depression. Without political action there can be no free health services, cheap housing and other forms of "socialized wages," which will help to keep wage demands within practicable limits. Without political action the economy certainly cannot be transformed.

Employers, most Governments, and probably a majority of the Canadian people at the moment, are likely to look on the development of Labour political action with misgivings. Attempts to transform the economy they will probably consider futile. But, even if they are right, Labour will have to find that out for itself; and there is always the possibility that in the process we may all learn a good deal and discover that

more things are possible than we had supposed. The final result may not be exactly what Labour now expects, but it may be equally different from what we now have, and better than either. Anyhow, democratic Labour political action is the most effective answer to Communism; and if the attempt to make that answer is suppressed, the Communists are probably the only people who will gain.

There is a place, and a most important one, for unions in the expanding economy. They will fill it if we all have the imagination, the courage, the faith in ordinary people and their possibilities, and the wisdom which the crisis of our times demands.

Incentives For Increased Production

By PHILIP STUCHEN

HE tremendous productive potentialities of the Canadian economy have become apparent during the years of World War II and subsequently. ability of our system of production to make available more and more goods and services has by no means been an accidental process. Technologically, such a system necessitates a high state of prefection; its machinery, organization of production and quality of goods must be of the first order. Economically, unless we can sell or dispose of what we produce our technological development will largely remain meaningless. Sociologically, we are beset with a variety of special viewpoints which affect, and in turn are affected by these related problems of production and consumption.

It is these special viewpoints and interests which are becoming of increasing concern to the economist, the industrial relations expert, and the engineer, in addition to the more immediate parties concerned— the employer and the employees. How to maintain people at work, how to keep them satisfied on their jobs. how to increase their efficiency and productivity, how to best extend work benefits and employment security are all very pertinent questions at any time. However, at a time of our fullest employment, when our physical volume of production has reached an all-time peak, or while we enjoy a standard of living which is the envy of most countries of the world, these same problems demand greater urgency in our attempt to find answers to them.

Types of Incentives

In a recent commentary¹ "The Economist" reduced the American economy—and, therefore, by implication our own—to "the carrot and stick" variety requiring either a carrot in front or a stick

EDITOR'S NOTE: Philip Stuchen of the Economic Research and Development Branch, Department of Trade and Commerce Ottawa, presents his personal views in this article.

^{1.} June 29, 1946, pp. 10-3335.

behind to goad the human donkey into activity. Being "fashionable at the moment to argue that the carrot is the more important of the two," incentive becomes the watchword of our economy. Since human energy is individually controlled and can be turned on or off at will or turned on part way, it follows that "bigger carrots" or incentives are necessary to cause us to release our human energy in full. It is by such inducements that people are led to change attitude, to expend additional effort or to excel in accomplishment.

We have two types of incentives—the financial and non-financial, or as some American economists term the latter, "plus money" incentives. Financial or immediate incentives might be classed as those directly dependent upon the performance of the worker as reflected by the output and quality of his product. We might consider non-financial incentives as all other inducements which would cover nearly the whole field of industrial relations. Being too broad in its inclusiveness, a more precise meaning would be those more formal arrangements announced to employees in advance, designed to influence their attitudes or ac tions, but which do not link compensation directly with performance; however, the many morale building actions of an informal nature which management employ when they pat employees on the back must not be overlooked.

Wage Incentive Payments

The basis for determing the financial compensation of wage or salary earners is either time worked or the amount of output. While the majority of Canadian workers' earnings are based on units of time, a substantial number—especially in the manufacturing industries—receive compensation which varies with the amount of their output. Such earnings based on average production quotas are commonly referred to as wage incentive payments. From the first or oldest incentive type of wage system—straight

piecework—to more advanced premium incentive plans in operation, the worker is rewarded in direct proportion to his increased effort. More elaborate plans require that the amount of output that the worker is expected to produce in a standard hour be determined in advance: for all he produces above this amount, he is paid a proportionate premium. Plans with complicated formulas for computing premium payments are less common today than some years ago. Further, group incentive systems which are easy to install were adopted by several firms during the war as a means of increasing production; however, individual incentive plans applying to the individual worker continue to be more prevalent.

The development of incentive payments has in turn increased the number of techniques for determining what constitutes "a fair day's pay for a fair day's work." Time and motion specialists who conduct these analyses have become part of the industrial engineering activities of many companies. The installation of the incentive plan, the setting of the base wage rate, the determining of the production or the performance standards, and who should conduct the rate-setting are all matters which involve considerable detailed planning. So it is that incentive payment methods are recognized by some companies and unions as an appropriate area for collective bargaining, although many wage incentive specialists would disagree.

