Only thus can the full possibilities of our power and machine age be realized. More people than ever are convinced that consumption must be increased and are willing to support a policy of higher wages and a shorter working week. Such a change could not be brought about without a closer and fuller co-operation of labour and capital, but this seems more capable of realization than at any time since the Great War when it was made possible under the spur of patriotism. The engineer and the inventor are making life easier and simpler. They are working to make wealth, power, leisure, and happiness the common possessions of a greater proportion of our people than has been true in any other age. Social reformers rail at some temporary conditions of industrialism but these are only moths which can be easily removed from their eyes if they desire to do so. Industry is acquiring a higher ideal of service to humanity inside and outside its own plants. It seems that we have the power and knowledge to establish a social and economic order nearer to the heart's desire if only the leadership will arise to take us into the land of Canaan.

EMPLOYMENT CONDITIONS IN CANADIAN INDUSTRIES

Information as to employment conditions in Canadian industry is contained in a report published recently by the National Employment Commission. It has been compiled from replies to a questionnaire sent to employers of labour throughout Canada. The list used by the Commission included names of more than 10,000 employers. Some 7,725 replies to the questionnaire were received.

Enquiries were directed only to those employers having in their employ 15 or more persons. The enquiry did not extend to those engaged in agriculture, hunting, fishing, banking or domestic service. While the figures given cannot therefore be regarded as complete, in view of the fact that they come from 7,725 firms employing 1,028,750 workers, as of September, 1936, they can be held as giving a definite indication of trends in the many phases of employment conditions covered.

Hours of Work.

All but about 200 of the firms reported on hours of work. Approximately 4,800, or 64 per cent of the total number reporting stated that their regular work week was 48 hours or less; 2,696, or 35.8 per cent reported a work week of 49 hours or over. In terms of numbers of employees, 639,720, or 68.3 per cent of the 1,015,636 involved, worked a week of 48 hours or less; while 321,916, or 31.7 per cent put in 49 hours and over a week.

Sick Leave and Holidays.

The granting of sick leave with pay appears to be a common practice so far as it applies to executives and office staffs, some 5,028 firms reporting that sick leave was confined to this group. The remaining 1,468 of the total 6,496 reporting payment for time lost through sickness, extended it to all their employees. Only 13.3 per cent of the firms stated that no sick leave with pay was granted, while 2.6 did not report on this point.

The questionnaire produced some interesting information on the extent to which holidays with pay are granted in Canadian industry. While 6,743 firms with a total of 958,295 employees reported a system of holidays with pay in effect, closer examination revealed that these were not granted to all classes of employees. In 5,072 firms with 656,252 employees, holidays with pay were granted to salaried employees only; 1,273 firms with 227,925 employees extended them to wage earners as well as to salaried employees; while the remaining 387 firms with 74,218 employees reporting holidays with pay did not specify the classes to which they applied.

Pension Plans.

Canadian industrial organizations to the number of 722 reported pension plans in effect. The combined pay-roll of these firms comprised 386,677

employees. Once again, however, it must be noted that while pension plans were effective in all these firms, they did not necessarily apply to all employees. In the primary industries only 14 firms, all engaged in mining, reported pension plans. Employees of these firms numbered 11,554. A total of 708 firms with 375,123 employees in secondary industries reported pension plans. Of this number of firms, 320 with 124,626 employees were engaged in manufacturing.

Housing.

Answers to questions on housing revealed that 930 Canadian firms with 293,474 employees gave housing assistance in one form or another. All employees of firms with housing plans were included in this figure of 293,474 whether or not such employees actually benefited from plans in effect. Of the 930 firms mentioned, 268 with 54,633 employees reported of assistance in acquiring houses. Plans providing for free or low rent housing were reported in effect by 512 firms with 185,134 employees. A total of 150 firms with 53,707 employees reported both assistance in acquiring houses and free or low rental housing.

Maritime Telegraph and Telephone Company Welfare Plan Twenty Years Old

At a time when governments are preparing plans to introduce social insurance for wage earners, it is interesting to note that one of the most important public utilities in Nova Scotia, the Maritime Telegraph and Telephone Company, for twenty years has provided welfare services aiming to give social security to its employees.

The plan operated by the company provides for old age pensions, sickness disability benefits and death benefits.

1. Eligible for a pension on their retirement are all male employees who have reached the age of sixty years, and whose term of employment has been twenty or more years. Women are eligible at the age of fifty-five. Under special circumstances employees younger than sixty or fifty-five may also be given a pension.

The pension is one and one-half per cent for each year of employment of the average annual pay during the ten years preceding retirement. The minimum pension is \$30 per month. The maximum is eighty per cent of the average annual pay. In 1937 the Company spent for pensions the sum of \$17,115.

