### PERSONNEL ORGANIZATION IN KANSAS ITS EXTENT AND FORM

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### INTRODUCTION AND PURPOSE

This thesis is the result of a study to determine the extent and form of personnel organisation in Kanasa. The unit of study is the industrial plant. By "extent" is meant the number of plants having definitely organized departments of personnel and the number of employees affected. By "form" is meant the activities or functions which the plant organization performs that are because of their relation to employee and employer of a nature to came under the direction of a department of personnel.

So far as sould be ascertained no such study of this kind has been made on this subject prior to this one.

The study is limited in its scope by the fact that Kansas is largely an agricultural state and has comparatively few large industrial plants which are the more likely to nave organized personnel work.

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### BETHOOS AND MATERIALS

After some study of existing materials on personnel organization a list of typical functions was prepared. From this list the questionnaire on the following page was prepared.

This questionnaire was sent to all industrial plants in the state having 100 or more employees. It was assumed that plants having less than 100 employees would not find it practicable to have a separately organised personnel department. The list of plants was obtained from the State Public Service Gosmission, Labor Department. The list included 115 plants. From those, 62 replies were received. Forty-eight returned the questionnaire with answers.

In the following thesia the work is divided on the basis of organization into manufacturing plants with departments of personnel; railway shops; and plants without departments of personnel yet performing many of the functions of a department. Each of these divisions is treated separately and in the above order.

### GURSTIONMAIRE

- 1. Do you employ a personnel man?
- 2. If so, what title does he have?
- 5. Do you operate under the Kansas Workmen's Compensation
  - 4. How many employees have you?
  - 5. What is your annual labor turnover?
- 6. Check any of the following which you have in your plant:
  - a. Physician with attendant nurses.
  - b. Assistance in case of sickness.
  - c. Compensation for injury in course of employment.
  - d. Life insurance: Group or individual.
  - e. Savings department.
  - f. Educational program.
  - g. Recreation rooms and equipment.
  - h. Annual vacation with full pay.
  - i. Bonus system.
  - Does the Personnel Department handle: Hiring and placement; promotions; discharging; payment; disciplining of employees; etc.?
  - 8. Do you employ union labor?

- Are the employees organised into plant committees for the purpose of premoting group cooperation?
- 10. Do the employees have any part in the management?
- 11. Are suggestions in processes or improvements of any kind accepted from the employees?
- 12. Do the employees have recourse to the management in case of discipline or misunderstanding?

### HISTORICAL BACKGROUND

In the last twenty years a new field of administration has been developing. Industry has been centering its attention upon the human relations and the effectiveness with which human labor is being applied. As a result a new department of administration has been created in many industries with a qualified director and staff. This new department is termed the Department of Personnel and has at its head a Director of Personnel. The name of the department and the head may differ from one plant to another but the menning in each case is very much the same.

According to feed and Metcasif (1980), "personnel administration is the direction and coordination of the human relations of any organisation with a view to getting the maximum necessary production with a minisum of effort and friction, and with proper regard for the gemuine well-being

As would be expected in larger industrial plants with many employees the personal relationships between the management and employees have disappeared because of the inpossibility of the situation. With so many people in a plant it becomes impossible for the management to be directly acquainted with each worker. But in recent years the value of that personal relation, as it existed in the plants before the number of persons became so great, and as it exists in the smaller plants today, is being recognized by the large establishments and the Department of Personnel is being organised to build up a better attitude between the employees and management. Hence we find the Department of Personnel most highly developed in the large plants. In many smaller plants some of the same functions are performed but not through a separate organized department as in the larger plants.

One of the most cutstanding reasons for organizing such departments has been the problem of labor turnover. Turnover muy be defined as the change in personnel brought about by hiring and the termination of employment. It was due to a careful study of the causes of turnover that definite directed activities were adopted and put into practice in industrial plants with the aim in view of making conditions

more satisfactory for the employee and hence reducing the need for hiring and unavoidable termination of employment.

Certain definite recornes are carried out by the industries having the Department of Personnel and the programs are adapted to the particular needs and conditions in the individual plants. However, some of the functions of the department may be summarised as follows: To promote fair terms and conditions of employments to develop sources of labor supply: to help determine working force requirements: to direct the selection and placement of employees; to stabilise the labor and production requirements; to exercise control from the standpoint of management over questions of promotion, discharge, and other adjustments affecting employee relationships; to help determine and direct the ad--injetration of wage avatemat to administer work on accident prevention, health, and sanitation; to supervise training; to advise on and direct in proper relations with other major executives, the policies on ecoperative management between the employer and the workers; and in general to act as the central agency within the organisation for dealing with all matters between the management and the workers.

### EXTENT IN KANSAS

In Kansas there are 115 industrial plants with over 100 employees. Einsteen of those plants have over 500 employ-

ees. This latter group is comprised of eight railway plants; seven meat packers; one oil company; one scap manufacturer; and one salt company. Data was obtained from 48 of these life plants. For the group of plants having over 500 employees data was secured from all but three. It is upon this data that the following figures and discussion are based.

Trenty-six or 56 per cent of the plants have Departments of Personnel with a recognised administrative benefits of organised personnel work. Of the 16 plants with over 500 employees, 14 have definite organised departments; eight are railway plants and six are manufacturers. Two plants with less than 500 employees have departments and 10 railway shops with less than 500 employees come under the direction of personnel administration.

The figures here in regard to the railway organisation are kept separate because of the difference in system of personnel used by them.