Survey of Wage Pattern

To appraise briefly the advances made by Canadian employers in the matter of material or financial incentives offered to their labour force, the analysis of one hundred Canadian labour agreements recently carried out by a former Canadian² while he was a member of the National Industrial Conference Board is quite re-

A. A. Desser, "Collective Bargaining in Canada," pp. 9-10. Studies in Personnel Policy, No. 84; Management Research Division. National Industrial Conference Board, New York.

Number of

vealing. Cutting across all sections of Canadian industry—twenty-four types in all—the survey includes companies with employees varying from a few hundred to over ten thousand. The following sum mary table indicates the trend of the agreement clauses dealing with the wage and more recent incentive payment pattern:

	14 umbor or
	Agreements
	Including Clauses
	Indicated at Left
Wage rates or seale specified	72
Wage rates or scale specified	
Higher wage prevails in case of	
temporary transfers to jobs	0.4
with a different wage scale.	34
Wage increase provided for	
in agreement	19
Existing wages to remain in	
force for:	
Duration of agreement	23
Specified period during	
which wage increases are	
discussed	distribution a production
Transpage maggible any time	-
Increase possible any time	
during the life of the	10
agreement	
Provisions for wage adjust-	
ment:	0.5
By negotiation	25
Automatically	5
Individual wage incentives to	CONTRACTOR SECTION
be adjusted	5
Provision established for:	
Bonus plans	4
Incentive plans	18
Cost-of-living bonus	
Mathed of payment to piece-	
Method of payment to piece-	
workers for waiting time:	1
At established piece rate	6
At established time rate	
Union participates in time	
study and incentive pro-	
grams	15

The hours of work pattern showed forty-seven of the agreements analyzed to have a 48-hour week arrangement; fifteen reported 44 hours and eight have hours. A six-day week was indicated for fifty-two agreements; thirty provided for a five-day week and twelve agreements did not include the number of days in which the hours were worked.

Guaranteed Work and Wage Plans

But it is not only matters of wage rates, hours of work or incentive payments which are uppermost in the minds

of workers to-day. In our highly industrialized economy, which is presently experiencing a tight labour market, the tendency is for labour to shop around. not necessarily for the firm paying the highest wage or working more hours but that employer who offers the greatest job security, most satisfactory working conditions and relationships, bigger and better benefit, insurance and pension schemes. In other words, the non-financial as well as the financial incentives are not only facilitating the recruitment of an effective labour force by some employers but insuring that such be maintained at high morale and productive level.

However, it is of interest to know that in the United States the recent "Fortune" poll for this year³ revealed that "few workers view their chances of finding another job with any optimism." Seventy-four per cent of the factory workers polled reported that it would be "hard" or "fairly hard" to find new jobs as compared to the sixty-five per cent of "all other labour" and sixty-three per cent of non-supervisory "white collar" workers. It follows that guarantee work and wage plans should be given more careful study although the experience of their operations to date has been so limited that it can give but a partial answer to the many questions involved in employment securitv.

Lacking such schemes on a comprehensive scale in Canada, a few successfully operating plans in the United States are worthy of mention. There is the well-known Procter and Gamble plan which guarantees 48 weeks of employment or the equivalent to its 14,000 employees whose pay is compiled on an hourly basis; or the Hormel Meat Packers' annual wage plan offers year round employment to almost 6,000 employees as well as regularizing weekly pay cheques in an industry which has pronounced seasonal variations. Both companies are enthus-

^{3.} Elmo Roper, "The Fortune Consumer Outlook,", Fortune Magazine, April, 1948.

iastic about the benefits deriving from their respective plans. In addition to such advantages as the stimulation of high employee morale, the management are convinced in turn that the presence of the work guarantee has stimulated them to stabilize their business further, which has been of financial advantage to them.

Profit Sharing Plans

Provision for employee benefits and security is more evident at this time when our economy is experiencing inflationary tendencies as well as full employment. Earnings are high and employees are better able to save; profits are also high and a larger share of corporate income can be diverted to benefit channels. As a result, several Canadian firms have devised profit sharing or wage dividend plans affecting approximately 7,500 emplovees. While one firm's plan dates back to its American parent scheme of 1912, most of the others are more recent innovations taking account of the habit of saving which many employees had acquired during the war as well as worker aspirations for a larger place in industry. Another company has incorporated as its model the "share-the-production plan" of a well-known American shoe manufacturer. In this case, the lovalty of the present workers has increased and more satisfied workers are maintained on the job; in addition, the firm benefits from the increased output of its workers, improved quality of product and lower labour turnover.

In the hundred labour agreements analyzed above, eleven indicated having group insurance, three supported pension funds, eleven claimed severance pay plans, and none showed profit sharing plans. While this sample does not represent a high proportion of Canadian industry, yet it demonstrates that management is more aware at this time of the need for basic protection of the workers in case of disability, severance

from employment, retirement and death. Provision for these basic forms of protection are being more realistically anticipated by employers as well as being more reasonably sought by labour.