2. All employees of the Company after a term of employment of two years who by reason of

sickness are unable to work, are entitled to sickness disability benefits. These are also granted in case of accidents which do not justify any compensation under the regulations of the Government's Workmen's Compensation Act. The benefits consist in continuation of salary during the absence of the employee beginning with the eighth calendar day. Persons with two years of employment are entitled to a maximum of four weeks full pay and nine weeks half pay. The benefit periods increase with the duration of employment in the Company to a maximum of thirteen weeks full pay and thirty-nine weeks half pay reached after ten years of employment. In 1937 sickness disability benefits were paid in eighty-three cases, amounting to \$6,830.

(3) In the case of persons who have been employed by the Company for at least five years, death benefit is paid to their beneficiaries. It increases with the number of years spent in the employ of the Company beginning with six months pay after five years employment and extending to twelve months pay after ten years employment and over. While the costs of sickness benefits and pensions are fairly constant, those for death benefits vary considerably. In 1937 the Company spent on that item \$445, while the costs in 1936 were \$1662.

In the twenty years in which the pension plan has been in operation, the Company has spent altogether \$267,750. The largest part of this sum, \$132,420, was for sickness benefits while pensions amounted to \$107,325, and death benefits to \$28,000. All these benefits are given without any contributions on the part of the employees. The Company also provides in addition for a group life insurance.

Another interesting feature in the Industrial Relations system of the Company is an employees' stock saving plan which entitles employees to purchase shares of the Company's stock. All permanent employees may invest up to ten per cent of their yearly wages or salaries in stock of the Company, which is given to them at par, while their actual market value is \$16. Since the principal object of the plan is to encourage thrift among the employees, the stock is held in trust and remains in the hands of the trustees together with all dividends accruing until the employee either leaves

the Company, reaches the retiring age or dies.

Should the employee be faced with a grave emergency or be in need of money, the trustees are entitled to lend him up to seventy-five per cent of the par value of the shares for which he holds certificates. A great number of the Company's employees take advantage of the stock savings plan. At present there are three hundred shareholders of that type.

COLLECTIVE BARGAINING

Although, perhaps, a few of the more conservative of our industrial leaders would not be prepared to admit it, the principle of collective bargaining is gradually invading Canadian industry. With the progress that has already been made in cementing friendlier feelings between employer and employee, this is not surprising, since it does not involve any particular loss of prerogative or pride on the part of the former. Indeed, if the vision of an essentially Canadian labour federation, under government control and supervision somewhat similar to that in Great Britain, were to be translated into reality, there would be less reason for Canadian industry to regard that invasion with misgiving, especially as the state reserves the right to intervene in any dispute that may threaten to disturb international peace. In fact, it could be made a condition of any further recognition of collective bargaining power through the medium of Canadian unions that, (1) in the event of the parties in an industrial dispute unable to agree upon a settlement, no lock-out or strike could be called until the matter had been referred to an official board of arbitration, and until a certain period of time had elapsed, and (2) it should be an offence for the employees of institutions, such as hospitals; public utilities, such as water, gas and electric service systems; and businesses supplying the necessities of life, such as dairies, bakeries, etc., to strike. There is little doubt that Canadian Labour would be reasonable enough to recognize the justice of this, where the employers recognized the right of the workers to bargain through their Canadian labour organizations.

From an Address by J. J. Gibbons, President of the Toronto Board of Trade before the Convention of the Canadian Chamber of Commerce, Vancouver, September, 1937.

COUNTY HEALTH UNIT

In an address given recently at Amherst, Dr. J. W. Sutherland stressed the need for a county health unit in Cumberland. He referred to the importance of vaccines and serums for preventive purposes and asserted that doctors today are

interested in keeping people well. Dr. Sutherland stated that health units had already been established in Ontario, Quebec, and Cape Breton Island were doing great work in this regard.

PENSIONS FOR BLIND COMING ON P. E. ISLAND

Payment of pensions to the blind in Prince Edward Island would begin in February, according to an announcement of Hon. Mark R. MacGuigan, Minister of Health and Education. Sixteen of the hundred applications received had already been approved.

The maximum pension is \$15 a month to persons without income and proportionately less to anyone with a certain amount of income. Only persons forty years old or over who were unable to work because of blindness were eligible. It was expected that out of the total number of applications about forty would receive pensions.

Dr. J. P. Lantz of Charlottetown was appointed by the Department of Pensions and National Health, Ottawa, to examine applicants to determine the degree of their blindness. Following approval by Ottawa the local Pensions Commission, headed by Hon. M. R. MacGuigan, will determine the amount of pensions based on whether or not the applicant has other sources of income. No duplication of pensions will be made in the case of blind persons who are now receiving old age pensions.