### EXTENT AND FORM OF ACTIVITIES

# Manufacturere

Industrial relations in its simplest form is the relation between men and management — the human relation in industry — sometimes called "Hamma implineering". Engineering in a tread sense is conceived as an exact science, with definite laws. Haman engineering may be conceived as a science but it is not exact. It deals with the minds and motives of men. Its problems are more involved because of the many unknown quantities entering into the equation. The solutions of these problems are as varied as the human elements, which is the principal factor to be considered, first and always in every organization of man in industry.

A thorough, systematic, and continuous study of the wants and needs of men is a prerequisite of the proper and intelligent administration of "industrial relations".

The medium through which this administration is carried on varies with the type of management organization of the different plants but it was found that in the plants to be discussed here a definite unit of organization had sharge of this function. As stated before, this unit will be termed the Department of Personnel with the Director of Personnel at the head. The functions of the departments are the direction and coordination of the human relations of the organizations. The diagram on the following page is given as an illustration of the organization of a department and its relation to the rest of the organization.

<u>furnover.</u> Since in the last analysis all unrest and dissatisfaction on the part of the employees results in

President Vice-President

General Sales Agent	nel	t Direct Direct (Woman) 11 (Clerk ple an and and and and
General	Director of Personnel	(8) Residents Director of Records and State of Record Assistant Director of Records (Nomen) (Nomen) (S) Record Officer of Records (Nomen) Perfol Cherk (8) And State of Records (9) Comment Perfol Cherk (9) Comment Performance (9) Comment Perfo
General Works Hanager	Direc	(1) (8) (8) (4) (9) (9) (9) (9) (9) (9) (9) (9) (9) (9
Works		
General		
ng Agent	Executives	and Sarvice Departments
General Purchasing Agent	Punctional Executives	Poronen of Production and Sorviton Department

Diagram 1. -- Personnel Organisation.

labor turnover and increasing losses financially both to the employer and employee, this question will be considered first. Turnover is costly to the employer in that production is slowed up by the employment of new men to fill the vacancies when employees leave voluntarily or are discharged. Over-head expense is increased because of idle machinery and the greater amount of time taken by the executives from their regular work to instruct the new employee. The instruction of the new employee is costly since the machinery of production is slowed while he is learning, newness of the job and lack of skill in handling the machine often result in accidents both to the machine and individual. Even though a new employee is not secured to fill the vacancy less in production results with the accompanying loss in earnings. The employee suffers loss financially in this process due to sessation of wages and the bad effect of varying positions and idleness upon working morale. He is out to the extra expense of securing a new job, his earnings are reduced during the period of adaptation to the new job. there is increased risk of accident, and many times it is necessary for the change of the home involving the expense of moving and a loss of credit.

Among the eight plants (exclusive of railways), six gave figures for their annual labor turnover. The percentages varied from 10 per cent to 117 per cent and showed a direct increase in turnover with the increased number of employees. There seemed to be a question on the part of two of the plants as to the meaning of turnover as in one case a question mark was placed after the question in regard to turnover and in the other case the statement "each thirty days or twelve times annually" was made. This could be sxnected since there seems at present to be no unanimity of opinion on a standard definition of the term. Two basic theories around which discussion has settled are the separationist theory and the replacement theory. The separationist theory holds that the basis for determining the true labor turnover is the relation of the separation from the plant to the number on the pay-roll. The replacement theory is that the turnover is the relation of the number of workers actually replaced to the number on the pay-roll. In one instance 1,815 men were employed during the year to maintain a working force of 1,550. This resulted in the highest par cent of turnover of any of the plants.

Medical Service. Kanses has a workment's compensation law which provides that the employer must provide services to the injured employees. The cost of the service is not to exceed \$100 or be distributed over a period to exceed 60 days. The accident must be immediately reported to the State Public Service Commission, Department of Labor, on blanks provided for that purposs. In case of permanent

total disability, after one week (two length of waiting period) 60 per cent of the average weekly earnings of the employee is paid over a period not te exceed eight years. The amount of this weekly payment shall not be less than 86.00 nor more than \$18.00. In case of temperary tetal disability the same rate is made payable to the employee during the period of disability after the waiting period of one week.

If the employee does not elect to participate under this law, he must file written notice to that effect with the consission. The employer may also elect not to participate under this law in which case he must also file written notice with the counission. However, he is still liable and suit can be brought against him for dawages. Business or employment engaged in interstate commerce is not affected by this law unless notice is filed with the commission to such affect.

In every case here studied the companies operate under the Kansas Norkssen's Componantion Law and in most cases additional services are provided, with some providing additional componantion above that required by the law.

Four plants have plant physicians and murses in charge of First Aid Stations within the plants. These physicians and murses are provided by the companies and the treatment and assistance is given the employees without charge, in case of injury or sickness. In sow cases a dentite visite
the plant on certain designated days of each week and demtal
treatment for minor causes is given free, but a small charge
is made in cases requiring a greater amount of treatment.
One of the four plants compensates the employee for accident
in the course of employment to an amount 80 per cent in excess of that required by the law. Furthermore, in this
plant compensation will begin to accrue on the fourth day of
disability due to the injury instead of the eighth day as
provided by the law. The employee shall not be entitled to
these extras, however, unless the injury is reported to the
"Plant Medical Department" within one day after the accident.

Assistance in case of sickness is also provided by the foregoing plants. Assistance is also given members of the employee's family for sickness as it is believed that the employee cannot work as efficiently if he has to think of those of his dependents who are ill.