Non-Financial Incentives

Without minimizing the importance to be attached to job security, pay and the work pattern generally, the area of non-financial incentives is too often inadequately explored. In fact, certain theorists are of the opinion that modern industrial societies have pushed material production and the material rewards of individuals, to the point of threatening the stability of the system as a whole:

No job can be evaluated wholly in monetary terms . . . Workers seek prestige and esteem, social as well as material security, pleasant working conditions, fun and change . . . If the job is oriented on technical competence alone, so rationalized that it provides no change for personal attachment, or offers no opportunity for enjoyment or change, and other breaks in the tension, or has no relation to family or community ties, if it has no standing under the recognized social standards, then the incentive to work is certainly smaller than in a work situation where the necessary interdependence of values is recognized.⁴

Much can be accomplished in the field of non-financial incentives—those not directly related to the pay envelope in motivating to greater effort. It must be recognized that each worker is an individual having his own likes and dislikes, his own fears and hopes. Favourable conditions must be created for the worker on the job—as well as away from his work which tend to act as a stimulant to him at all times. For example, many a worker's decision when he is tempted to leave one job for another might be influenced by a more generous vacation plan offered by a prospective employer. The hundred labour agreements' survey on vacation plans as set out below is enlightening on this point:

Dr. Wilbert E. Moore, "Theoretical Aspects of Industrialization," Social Science Quarterly, September, 1948, pp. 286-7.

Number of

	I tulifour or
	Agreements
	Including Clauses
	Indicated at Left
Vacations with pay	945
Vacations with pay	
Vacation allowance for less	
than 1 year service	21
One week vacation after:	
½ year service	2
1 " "	75
Two weeks vacation after:	
1 year service	8
2 years "	3
2 16 16	$egin{array}{c} 8 \ 3 \ 2 \end{array}$
2 " " "	4
5 " "	26
2 years " 3 " " 5 " " 7 " "	6
10 " "	10
10	
11 " "	2
15 " "	THE PARTY OF THE P
	etistas la i tuombini
20	1
Three weeks vacation after:	
15 years service	2
	$\frac{2}{3}$
20 " "	3
25 " "	3
Four weeks vacation after:	
25 years service	1
35 " "	2
Miscellaneous	11
No statement	
No statement	6

Labour-Management Committees

Another worthwhile effort being made by employers and employees in their attempt to create better relations with one another is the functioning of labourmanagement production committees, of which there were twenty-five recorded out of the hundred agreements examined Commencing as a wartime development, there are now 579 such production committees set up in Canadian industry involving almost 300,000 workers. A definite contribution to increasing production and productivity, reducing and settling the number of grievances, encouraging accident prevention, reducing absenteeism, improving the quantity of output and maintaining good-housekeeping is being promoted through the voluntary co-operation of labour and management. Unlike similar committees in the United States, Canadian labourcommittees management have stantially increased in number since the end of war⁶ under the auspices of the federal Department of Labour.

Other managerial responsibilities and functions which have had a beneficial effect on the day-to-day relationships with the labour force as well as favourably influencing production are the following—again derived from the labour contracts' survey:

	Number of Agreements Including Clauses
	Indicated at Left
Company training programs Company responsible for in-	20
dustrial health and safety of employees	45
inate against the union nor interfere with employee's right to join a labour union Company shall not discrim-	79
inate against any employee because of race, colour, re- ligion or political belief Employees may appeal through grievance proced-	10
ure on matters relating to: Employment	81
Promotion and demotion.	69
Transfer	65
Suspension	58
Discharge	79
Lay-off	38
Reprimand	36

Growing Management Deference To Employee Opinion

There is, then, a greater effort being put forward by management in meeting the non-material aspirations of their employees. Before 1939, very few Canadian firms could boast of fully trained personnel departments which were set up to give full time and attention to staff requirements. Today and within the short space of ten years, the situation has substantially altered with personnel directors and their staffs becoming a very essential and recognized part of manage-The several hundred personnel experts quickly trained during the war and more thoroughly subsequently have made a valuable contribution in their daily efforts to attain the maximum utilization of human resources with the highest degree of individual satisfaction.

More clearly defined policies and a carefully staffed and functioning indus-

^{5.} Totals are not equal due to the varied plans within companies.

^{6. 382} were reported as of V-J Day.

trial relations department are essential for the new concern towards employees as individuals within their respective organizations. Executive training courses and research on specific economic problems carried out by employers' associations give ample evidence of the more positive educational program on the part of individual companies and management groups. Close contacts and consultations with university industrial relations experts is a further available means of attaining higher standards of policy and performance in employers' dealings with These steps are necessary employees. if the long trend towards subordination of the employee to the group, with consequent restriction of the freedom of the individual, is to be reversed.

