to find or develop markets that will take goods in the slack son.

Manufacturers should consider carefully the advantages keeping a stock department. Such a department is prictilly a storage for temporary surplus, making possible potton in advance of demand.

Manufacturers should endeavor to bring to bear upon pers and retailers a strong influence to anticipate sales and orderies and retailers.

bers and retailers a strong influence to anticipate sales and ce orders early.

In certain industries where rapid changes in style are ticularly detrimental, organized attempts should be made tricit such changes of style within reasonable limits.

Manufacturers should study the possibility of developing fariety of products and introducing new lines which will be to find a market in sestions when sales of other stable to find a market in sestions when sales of other stable.

watery of products and introducing new lines which will be itself to find a market in seatons when sales of other staple times fall off.

7. All establishments of any constructive size should market to be a supering the staple of the seaton of the seaton

H. T. NOYES: I think Mr. Valentine's theory is right lieve the development of the profession of industrial counelor is of interest to those with the subject of scientific anagement at heart; and I believe the two subjects go toether, and that the minds of business men may be opened these points. I sympathize with Mr. Valentine's viewoint, but I think his theories have carried him very far. One suggestion he made seems ridiculous to me. I onnected with an industry that must use a payroll. Valentine spoke of the institution that guaranteed a weekly ninimum, whatever the conditions of the industry. Theretically it is fine, but extreme conditions sometimes arise le said that in a given industry he would assume the reonsibility of standing squarely on this proposition, that if n industry failed to meet its weekly guarantees, that it hould be declared insolvent and put in the hands of a reeiver, as it would be practically for a failure to meet finanal obligations

I will give him a few figures: Many industries in the last w months, due to the very unusual condition of affairs. ave been booking business at 25 to 30 to 40 per. cent of Out of the clear sky things have happened which ould not have been foreseen. Assume that industry had uaranteed weekly payments-say 1,000 people are guaranteed a concern a weekly minimum, it might easily be true nder these conditions, if they paid that weekly guarantee hey could lose in one month perhaps an amount equal to what they would pay for one year on their bonded indebtess and by way of dividend on their preferred stock. Their oss in one month might equal or be somewhat in excess the sum they would have to pay annually on bonds and ike indebtedness. Therefore it seems to me Mr. Valentine hould be criticized for making such emphatic statements and aving that such a concern should be placed in the same ategory with the bankrupt.

MR. VALENTINE: There is nothing so theoretical practical man. I do not want for one minute to appear to etreat from the statement I made, but possibly it was overlooked, and you are almost entirely sure to overlook it, that I said, "A very carefully guarded weekly minimum." I do not retreat from my general statement: It should be a carefully guarded minimum; and if you went over with me the definite safeguards you would be inclined, I believe to agree with me

The particular safeguards I worked out, I worked out with a partner and a manager in a concern employing 1,000 people outside of the industry in question under this minimum wage matter. And it was the manager of this concern employing about 1,000 people that developed a plan-for a weekly minimum wage under certain conditions which he felt he would be perfectly safe in adopting in his plant and which he is considering adopting irrespective of whether the law established a minimum wage in his industry or not

The particular element in the plan he worked out was: That the weekly minimum wage should be installed by tenweek periods. We will say that the law determined that instead of an hourly rate with an \$8 minimum, the weekly rate minimum should be \$7.75; that there should be reduction for voluntary absence, and the manager should be free to turn anybody out, and he should not be restricted from paying this minimum to any number.

Then, in a sense, the minimum wage is not a wage, it is simply a retainer fee for labor. I ask you, when you come to me, what does it cost you to work, and you say that you can get by on \$7 a week. Then after you have been with me a few weeks I would determine if you were or were not working within your retainer fee, and also determine whether your wages should be more or less than that amount.

It is merely a retainer fee for labor, and the man mustearn that money in the course of the week for the employer, in order to enable the employer to pay him that much out of it. So you see he creates his own wage scale.

Now this is the most helpful thing I had done for me, and that is that even that weekly wage, \$7.50, should not be paid to the employe for each week, but that it should be for a period of ten weeks preceding. That is, the employes should count on \$7.50 each week, and when they earn anything in any given week, say \$6, they get \$6 for that week; and if they earn \$8 the next week, they get \$8, and when it is figured up at the end of the ten weeks, the extra \$1 for one week will balance the lesser payment of another

PROF. HOXIE: I have been studying the bringing together of organized workers and employers. The possibility of bringing them together into some collective *arrangement. whereby the principles of scientific management could be put over, has occurred to me. Now I do not think that abstractly there is any great difficulty to be found in getting some agreement between employers and workers whereby the principles of scientific management can be applied to industry under collective agreement. I say abstractly. The trouble is to do it concretely.

The trouble lies in two things: (1) The unions think they know all about scientific management, whereas they know nothing about it. (2) The employers and scientific managers think that they know unionism, and they know less about that than the unions know about them.