One plant has a physician with attendant nurses only in case of secident and sesistance in case of sickness is dependent upon the length of service of the employes. Another has murses but no physician to give assistance in case of sickness. While one plant has noither physician or murses.

Where the plants have physicians and nurses a physical examination of the employee is required upon entrance into service and careful follow-up work is carried on with defective employees. A program of health education is carried on and special stress is placed upon accident prevention and hygiene.

Insurance. The Kansas Workmen's Compensation Law also provides for the carrying of group life insurance by the employer for the employees. In case of death of an employee during the course of employment a sum equal to three times in average yearly earnings but not exceeding \$4,000 and not less than \$1,400 is paid those wholly dependent upon the deceased. The employer also pays the burial expenses up to a maximum of \$150. The payment of the insurance to the dependents is in weekly or monthly installments according to the terms of agreement established by the interested parties. This insurance may be taken out by the employer with any company which complies with the Kansas insurance laws and writes this particular kind of risk or he may carry the risk himself by what is known as "self-insurance".

In every case group insurance is carried by the compantes in compliance with this law and some of the companies provide in addition a group insurance whiching a low rate of presium which is paid by the employee if he elects to come under the plan. The plans of group insurance aim to provide life insurance for the group of employees without requiring individual physical examination. The premiums vary in size with the nature of the industry, and are paid monthly by the employers. Insurance automatically ceases when the employee leaves the employ of the company.

This form of insurance is advantageous in that it is conductive to continuous service on the part of the employee. In many cases it gives benefits to workers who could not ordinarily pass the medical examinations required in the case of individual policies, and it gives the workers who sammet afford regular policies an opportunity to provide for their families with respect to the future.

In addition to the foregoing aids and compensation to the employees one occupany has an imployee Pension System. Every salaried employee of the company is eligible with the exception of those burned by the age limitations. Appropriations by the company together with contributions by the employee are the basis of the system. Rach employee contributes 3 per cent of his or her annual salary. Upon completing 30 years of continuous service for men who have attained the age of 65 years, and women who have served 25 years or longer and who have attained the age of 65 years, retirement on pension on their own application or at the discretion of the board of trustees is provided. The pensions are computed at the rate of 1 per cent of the salary for each year of continuous service, calculated on the

ment. The following hypothetical case will make this more clear. An employee has served the company 50 years, and his average salary for the last 10 years was \$1,800. One per cent of this amount multiplied by the 50 years of service will equal \$560 pension per year on \$50 per month. Refunds of contributions are provided for employees leaving the service. In the case of hourly paid plant employees ineligible to the pension, the company handles individual cases separately and maintains a service roll for those plant workers who are in need of assistance.

Hiring, Placement, Disciplining. Hiring and placement in six of the plants is handled by the Department of Personnel. In one plant it is handled by the department of Person white in one plant is a sale as a superintendent in charges, while in one plant the department does not handle it at all. In connection with hiring and placement, promotion, discharging, and disciplining may be considered. The Department of Personnel in five plants has charge of these functions; in one plant the superintendent of the department has charges and two plants gave "ne" in answer to the question as to whether the Department of Personnel was in charge.

Before hiring an employee some member of the Department of Personnel, usually the Director of Personnel, holds a personal interview with the applicant for a position. A careful record is taken of the answers to questions, which provide data as to experience, qualifications, and kind of work sought by the applicant. An examining physician reports upon the physical fitness of the applicant. The purpose of the physical examination is to protect the employeto whom it frequently reveals unknown defects that timely treatment may correct; and it serves to determine to a large extent the position which the applicant is fit to fill.

The new employee is accorted to the department to which he has been easigned and is carefully instructed in the work. Usually a tour of the plant is made with the new employee so that he may more fully realise the importance of his position and the relationship it bears to the rest of the plant processes. A little later he is given details of the organisation plans and activities which are for the benefit of the employees. He is also informed with regard to the employee organisations and their activities.

Mucation. Six of the plants have educational programs but two have not. In one the educational work consists of a yearly conference of executives and salesmen. In general the educational program first takes up the training of the new employee for his task. The new employee in many cases has had no experience with the type of work into which he is going, so that it is necessary that acces time be given to chucating him to the task. Might school classes seem quite popular and the plants in come cases have a particular room

in the oxiding set spart for this purpose. Teachers are also furnished and the expense is borne by the company, and in some cases by the company and the public schools. The Department of fersonnel is always at the service of the employee in helping to arrange for special study courses and to advise regarding educational matters. The night schools usually have special courses in mathematics, common school subjects, blue print reading, mechanical drawing, and similar technical instruction.

A type of class for education is the "Flying Squadron" as developed in one of the plants. Sixteen men were first selected from various departments of the plant and assigned to this special group. These men are not permanently connected with any department but are assigned for emergency work in any part of the plant. The inmediate purpose of the group is to fill temporary vacancies in case of emergency. In addition an all around training in production methods and processes is furnished. The men are selected for their dependability, interest, and ability to develop for positions of responsibility. An additional class is added to this group each year. Persons with limited education on this squadron necessarily have to devote a reasonable amount of time to outside study if they expect to succeed. All members are expected to devote some time to night school and home study. This is a three year course at the end of

which, the members who have made good are graduated as "Measter Workness" and a certificate of graduation is feaued. After graduation the employees are assigned for regular duty wherever needed and receive a higher rate of pay commensurate with their greater knowledge of, and adaptability of all kinds of work in the plant. Employees may apply to the Department of Personnel for membership on this equadron.

