assumed to be another effort of capital to make labor dependent upon it.

THE EMPLOYER MUST KNOW HIS BUSINESS

The greatest grievance that any group of employes can have against their employers is lack of intelligence in the conduct of their business. In general, we expect leadership to be informed about the path along which it purports to lead, but one of the most disturbing factors in our industrial life has been the employer who has had no further knowledge of where he was going than that he was on his way. The man who assumes industrial leadership is an industrial menace, unless he makes or has made those strides which shall in form him as to the vital facts of his business, such as manufacturing costs, hours of labor required for maximum production, the very great distinction between increased individual wages and increased total expense, and so, on. Gradual elimination of seasonal employment and reduction in labor turn over must be his aim.

The domain of the work of such a department as we have been discussing ought not to be too definitely defined. It work is bound to be staff work in the main. It offers opportunity for centralization of the practical idealism, now to be found in connection with most industries, and for the adjustments which are so necessary to keep the proportions of things right. Its goal must be to contribute as much as possible to hastening the day when an efficient, profit-making industry, and prosperous, contented workers see their mutual dependence, and live with mutual respect. Such is "the day" toward which we must all look, and our greatest satisfaction must be the fact that every once in a while, as we look it seems not so far away as when we looked before.

MORRIS L. COOKE: My principal objection to Mr. Hopkins is not his attitude, but this: I am primarily a democrat. I do not want to do anything that does not fit in with the widest conception I can form as to how society will be assisted in what I can say. So, when we talk about the workingman wants, there is the reaction. We can give thems a blace, I think, that takes that sting out of it, so that this work of the supervisor of personnel is not done with any particular group in mind. Those of us in responsible positions do need the help of just such an agency as Mr. Hopkins is trying to describe. And if we can make it something that applies to all the different grades in the business and all the different people in the industry, men and women, from the top down, it takes that sting away from it.

it takes that sting away from it.

One of the first things which struck me in reading Shop Management by Mr. Taylor was his reference to the agency used for employment of men. Now it seems to me we can turn this over to Mr. Hopkins's supervisor, and we are ready to consider the exceptional man, and to come into contact with certain employes where even the supervisor of presonic mdy feel he is not the man to handle the situation. We should in turn classify any people who are specifically qualified for

What makes me say that is my experience with factory owners. If have what I call my social secretary. If I were going to get the most out of politics I certainly had to perform some of the services formerly performed by the Ward Boss, and when someone was born or died or was sick, or something else happened to them, I must do what the Ward Boss formerly did. So I put on a young woman whom I think of as my social secretary. I have seen factory owners that were not of the kind Mr. Hopkins has in mind. I believe there are more factory owners and others with titles corresponding to that, that hurt this movement more than they help it.

I have in mind now a case of a factory nurse who was used as a spy. I know another factory nurse in a New England establishment that did very good work. But I have found that I must keep away from my social secretary as much as two mouths at a time without talking to her. I have ascertained that the impression was going out that this young woman went into the homes of the employes—and she always goes to the hospitals when we have any man sick there, and we always have someone there—I found the impression was being created that she was reporting directly to me about these thines.

Now, that is an unfortunate opinion for the workmen to have. However benign the employer, the employes do not want to feel that everything that a particular employe assigned to social work knows, goes to the management or to the Board of Directors. This scheme of having a department of personnel acts as a sieve. We must remember that it cannot be efficiently carried on if the employes think the information is going to headquarters.

Another thing suggested by Mr. Hopkins's talk is this suggestion of social welfare. I was glad to hear him say there were many things that could be done in that department. In Dayton they give a physical examination of every employe that comes into a certain establishment. Now, I believe that is brutal. If you said that everyone should be physically examined, there would be probably 8s to go per cent examined.

Now do not let us injure this cause of improving conditions, by being too arbitrary about it, and making the employe feel he is not a part of it. I have had a lot hammered into me in the last three years, and I have found you can work with some pretty high class people and yet have their views differ from yours on many things.

Now, if this is true of people in the higher grades, it is even more so in the lower grades. You must avoid in every way you can, imposing on them rules and systems which they cannot understand. Start with that idea in view and announce your programme, not too loud, get all you can into the first year, and then the next year exert a little pressure, but do it so that no one will know where it comes from, and by and by you will get it completed through a process of psychology, which will be more efficient than by doing it overnight and under pressure.

My experience in the last year, and especially in the last few months, seems to teach me that if you are doing big things—the bigger the things you are trying to do, the more mobile your organization must be,—the less and less you are going to regret losing people. You may lose them because they are going on for their own betterment. But whether they go for this reason or for any other, you have got to get away from the old idea of holding on to people. Undoubtedly unemployment will be reduced by building our organization so that people can stay if it is to their advantage, and your advantage for them to stay; and the more valuable they are to you and you to them, the more unlikely it is that people will change.

H. V. R. SCHEEL: It is admittedly good business to consider the psychological side. Take a case where three men have about the same kind of responsibility, or are doing about the same kind of work, instead of considering them as equal jobs of equal value, it has been found better to arrange them arbitrarily, one above the other as to importance and pay, into a lower and intermediate and an upper grade, so that a line of succession is established and advancement will be possible from one to the other. The result is psychologically that the man in the lowest of the three has something

to look forward to, the man in the highest of the three has something to look back upon. It has been worked out satisfactorily with clerks. It is worthy of consideration. The disadvantages of the greater number of changes due to more frequent promotions are taken care of by having the men themselves take the responsibility for breaking in their successors and acquiring the knowledge of the new job under the penalty of forfeiting the chance to advance.