There is a constantly reiterated statement of employers and scientific managers that the unionists believe in the restriction of a scientific output. Now, the unionists do not believe any such thing. They do restrict output, we will have to grant, but they do not believe in it. And that means simply this, that you cannot say what the unionists believe in until you get below the surface of their actions and have discovered the reasons for their actions. The employers simply see the actions of the unions, and they assume to know what the beliefs of the unions are and what you can depend on the unions to do. The unions do the same thing for the scientific managers and the employers.

If each could understand the why of the attitude of the other side, we would be able to come to some agreement Why don't we get to the point where we can have each side understand the why of the other side?-Because when the unionists discuss the deviltry of the employers and explain it, they do it among themselves; and when the scientific managers discuss the question of the possibility of getting together with the unions, they tell each other what the unions do. My suggestion to you is if you want to promote the science of management, that you change your constitution so as to admit members of unions, and then make a campaign among the labor organizations; and if you do that I will furnish you with some names of trade unionists that will join your organization, who are as keen as any of you here, and when you come to the discussion of restriction of output. you will find out why they take that stand.

THE SUPERVISOR OF PERSONNEL

By Ernest M. Hopkins²

The development of machinery and the later discovery of the sources of power, which made necessary the centralization of machinery within factory walls, imposed upon the industrial world a multitude of problems, which had to do at first largely with machines and afterwards with the plantthat is, the structure of the building and its arrangement within. Meanwhile, the laborer was taken for granted and if thought was given to him at all, it was with the promise that he was of lesser concern and that such discontent as he might have could better be guelled than removed. Along with this, there unquestionably has been the assumption that gradually industry was getting to the point where it would be less dependent upon the human factor.

IMPORTANCE OF THE INDIVIDUAL WORKER .

Something of the same sort, as regards the importance of the individual, has proved true in industry. The functions of the individual workman have changed but dependency upon him remains. The day of large profits is passing. The time has already passed when knowledge and skill were confined to a few. Machinery and methods of production alike are becoming standardized. One does not see, to any large degree, manufacturing processes carried on in the type of building common fifteen or twenty years agol Now, attention is centered on the status of the individual worker, and the individual worker is coming into his own as a supremely important subject for study and for development. Industry has become a science. When there is no advantage to one over another in plant, machinery methods, price of raw materials, or opportunity for distribution, varying grades of success will be determined by the intelligence of selection of the personnel and the reasonableness of the adjustments with it.

The production corps as a mass is a necessity of industry, and cannot be done without. No man, however great his capacity, could be omnipresent enough to cover the attendance at numberless machines, or to execute the variety of processes of the modern factory, mill or shop. The efforts of the mass need co-relation and direction, to be sure, and for this the executive exists, but it is not considered now as in some times past, that the executive is the sole necessary adjunct of the institution, and that the productive force exists but to supplement his efforts. The cold logic of the proposition is rather the reverse.

THE SUPERVISOR OF PERSONNEL

Now if that be so, it should not be in any institution that department heads should be called upon to superimpose upon their other duties the necessity for choosing their employes A man capable of directing the running of a machine, or of a hundred machines to maximum capacity is not necessarily the man who knows best how to get at the available labor supply of the given city or town and to pick from it. That is a separate and distinct function, and must be developed on its own lines. Thus it has become generally accepted that the selection of personnel is work for a special functionalized officer,-a man who has made a study of this problem, and who goes at it with the same scientific attitude as that of the man who builds the plant or selects the mechanical equipment.

It should be said that it is true in every concern, unfortunately, that there are a few foremen and sub-managers who feel that in some subtle way their authority and discipline are impaired unless they independently seek their people, interview the applicants originally, and make their own arbitrary selection from them. To these, the establishment of an employment department is an offense and all its operations are anathema. The economic loss of detaching their attention from the operations on which they are specialists on the one hand, or of assigning the interviewing and selection to a subordinate in the department, on the other hand, never appeals to them. It is generally the type of foreman or manager which would most resent any suggestion that another might know anything of his business which most quickly resents the suggestion that a specialist on employment might be useful in sending to him a preferred group of applicants, saving him, at least, the weeding-out process. In the main however, foremen and managers work heartily in accord with the employment manager and make his work pleasant.

No Fixed "System" for Selecting Workers.

The waste of money involved in unwise selection and consequent change is beyond the belief of those who have not investigated this. It is not enough that a position should be filled with one who will not botch his work; it needs the best available candidate, and changes as infrequent as may be.

do not undertake to say that some of the widely advertised methods of judging human characteristics are not all that are proclaimed for them, but I do believe that cause and effect have been mixed under some of these-that the superficial attributes which are accepted as an index may have been developed by past achievement, or lack of it, and that while accurate in regard to this, the index may fail sometimes in determining potentiality.

There is, in my estimation, no "open sesame" which will do for all employment work. It is a matter of records, carefully gathered and scientifically kept, in regard to the sources of supply, special requirements of different departments and individuals, and respective successes and failures. It requires hard work, common sense, and good-natured persistence, wherein it is like most other work.

The position of the employment manager in the organiza tion is of vital importance to the success of the work. He

¹A paper read at the Annual Meeting of the Society, December Manager of the Emily ²Manager of the Employment Department of The Curtis Pub-lishing Company, Philadelphia.