Parment, Romas, Thrift. Payment of the employees in four of the plants is a function of the Department of Fersonnel, while in the other four it is a function of some other department. In connection with the payment of regular wages six plants have bonus systems. In one plant due to the nature of the work slack periods appear, and to avoid loss of wages to the employees a 40-hour week is guaranteed. Somuses are paid the employees in lump sums at the close of a fiscal period and are dependent upon the presperity of the company attained during the period. Another form of bonus in use givee extra compensation for work done over and above a certain standard.

Employees are expected to practice thrift, to live within their incomes, to meet their obligations promptly, and to save a portion for future need. As a result four plants have savings departments or thrift programs. Stock purchase by menthly installments is practiced in two of the plants. In one plant the management recommends some form of

regular saving and in individual cases will discuss the marits of various available investment plans. Another plant is contemplating the beginning of a savings plan.

Annual vecetion with full pay is the policy in all of the plante but limiting conditions are placed upon the privilege. Three plants grant vacations to only the supervisory or salaried employees. One week vacation cach year is given to make employees who have been with the company for five years, and to female employees who have been with the company three years; and two weeks vacation for those with the company if years or more in one of the plants. Another gives one week to all employees who have been with the commany for one week.

Employee Granisation. Suplayee organisation to some extent is found in all of the plants. By organisation is meant other than "union" organised employees since three of the plants do not employ union labor and five hold "open alop". The employees organise for the purpose of premoting cooperation with the management and to promote fellowship among the employees themselves. Through these organisations the employees have some voice in the management of the plants. In some plants rather elaborate systems of employee representation are in use as may be seen from the diagram on the following page. In one company the employees exercise control in management through stock ownership. In another

# General Sprerintendent

(2) members elseted (Plants with: from such Divisions 680 employees, I member Deputy representatives por 100-	General Conterence Board Members appointed by Plant Conference Boards of various plants. Duttes: Questions of
5,000 empleyees, l member	

# Duties and Powers

- Exployment and working conditions. Hages and cost of living scaleders. Safety and prevention of scoldents. Health and plant sanitation. Education and publications. Regreation and athletics.
- Other matters of mutual interest.

Management appoints members equal in number to those elected by smployees.

Diagram 2. - Employee Representation Plan.

the employees only nave a small part in the management and that in dealing with employment and working conditions. These employee organizations provide an orderly and expedious procedure for the prevention and adjustment of differences and aid in the development of all matters of mutual benefit to the employees and the company. Employees in every case have recourse to the managers in questions of discipline and grievances.

Suggestions. Cash awards are given for suggestions which lead to improvements in safety and production devices and processes in most of the plants. Cartain difficulties of administration of a plan in regard to acceptance of the auggestions present themselves which make this a questionable practice. It is difficult to determine who shall be especially rewarded for new ideas and who shall not expect such special awards. Executives who must plan and direct the work of others are constantly developing new plans and attempting to make improvements and they do not expect such special rewards for discharging their regular duties. Foremen, assistant foremen, engineers, tool designers, tool makers, and many others are expected as a part of their regular duties to work out new ideas, plans, and improvements and it is hardly possible to give special reward for each such improvement. But it becomes difficult to exclude these persons from the suggestion plan. It would seem better then to use premotion to larger responsibilities and higher wages with greater assurance of continuous employment, instead of giving cash awards.

Regression. Seven of the eight plants have recreation rooms and equipment. Social claus, Y.M.C.A., Y.M.C.A., Soy Scouts, and Athletic clubs are some of the organizations spensored in the plants. These organizations are not controlled by the companies but are entirely in the hands of the employees. The compenies contribute financially to the organizations and in some instances furnish gymnasiums and other rooms for them. Golf links, summor camps, and resturants or enfetories are established for and by the employees and nominal charges are made for the services offered. Reading rooms equipped with magazines, books, and newspapers are furnished. Use of these recreational facilities is made especially by the executives and office workers because their positions are such that they do not get a great arount of physical exercise.

### Railreads

Three railway companies representing 18 plants with over 100 employees each, in the state returned questionnaires. These companies have Directors of Fersonnel but only in one case is the Director located within the state. In the cases of the railroads the Assistant General Manager or the Assistant to the President acts as Director of Per-

At oan be resulty seen that the Director of Ferroment does not one in direct contact with the workers in the individual plants. As a result he must keep in touch with these plants through their superintendents and feremen. It would also seen that because of the many plants and their widely different losetions, it would be difficult to direct the functions efficiently yet it was found that in those functions undertaken good results were being obtained.

The functions and activities of the Department of Percannel fall largely within the following groups as suggested by one of the ecopanies: (1) Supervision of wages and working conditions; (2) development of a central bursau of personal service records so that promotion and transfer may be facilitated and adequate records made available for the use of the Board of Peneicans; (3) supervision of recreational activities escong employees including social clubs, outings, sumical organizations, and athletic toness, so that we may get to know one another betters (4) development of educational activities to help employees prepare for promotion, and to assist them in developing their capacities to the utmost; (5) development of housing facilities for employees, together with the supervision of Y.N.C.A. and other rest houses at terminal points; (6) plans for the improvement with the cooperation of the Gnief Eurgeon, of the health of employees and conditions surrounding their work; (7) supervision of the company magazine and other employee publications; (8) supervision of advertising literature of an institutional nature, contact with civic and community organisations and the public generally, to the end that more perfect mutual understanding may be developed and maintained.