January, 1915

MR. J. M. BRUCE: Some of the points made by Mr. Hopkins have interested me favorably, and it occurs to me that some of the work along these lines which I have succeeded in doing for the American Tobacco Co. may be of interest in this confinction.

The company's sales force is directed from the home office through the supervision of five general districts and under them there are some forty state department managers. These latter have always had the hiring and firing of the salesmen in their hands. In going over the records I found that during the previous four months, 140 men had been hired to fill thirty vacancies and 110 discharged. The salary and traveling expenses of these men who averaged nearly six weeks each in this company's employ, was a heavy burden of expense on the sales department, not to speak of the disastrous effect of the undisciplined work of inefficient men in the various territories and the disturbing influence of this constant changing on the moralé of the whole organization.

After considerable experiment we evolved the following plan now in effect: I will illustrate with a concrete example. Desiring ten new men in the Middle West, the state department manager needing men in that territory was directed to advertise for applicants and to pick out three or four men for each position to be filled. They were supplied with record blanks worked out by Prof. Walker Dell Scott of Northwestern University—in whose hands the final selection of the men was placed, as will be shown.

These blanks contained specific and searching questions which had to be answered categorically by the applicants and those responsible persons, either former employers, school teachers or business men acquainted with the applicant. By this means we avoided the usual testimonial with which we are all so painfully familiar—which in the case of a drunkard generally reads: "I have had John Smith in my employ for some time (generally about two weeks) and have found him industrious and honest.—Blank Blank Co." In the case of a crook the testimonial is changed to read, "I found John Smith sober and industrious."

With Prof. Scott's blanks a direct lie was necessary to get one of these men by for further consideration. Quite a few refused to be bothered with so much red tape, and were eliminated. Next a careful examination of the applicant's physical features was made by a regular life insurance physician, special attention being given to the conditions of the men's feet as well as the regular organic examination. Some twenty-four passed these preliminary tests and were sent to Evanston to take the final examination. The test started with the simple Binet Simon test to discover persons of arrested mental development, who are utterly unfit to become satisfactory salesmen, and who cannot be detected in a casual interview by the most expert of examiners. Next came simple tests in memory, accuracy of perception, quickness of perception, etc. These tests were made increasingly difficult and consumed some 6 hours. About 7 or 8 were eliminated, or eliminated themselves. Then came the final determining test. Each applicant had it explained to him that to be a successful salesman he must be able to gain and hold the interest and

attention of his prospective customer, and that this operation would have to be repeated many times each day. To show the men's capacity to do this, Prof. Scott, some assistants and some advanced students numbering twelve in all gave each applicant a 5-minute interview on a subject of general interest named by the examiner as the applicant entered the room where the examiner awaited him alone. The last book read—Base Ball—The last play—The good and bad points of the last job—School, etc., were the topics selected by the examiners. Each man was thus required to give twelve 5-minute interviews to twelve different men in an hour. Each examiner graded the men numerically as he found their work relatively interesting, the sum of the ratings and the examinations determining the men's standing!

Twelve men were selected for work in the school. This school is in charge of an experienced state department manager who had been a school teacher before becoming associated with the company. Two weeks were given to training the men in handling the company's forms and reports and giving them were spent in actual work in Chicago, first in groups under the eye of the instructor and then individually. Nightly meetings were held, in which the men met, told of their failures and successes and had the errors of their work pointed out by the instructor, often with demonstrations of the correct method.

The result of this work is that of the ten men graduated from the school, nine are now with us and are among our best bonus earners. In fact the high man for the past four months over all the salesmen in the company is a graduate of the school. Of course we are able to follow the work of each individual with absolute exactness because the whole force is operated on the task and bonus system. The tests are not anything that could not be given anywhere by a group of ten or twelve trained observers but the point is that they will not be given under the old system of forcing a harddriven sales manager to do the work himself—hiring and firing is more easier and more conventional.

WILLIAM KENT: I am interested in what Mr. Hopkins said about paternalism and democracy. At a mining village in Pennsylvania I noticed a row of houses built in blocks, and they were of unpainted wood, and in front of them was a miserable wooden pavement, and between the pavement and the house there was nothing but mud and dirt and chickens and pigs. That is democracy, with every man free to do with his own doorway as he feels.

A few years afterwards I was over in Germany. In looking over a coal mine there I saw a room where 2,000 men could hang their clothes on books suspended from the ceiling, and take from the hangers his mining suit. There was a room adjoining with 200 shower baths. In Pennsylvania when the men came home from the coal mine, they looked as though they had been in a coal mine, but in Germany the men went home cleaned up with no trace on them of what their business was. They took us then into the German village, and the houses there were built of brick with a concrete stone pavement in front, and they had grass plots in front and each house had a window box with flowers in it. Then they took us into a house and we went in the back yard. There was a pig out there but he was all clean and polished up. Now, that contrasted very favorably with the democracy which was exhibited in Pennsylvania. If it was wrong for the mine owner to do that, then the village should take it up, and have uniform architecture and flower