many elements of management beyond the scope of discussion in this code. However, security of employment as one of management's major objectives; a definite guarantee of employment for a specified number of months in the year and provision of funds to make payments to workers for whom employment is not provided for the guaranteed period, is being demonstrated as a practice which should be studied by all industries in the interest of the workers, the community and the enterprise itself. Continuity of employment is coming to be looked upon as a net result of all the elements which enter into good management, and if so regarded it constitutes a stimulus to the better performance of all the functions of management.

Technological improvement—the invention and adoption of energy-saving equipment and the discovery and adoption of improved methods of work-should be a matter of continuous concern and of specialized responsibility within the organization. These should be a matter of concern because they constitute the solid foundations of stability within the industry, and that concern should be continuous because improvement by ' small increments permits adjustments to change on the part of the individuals concerned and avoidance or reduction to a minimum of what has come to be called technological unemployment. Especially adjustment to change on the part of the older, less flexible workers is promoted if change is by a succession of moderate adaptations instead of periodic radical technological upheavals, and thus the imponderable assets embodied in the experience of the older workers are preserved for the organization, a subject to which reference will be made in a later section.

Sudden termination of employment, without warning and without financial compensation, is contrary to good practice in employment.

Procedure for making changes among employes should be formulated as part of managerial policy and should have regard for the general objective of security. The whole operation should be studied and a forecast made of the effect of changes upon personnel, including the possibility of retraining the present personnel for the new processes or the transfer of these individuals to other processes. Rates and the reassignment of employes to be affected should be studied with a view to maintaining the level of earnings of those affected or raising it if the new process results in such a lowering of cost as to make possible changes in prices and wages.

If displacement of employes is unavoidable after all the other possibilities have been studied, a compensation wage should be paid as a lump sum or in weekly payments, covering a reasonable maximum period to make it possible for the worker to find another position; the personnel department should assume definite responsibility in co-operation with public employment offices and other agencies to assist the worker in finding other employment.

VII. Personnel Organization

To secure, develop and maintain a competent working force is the basis of lasting success in an industrial enterprise. Provision for attaining this objective: through competence in the personnel function is of the essence of an employment code. The personnel function may be organized in a variety of ways, according to the needs of the particular enterprise. It should. however, be so developed as to insure maximum success in selection of the right employe for the right job; the training of the employe for the best performance of his job; and his promotion to more difficult work for which he has capacity and ambition. As women workers constitute a substantial and permanent part of the working force in American industry, it is obvious that success in attaining this objective demands that the opportunity for selection, training and promotion be extended to women and men alike, giving to women as to men a chance to develop and use their best capacities in work.

Principles and procedures for good personnel work, judged by this general objective, will affect the choice of foremen, their training for their work, and in general the mechanism for proper supervision of work. Foremanship should be regarded not merely as an obligation to keep machinery in order and to secure a maximum output, but as a responsibility for leadership of groups of men and women who are freely cooperating in the task of production.

VIII. Safety and Health in Workrooms

Engineers and architects are rapidly developing standards for the physical conditions of workrooms, which should make unnecessary a detailed statement on this point, except to indicate certain basic points demanding constant attention by management.

The best-managed enterprise will be the safest, because it will provide for machinery suited to use by

human beings without risk; clean floors and removal of waste and debris which cause accidents; proper (hours of work to avoid fatigue; and a wage policy which eliminates unreasonable pressure for speed resulting in carelessness as to the use of safeguards. Moseover, in a well-managed plant, supervision insures full knowledge of the circumstances of an accident as a basis for prevention of a similar occurrence in the future.

February, 1931

The uses of new and hitherto untried chemicals in manufacturing processes make necessary constant expert advice regarding their effects on the human body. In industries in which such hazardous chemicals or other materials are used, the personnel function must include proper medical supervision to prevent injury or to counteract it. They require also the elimination of youth under twenty-one years of age, as more susceptible than adults to injury from poisons and less trustworthy in carrying out self-protective measures.

In the larger industrial states, the state labor departments may be called upon for expert advice, and in a number of them special codes for physical conditions in workrooms and special arrangements for particular, industries have been adopted by industrial commissions and have the force of law. These legal arrangements, of course, are accepted as a minimum in all industries.

IX. Policies Regarding Age

Progressive personnel policies establish at least sixteen years as the minimum age for employment, although employment at fourteen years of age is permitted by the laws of the majority of states. Seven have adopted the fifteenth or sixteenth birthday for manufacture, and management in many enterprises has raised the standard beyond the legal requirement. Experience shows that minors of sixteen are more capable of developing into competent workers than younger children and that, on the other hand, the employment of children has serious social consequences in denying them a full measure of elementary education and injuring them in mind and body. A positive, constructive policy will include co-operation with the public schools in vocational guidance and in possible vocational training, and this co-operation with the schools becomes more feasible when the age limit is set at sixteen.

At the other end of the scale of ages, the policy of discharge because of age has serious social and industrial consequences. A thoroughly well-considered personnel policy which has included the training, de-

velopment and promotion of workers will result in continuing the older workers as valuable assets in an industry; and in recognizing the obligation of an industry to prevent the social waste of unemployment of men and women who are still far from old age. If in change of processes the older employe is incapable of measuring up to the requirements of a new method, the policy already outlined for insuring security of employment or compensating when displacement is necessary should be applied here with greater care, since the older worker encounters greater difficulties in finding other employment. An enterprise should also avoid setting an upper age limit for hiring workers. since this has social consequences for industry as a whole, of much the same character as the separate enterprise encounters in the obligation of retaining older workers.

X. Employes' Group Relationships

Aside from the technical developments which constantly cause change, there is the ever-present fact that human relations must be renewed day by day. These day-to-day applications of principles and their changes to meet changing conditions suggest the desirability of definite group organizations of the workers, with clear responsibility for functioning as a group in attaining the accepted objectives of the business. The purpose is to create such conditions of confidence as will result in the least waste of human effort in avoidable friction, and the maximum contribution of the individual through his work to the economic service rendered by the business employing him. Unprejudiced study of the most effective forms of organization of labor for functioning in relation to management as 'a science is an obligation resting upon progressive managers, in the interest of good management as well as in recognition of the importance of satisfactory human relations in industry.

Theoretically it seems logical that any employer should have the right to negotiate and deal with any employe individually. But when it is considered how disproportionate is the power of a modern large-scale employer to the power of any individual worker, it becomes apparent that labor is no more than reasonable when it insists that all the workers in a particular plant or project, or all the workers in a particular trade or craft, shall be considered as a unit for purposes of negotiating and bargaining with employers. Labor's right of collective bargaining is now, in this country,