Turnover. Statistics in regard to turnover were not forthcoming from the railway companies as no such figures were kept, yet the answer in two cases was that the turnover was very low, while in the other case it was high. It would seem, and as the chief statistician of one company pointed out, that the turnover would tend to be high rather than low in these plants because of the seasonal character of the work. There are certain seasons of the year in which the traffic greatly increases and then there is the other extreme of decrease which results in greater and smaller demand for labor. The labor force will have to be adjusted to meet these changes and turnover is the ultimate result. Again statistics in regard to turnover in the plants as a whole would be valueless from the standpoint of practical use because of the different conditions that prevail in the different plants to bring about turnover. Mevertheless, it would seem that data from and for the individual plants would be valuable in trying to adjust the situation so as to eliminate as far as possible all unnecessary turnover.

Medical Sarvice. The companies, although not so required, operate under the Kansas Horkmen's Compensation law with regard to compensation in case of accident during the course of employment. The provisions of this act having been previously A given will not be repeated here.

In addition company doctors are employed and are located in the plant (when the size justifies) or are practicing physicians in the community who are designated by the company and subject to the call of the employee in case of necessity. The service fee is paid by the company. Company hospitals located at convenient points are another feature of the Modical Service. Treatment in these hospitals is given both to the employee and his family. These hospitals are supported by monthly assessments paid by all the employsee of all ranks. There are also first aid squads and equipment in the plants for the purpose of taking care of the immediate needs and whore cases of injury. These squads are made up of employees in the plant and have been trained in first aid work.

<u>Ansurance</u>. Group life insurance is carried by the companies for the employees in compliance with the Kansas Northmen's Compensation law. In addition the employees, through the aid of the company, are able to accoure individual life

<sup>1.</sup> Of. pp. 11-12.

and accident insurance on very satisfactory terms. The work in the railway plants is more or less hazardons in spite of the fact that safety appliances and devices are used, so we can see here an urgent need for a type of insurance such as is provided in the group plan and in the individual accident politics.

Besides insurance the companies have possion systems for the employees. The pension is voluntary on the part of the company and is not made up by contributions from the employees. The amount of and receipt of the pension are dependent upon the length of service, the amount of wages, and character of service of the employee. At a certain age the employee is retired upon the pension. A minimum and maximum limit is set as to the amount of the pension. The pension is given in order to enable the employees of the company who have rendered long and efficient service to retire when advanced age makes relief from work desirable. This sense of security in old age has proved a great incentive to layalty, contentment, and fathriliness in service, bringing about the betterment of permanent relations between the employer and employed.

Miring, Placement, Disciplining. Miring, placement, and gresotions are not handled by the Department of Fersennel, but are handled by the foremen and superintendents in charge of the separate departments. It is the function of

the Department of Personnel to keep rescuts of service of the complayees for the purpose of facilitating prenotions. The presotions are usually made on the basis of "seniority" or length of service. The Department may also recommend the hiring and placement of the complayees after careful investigation. Discharging is in the heats of the foremen and superintendents but the employees have recourse to the General Plant Superintendent in case of discatisfaction. Here again the fact that the Director of Personnel is not located in the plant prevents the most complete and efficient functioning of the Department of Personnel in cases of hiring, placement, and disciplining. Even with assistants located in the plants there would be difficulty in securing uniform action because of the human element in directorphip.

Education. A two-fold educational program is carried out by the railway companies: First, education for the teak and eafety, and second, the apprentice system.

Due to the meny hasands in the railway plants it is necessary to keep in the minds of and before the employees the importance of "safety". To do this measures for and rules of safety are placed before the employees in the form of posters, certoons, and printed articles placed upon ballatin boards and in the company magazine. Safety committees are organized within the plants and competition is fostered between the departments and groups in striving for the lowest number of casualities. The management is extremely interested in this form of education since it saves the conpany money. The cost of the education in this line would be much less than would be the expense due to loss of time of employees, wrecked machinery, loss of lives, and doctors' and nurses' fees. The large per cent of accidents to employees is not due to the lack of safety devices, but is due to the seeming carelessness of the caployees. One of the most important ways in which to prevent these accidents is through education so that the workers may absorb and assimilate the idea of safety. This is a recent addition of the educational work and has received the greatest amount of attention in the past five years. The enthusiasm and interest of the employees has increased in this work although at first the attitude of many of the employees was one of indifference and scoffing because they believed that they could look out for their own safety without caution being continuously presented to them.

The apprentice system of education applies to boys. The boys are taken on with the idea of keeping them in the service of the obspany for life. They usually begin at age l6 and serve a definite number of years as apprentices. During this time they are given training in actual shop work and practices. In some cases it is necessary to give training in the fundamental courses of arithmetic, reading, spelling, and writing. In such cases certain hours of the day, usually in the morning, are set aside for instruction in these studies. Individual training rather than group training is given and as a result the boy can be advanced as rapidly as his development and work warrants. The instruction of the apprentice is not given by the foremen, but is given by a man placed in the plant for this particular purpose. At the end of about six months: time it is determined whather or not the success of the apprentice in a particular line of work is such that he is kestified in continuing in that line or whether he should be transferred to some other work or dropped entirely. If the apprentice has any possible chance of continuing and making a suspess in some position, he is not dropped because it is thought that if the boy is let go, in many cases it leads to his ruin. This is due to the fast that the boy is discouraged and feels that it is useless for him to attempt anything else as the ultimate result will again be fullure and discharge.