Perhaps more apparent, too, from opinion polls being conducted is a growing deference being shown by management to employee opinion. As an Amerimanagement-research organization has recently pointed out: "Within the individual enterprise, management is discovering that employees have other notions besides their thinking on wages, hours and working conditions largely determine their attitude towards their employers and their jobs and that the individual worker wants to learn about management plans and actions and especially as to how they affect him and his job." Employee opinion polls conducted on problems of national economy, international topics of the day, as well as those directed at employees' reactions to their individual work environments have helped to correct ills on one side and overlooked or distorted viewpoints on the other.

Conclusion

To conclude, a strong dose of realism appears to be basic to any approach to the human industry. Management regards the incentive system as an effective stimulus to production and to improved efficiency when the general standards of performance are comparatively low. Although many workers are in favour of some form of incentives, several unions are opposed to incentive plans—at least the incentive pay system—since their aim is to secure overall high average wages and better working conditions for their entire membership. The answer would seem, therefore, to embrace the very essence of employee-employer relations.

While not attempting any permanent solution, it is believed by many qualified observers that the foundation of sound industrial relations is dependent upon the fuller understanding and application of This does not non-financial incentives. minimize for a moment the great importance to be attached to financial incentives which are basic in any employeeemployer felationship. But pay rewards or wage guarantees—the financial incentives—can never be considered adequate substitute for good human relations in any organization. In fact many of the most severe and prolonged labour disputes in our country and in the United Stztes have occurred in industries paying the highest wage rates. This would seem to contradict the belief and practice held by many business executives who rely almost exclusively upon the contents of the pay envelope for the maintenance of productivity and industrial peace.

It would seem, then, that the area of non-financial incentives—those benefits not directly tied directly tied up with the pay check-have been inadequately explored to date. However, a greater appreciation of joint management labour collaboration in ironing out production problems or union participation and interest in matters such as industrial fatigue or job security are clearly recent evidences of the new role assumed by nonfinancial incentives. But if they are to be effectively utilized as a means of leading to more constructive attitudes and to higher levels of performance, they must meet certain standards. Perhaps most important, these non-financial arrangements should not be used as a substitute for money wages. In addition they should be definite in what they offer; they should be formalized and announced in advance; and they should operate automatically and consistently without any personal bias or prejudice.

In the final analysis, the interests of labour and management are the same within a large area; in fact, it can perhaps be said that the area of common interests is much larger than the area of diverse interests. So it is that the effective understanding and widespread application of incentives—financial as well as a more explicit regard for the non-financial—will contribute much to the achievement of successful industrial relations in any industry.

The Maritimes: A Vital Region in War and Peace

By A. M. CHIPMAN

DURING the past decade, industry in the Maritime Provinces, as elsewhere, has experienced the test of a national emergency and the difficulties of transition to a peacetime basis. It may be recorded that, after playing a vital part in Canada's war effort, the several groups of industrial enterprises are making a significant contribution to the economy of the region and of the Dominion as a whole.

Maritime plants, in respect to war needs, processed agricultural and fisheries products in major quantities, turned out basic and finished forestry products, manufactured steel, built steel and wooden ships in substantial numbers, produced a wide variety of textile goods and wearing apparel, and manufactured an impressive array of guns, small arms and aircraft. Maritime establishments also repaired and serviced the ships and aircraft so necessary to defence and to the effective transportation of personnel and supplies to Britain and Europe.

With a return to peace, the more traditional of the region's leading industries have again become pre-eminent, and these have continued to operate at high levels of output. Demobilization of war plants and certain recessions in transportation have unfortunately created unemployment which has not been entirely taken

up by expansion in manufacturing and other industries. Post-war developments have nevertheless been significant and encouraging, and opportunities may well exist for still further extensions.

Manufacturing's Leading Position

Manufacturing stands high in importance among the generative industries of the Maritime economy.

According to the Dominion Bureau of Statistics Census, manufacturing provided gainful employment to some 52,300 persons in 1941. These formed some 14 per cent of the 369,000 persons employed at home in gainful occupations, and placed manufacturing second only to agriculture with its 96,000 persons gainfully employed who comprised 26 per cent of the Maritime total. Forestry with 20,200 persons, mining with 18,600 and fishing with about 16,700 followed in order.

Transportation, a semi-generative industry because of the national traffic passing through Maritime ports and over the area's rail system in addition to Maritime traffic as such, actually ranked third in the overall activity classification with 28,500 persons gainfully employed in 1941.

On the basis of gross value of production, manufacturing outranked all other generative industries. In 1939 its gross output totalled \$152,700,000 against forestry at \$51,200,000, agriculture at \$46,600-000, mining at \$32,900,000, and fisheries

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