SICKNESS AND POVERTY

The United States Public Health Service has recently completed the most comprehensive survey of national health that has been made in this country. The survey relates sickness to the economic and social background of the families included in the study. The sections of the report thus far made public, deal with the amount of disabling illness in the Nation as a whole and illness and medical care in relation to economic status.

The survey finds that on the average winter day 6,000,000 persons are incapacitated for normal duties—of these, 2,500,000 are suffering from chronic

illness; 1,500,000 from colds, influenza, pneumonia, etc.; 2,500 (chiefly children) from acute infectious diseases; and 250,000 from acute diseases of the stomach, liver and appendix. On an average every man, woman and child is incapacitated by disease at least ten days each year from illness lasting one week or more.

The survey shows a definite relation between low incomes and illness. Low incomes mean inadequate funds and clothing, poor housing, the mental consequences of insecurity and inability to pay for adequate medical care. Disability in the low income families is double that in the higher income groups. Chronic illness is nearly twice (87 per cent) more in the small income families than in the higher. The days of disability per year are three times higher in the lower income families than in the higher.

Those families whose incomes are less than \$1,000, but who are not on relief, have twice as much illness as the families in the higher income group—but the higher income families have 46 per cent more medical care.

A by-product of the study is the light on distribution of income. Of the urban population interviewed (some 2,250,000 in 81 cities), 40 per cent were members of families existing on incomes of less than \$1,000; 65 per cent were in families with incomes under \$1,500 and 80 per cent in families with less than \$2,000. Only one person in five were in families with incomes over \$2,000. The minimum income providing standards of health and decency is \$2,500. Inadequate incomes mean more illness and sickness of dangerous duration.

The proportion of disabling illness for which no medical care was given was: 17 per cent for families with incomes of \$3,000 or more; 30 per cent among relief families and 28 per cent among those families not on relief with incomes under \$1,000.

It is estimated that approximately 1,250,000,000 days are lost from normal pursuits annually through illness lasting one week or longer.

From the *American Federationist*, February 1938.

RATES OF WAGES AND HOURS OF LABOUR IN VARIOUS INDUSTRIES IN NOVA SCOTIA, 1937.

Building Trades

| | Halifax | | Sydney | | New Glasgow | |
|------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | Wages per Hour | Hours per Week | Wages per Hour | Hours per Week | Wages per Hour | Hours per Week |
| Bricklayers..... | \$.97½ | 44 | \$.90 | 48 | \$.75 | 48 |
| Carpenters..... | .60 | 44 | .65-.80 | 48 | .45-.50 | 48 |
| Plumbers..... | .75 | 44 | .72-.80 | 44 | | .. |
| Labourers..... | .30-.40 | 44 | .30-.35 | 48-54 | .30 | 48 |

Municipal Service

| | Halifax | | Sydney | | Amherst | | Windsor | |
|--------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | Wages per Hour | Hours per Week | Wages per Hour | Hours per Week | Wages per Hour | Hours per Week | Wages per Hour | Hours per Week |
| Labourers..... | \$.40 | 48 | \$.35 | 48 | \$.35 | 48 | \$.30-.33 | 54 |
| Truck drivers..... | .45 | 54 | .45 | 48 | .35 | 50 | | .. |

Iron and Steel Foundries, Machine, Boiler and Ship Repair Shops.

| | Halifax | | Sydney | | New Glasgow and Trenton | | Other localities | |
|-------------------|----------------|----------------|----------------|----------------|-------------------------|----------------|------------------|----------------|
| | Wages per Hour | Hours per Week | Wages per Hour | Hours per Week | Wages per Hour | Hours per Week | Wages per Hour | Hours per Week |
| Moulders..... | \$.65-.70 | 44-48 | \$.46-.65 | 48 | \$.54 | 48 | \$.45-.50 | 44-54 |
| Machinists..... | .65-.70 | 44 | .57-.65 | 48 | .50-.54 | 45-48 | .40-.55 | 44-54 |
| Boilermakers..... | .50-.62½ | 44 | .57-.65 | 48 | | | | |
| Helpers..... | .37½-.42 | 44-48 | .40-.45 | 48 | .30 | 48 | .30-.35 | 44-54 |

Logging

| | Wages per Day | Hours per Week |
|---------------------------|----------------|----------------|
| Choppers and sawyers..... | \$1.00-1.25(a) | 53-60 |
| Teamsters..... | \$1.25(a) | 53-60 |
| River drivers..... | \$1.50-2.00(a) | 70-84 |
| Pulpwood cutters..... | \$3.00-4.00(b) | |

(a) with board and lodging.

(b) without board and lodging, 75 cents per day.