The apprentice works in actual shop conditions and his work is a part of the output of the plant. Fundamentals are taught only where they are needed in a case of actual production, so that the boy knows from the beginning that he is doing a place of responsible work. Here also is learned the value of time, the meaning of obedience and subordination. The apprentice receives regular pay throughout the course of

training. At the end of the period of approxiteship the boy receives a certificate and becomes a journeyman worker. His progress is carefully followed and he is given every opportunity to make good.

Payment, Romma, Niriff. The payment of the employees in no case is made by the Department of Personnel, but is handled by the officers in charge of the plants. Annual vecetion with full pay is given to salaried employees and clerks of the plants.

The work in one of the plants is highly standardized. hence the operation of a bonus system in connection with the regular wage system is made feasible. The bonus is proportioned over a considerable period of time (usually a month): in this sense being the ratio between the actual record of the man, or the time he takes for a series of jobs, and the standard or scheduls set for him. The amount of bonus is datarmined from a standard table fixing the percentages of wages for time actually worked which are paid in addition as homes at any determined rate of efficiency. This table grants no bonus below 66 2/5 per cent efficiency - that is. below the rate at which the man takes ly the standard time for completing a job; but from that point upward, it allows bonus on a sliding scale which reaches 20 per cent additional to actual wages at 100 per cent afficiency (or the conpletion of the job in standard time) and thereafter adds 1

per cent of wages as bomms for each additional 1 per cent of efficiency. The bomms system is also extended to include the foremen and the rate of bomms depends upon the proportion of all time worked in his shop under bomms schedules and the average efficiency attained in the performance of all the work under those standard schedules. The bomms is calculated from a table which is arranged on a sliding scale.

No systematic method of savings or thrift program is sponsored by any of the companies.

Imployee Organization. In all plants the employees are organized into plant countities for the purpose of furthering cooperation in productive work. The employees are also union members. The employees, through their organized countities, have no voice in the management of the plants, however, suggestions are given attention and always velocemed.

In a pumphic / B Henry T. Burt suggests a shop-countrtee plan for bringing about closer relations and cooperation between the railroad employees and the management. Employer membership should consist of the shop superintendent and the heads of the departments of the shop in numbers equal to and not to exceed employees' representatives. The function of the joint committees, as the author points out, should after agreeing upon a standard of preduction, promote: (1) Better understanding by management of the needs, desires, and pro-2. Bunt, Henry T. Heans to promote cooperation between railroad management and employees. New York, 1982s. 46 pp. blems of the workmen, and by workmen of the objects and problems of the management. (2) Stabilisation of forces, reduction of unemployment, and measures to reduce the injury to workmen caused by unemployment. Unemployment insurance. (3) The growth of faith, confidence, and trust on both sides. (4) Ascertainment of and agreement upon a fair output. (5) Increase of production by elimination of waste and improvement of processes. (6) Elimination of causes of grisvance and cettlement of grievances. The last named subject should be handled by a sub-committee composed of representatives from both eides. He would substitute a minimum standard of output of the shop instead of the individual standard of output. Productivity above the minimum enould be considered super-productivity, the value of which might be ascertained and a part agreed upon paid by the company into an unemployment insurance or other insurance fund. The shop-committee plan would have to operate successfully for some time before this latter suggestion would be practicable.

The railroad industry, in the opinion of the author, possesse factore posuliarly qualifying it for cooperative action: Railroad employees constitute a highly intelligent and disciplined body of men. They are well organized and trained in the technique of democracy. Several of their organizations carry on complicated enterprises as well as govern themselves. Their leaders have constructive ability

and are in general moderate and responsible and are assure of the essentials for business success. These organizations, if given an incentive to aid railroad productivity, would bring into action forces of enormous power and value now suppressed.

increations. Suggestions in regard to improvements in productivity and safety devices are always welcomed by the samagement. No mention was made in any case of any inducements either in each prises or other forms being offered the employees for valuable suggestions.

Recreation. Recreation is an important function and is highly essential to the employee who works in the shop. As a result the companies have reading rooms and equipped rest rooms for the employees. Hear the larger plants athletic fields and parks are provided. The employees have organised athletic associations and contests are entered into on off days and holidays. Among the apprentices are athletic teams and those teams often travel for some distance to compete with other teams within the company organisation. Free transportation is furnished by the company in all suon cases, athletic teams. Homes are furnished a great many of the employees and their yards and surroundings are made very attractive. Also plant grounds are beautified to break the monotony and dreb surroundings for the lant.

## Other Plants

Trenty-two plants employing approximately 6,000 persons but sthout Personnel bepartments or Directors of Personnel assured the questionnaire. The munber of employees in the plants varied from 100 to 550. Only two plants had over 500 employees. The contention is held by some authorities that in plants having less than 500 employees, it is not practicable to have a Personnel organisation because the personal relations exist between the management and employees norm naturally through actual acquaintance. The data as received from these plants would tend to substantiate this belief. Severtheless, these plants perform many of the same functions that are performed in plants with organised Personnel work, and have their own methods of solving the problems that come up and are solved in other plants by the Department of Personnel.

Tunnover. Thirteen plants gave data in regard to the labor tunnover. The percentages varied from 5 per cent to 75 per cent. The monthly tunnover for one plant free 1985 to 1987 is shown in Table I on the following page. In one plant the first data in regard to tunnover was collected and tabilated in 1980. In that year it was found that the tunnover was 54 per cent and by the management was considered

Table I. - Plant Turnover.

Month .	1925	1924	1925	1926	1927
	Per cent				
Jamiary	1.48	3.25	.30	1.29	.60
February	1.43	.27	2.17	.78	.27
March	-95	•58	+81	12.85	1.59
April	4.65	1.56	1.08	-88	€.50
Kay	1.71	5,82	.81	•58	1
June	1.44	.28	• 512	.57	1
July	1.67	0	1.69	1.45	1
August	3.76	0	1.92	6.35	1
September	6.98	•88	5.19	1.84	1
October	0	.84	.25	1.57	1
Hovember	•52	4.07	.78	1.27	ł
December	•79	0	.78	+64	

Tuble II. - Reduction in Amnover.

Year	Per cent
1920	54
1921	45
1922	41
1923	29
1924	1.5
1995	13
1926	15

enomena. In 1981 a plan was put in operation to reduce the number of separations from the plant force. The results of the plan are shown by the reduction in turnover as illustrated by Table II on page 36. This result, it may be pointed out, was obtained during the post war times when the conditions of labor and industry were very such unsettled. The average number of employees in this plant is 140.

The following will show the relation between the number of employees and the per cent of turnover for the L5 plants.

Number of Employees	Per Cent Turnove
100	10
140	15
145	75
150	8
155	15
160	20
165	20
225	65
230	3
300	13
350	15
375	11
550	10

From these figures it is seen that the number of employees is not directly proportional to the per cent of turnover. That is, a large employee force does not mean necessarily a high per cent of turnover. Of course this conclusion fits only the ascompanying figures and perhaps would not obtain in general. Many factors are involved to bring about variations in the per cent of turnover much as the seasonal demands of the industries, inefficient management and poor organization of rowking schedules, sicinaes, grievances, and conditions of the labor market. In some plants at some time all or part of these factors will be operating to produce turnover, yet the problem can be greatly reduced through proper organization.

Medical Service. Three plants have physicians and murses who take cure of injured employees and give attention in case of sickness. In one case the local hospital is used to care for ossualities. One plant has only a physician. Two have trained first aid teams within the employee group. All of the plants operate under the Workmen's Compensation law and as a result compensate the employee in case of injury. It can be seen that it would not be practicable to have a full time physician and nurses in these small plants because the number of cases for treatment would be too small. The local physician handles the eases in the small plant very effectively.

Insurance. Bleven plants have group insurance plans; one has individual insurance; and two have both individual and group insurance for the employees. Here there seems to be some disorepancy in the results since all plants claim to be operating under the Workmen's Compensation law. This law provides that the companies provide some form of insurance, either group or individual, for the employees, yet half of these plants are operating under this law and do not provide

any insurance for the employees.

The presium on insurance for small groups of employees would tend to be higher because the risk is extended over such a limited field. There is also the possibility that the small plant will be more neglectful in providing the better forms of safety devices because of the additional costs. Revertheless, insurance is just as necessary for the workers in these small plants since they are usually no better situated financially to tide over a period of unemployment than any other worksen, nor are their families any less dependent.

Miring, Placement, Placibilining. The hiring, placement and discharging in a majority of the plants is centralized under one head, namely, the Superintendent or Assistant Superintendent. In a few plants the department heads or forement in charge of different groups have those powers. In one plant the failure of an employee to perform his allotted task entematically discharges hims. The cases in which one man does the hiring, placement and discharging illustrate quite effectively the modern tendency to place these powers in the hands of a competent and responsible executive. As a result there is a more definite and standardised policy carried out with respect to these functions and some careful consideration is given to causes and effects of the change of employment. Pavoritism and petty personal likes and distilkes on the part of minor executives who have performed

these functions have been eliminated. More careful study of the cost of turnover results and measures are taken to solve the problems and stabilise employment. Shifting of responsibility is made more difficult when one man is in charge of these functions.

Education. Four plants have educational progress. The education is in training for the task that the employee has to perform, education for safety, and first aid training. It is highly easential that the employee have some knowledge of the task he is to perform. This knowledge is not always obtainable from books and in schools hence the industries themselves must prepare the employee for the job. This is an added expense to the industry but it generally leads to mace efficient and increased production. It increases the interest of the employee in the work and thus tends to make his job a permanent one.

Safety education in the small plants is very practicuble. Accidents of any kind in small groups are much more
noticeable and tend to cause a greater amount of disturbance
among the employees because of the closer personal relationships. Safety education will tend to less not the number of
accidents and thus avoid a great deal of dissatisfaction and
difficulties with the employee force.

Two plants had trained first aid towns and first aid training to lesser extent is given the other employees through lectures, demonstrations, and posters placed in conspicuous places throughout the plant. This form of training on the part of the employees is very desirable since oftentimes a person is forced to stand helplosely by and watch a fellow being suffer and in some cases die unless he knows the proper thing to do in the way of first aid to alleviate the pain or stay the "hand of death" until a physician can be aummoned and expert care given to the victim. In cases of serious sections in plants many employees of a very nervous temperament would be affected and would leave the job with the loss to the employer of experienced hands and the messessity of "breaking in" new employees with the attendant costs in time, unclustion, and money.

Farment, Bonus, Tirift. Payment of the employees is made by the plant superintendents and the plant foreven.

Bonus systems are in use in six plants. In general, the bonus is paid for overtime work. One plant gives a bonus to only department heads; another allows time and one-half for overtime work; while a third gives a lump sum bonus at the close of the year, which depends upon the earnings of the company. One company just gives a bonus to the salesses.

Five plants allow the salaried employees an ansmal vacation with full pay. Six others allow the employees a vacation with pay.

Savings departments are found in three plants. In one

plant the question of savings is considered as an individual matter. Of two other plants encouraging thrift, one allows the employees to purchase stock in the company at reduced prices and the other advises the employees to invest in satisfiand Loan securities or in the preferred stock of this company. In one plant the bulk of the stock is owned by the employees.

Stock ownership by the employees is a popular and much advocated method for the employees to save their earnings at the present time. It encourages thrift, develops show morale, is educational, and brings about eleger relations between the employer and the employed and thus stabilises employment. The purchase is usually made on the installment plan which of course causes the employee to budget his earnings more carefully so that he can make these navments recomlarly. There will be developed a spirit of prompietorship on the part of the employees and in this way encourage them to make savings in materials and be more careful in their work so that in the end they will get greater dividends. The plan is educational in that the employees will study the plant organisation and financing so that they can understand the remains for paving or not paving dividends. Cleser relations between the employer and employed grow out of the feeling on the part of the employees that they are more nearly on an equal with the employer since they own a portion of the stook. Cooperation results because there is the demon objective (dividends) for which to work. The plan is buinging about a change of ownership from that of absentee to resident. It is a very practicable plan for small coupants and companies unser young management.

However, there are some criticisms that may be made of

stock ownership by the employees. In a sense it may be looked upon as "buying-off" the employees with the edded money income. In some cases it is used as a "panacea" to quiet the dissatisfactions of the employees, in which case the proper spirit is not manifested. It is also felt that if the employees share in ownership they will bear conditions in the plants that they otherwise would demand improved. Again the stock of some companies is a poor investment since they are marginal producers and fail to pay dividends or pay very small dividends. It also results in an employee placing all his savings in one investment which is considered a very poor investment policy. His funds are also so situated that they cannot be easily liquidated and present a difficulty in case the employee is in urgent need of his money. This difficulty could be surmounted, however, by requiring the employee to accumulate a certain amount of money (e.g. \$150) to take eare of such emergencies.

It is difficult to say what will be the outcome of these ventures in stock ownership since the movement is one of occparatively recent origin and has not as a result produced any definite conditions which can be taken as a basis for making conclusions of real value. However, it is an experiment which may be studied with care and interest, and may lead to far-reaching changes in industry and industrial management.

<u>Numbers Organisation</u>. In only two plants are the employees organised for the purpose of premoting group cooperation and increased efficiency in production. In one plant the organisation consists only of safety conditions. One plant tried employee organisation but gave it up. He reasess were given for this set. Wine plants employ union men.

In the plants having stock ownership the employees, through their voting power, exercise some authority in the management.

Suggestions. Suggestions from the employees in regard to management are always carefully considered and where considered practicable are put into effect. All of the employees are encouraged to contribute to the suggestion box any ideas or plans for improvement in processes and equipment. So mention of any specific incentives to the employees to make such suggestions was made in any of the replice.

Recreation. Five plants have recreational equipment and promote recreational activities. One plant is equipped only with rest rooms. In these small plants it is too ex-

pensive to build or provide in some other way any extensive recreational equipment. Hence the type of activities promoted are out-of-door sports such as baseball, tennis, hereesnoe pitching, and darb ball.

## CONCLUSIONS

The preceding study shows an increasing interest on the part of industrial management to establish a department under a responsible executive with the purpose in view of presenting more emisble relations between the employer and the employed. Even in the smaller plants that are unable to afford a completely organized department for this work we find the tendency to promote such activities and perform such functions as to bring about this closer relationship.

Attention is being directed upon the labor turnover as can be seen from the number of plants which have tabulated data in regard to its extens within the plants. Efforts are also being made which will reduce the amount of turnover.

Though required by law to perform certain functions and provide certain compensations in cases of injury, it was found that many voluntary functions in addition to those required by the law were performed for the employees in the way of first aid treatment, physicians, nurses, dentiste, and additional compensation.

Again, in the case of insurance for the employees the

companies have gone beyond the requirements of the law to provide the employees with insurance benefits that they otherwise would not be in a position to obtain. The employees are taking advantage of this privilege and are not looking upon it with the doubts and misgivings that they would have formerly.

The idea of the savings department has not the wide acceptance and use as has some of the other functions. Perhaps the reason for this is that the companies do not wish to assume the functions of a savings bank and also hesitate in a matter which on the part of some might be considered as distation in the use of the employees' savrings.

Educational work is being undertaken quite extensively because of the fact that the work is becoming so specialized and involves the use of so such machinery that the employees are at a loss to perform their duties without the training and education provided by the companies. The education for executive positions is growing also since the requirements in any particular plant differ from those in other plants.

Recreational activities are occupying a very important place in this field because it is in play that the social and economic differences are broken down and the personal friendships spring up which make for the closer relations between the employees and employers and among the employees themselves. Systematic and definite bonus systems have not been developed to any marked extent in the plants studied. Ferhaps the reason for this is that a majority of the plants claim to be paying a wage that is adequate and also fair to the employees, thus making a bonus unnecessary except in cases where overtime or other special work is done.

There is a very pronounced tendency on the part of the management to place the hiring, placement, and disciplining of the employees under the direction of one responsible exacutive.

Amployee organisation to the extent that it has a part in the management of the plants is not found in many of the plants. Organisations for the performance of recreational activities and for marety are found in a majority of the plants. The employee organisations are a part of the work, however, that is very important in fostering the proper spirit on the part of the employees toward the management and in promoting cooperation.

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