

DAILY PROBLEMS OF THE ORGANIZER<sup>1</sup>By KEPPELE HALL<sup>2</sup>

A GOOD many years ago, I obtained a degree of Electrical Engineer from the School of Electrical Engineering of Princeton University. In those days that course was a two years' course, presided over by the doctor and scholar, Doctor Brackett, who is one of the most learned and wise men that it has been my privilege to know. The course was an exceedingly difficult one, and there was no snap to it. Our textbooks were largely in French and German, and we got into higher mathematics so high that you couldn't see over the top. When we did get through, and there were about eight of us out of some forty or fifty, we felt that we were pretty hot stuff, and that when we stepped out, the arms of the world would be just aching for us, and that anything that we wanted would be ours. Dr. Brackett called us together with him for a talk before we received our diplomas. "Well, boys, you are through with this work, and if you are satisfied with what you have gotten out of this thing, I am satisfied; but there are two things that I hope you have learned, and if you have learned those two things, I shall feel that your time and my time have been well spent. The first thing is, I hope you have learned that you do not know a thing. The second—that when you get up against a problem which has to be solved, I hope that you have learned the way to go about to solve that problem."

Now when we first heard that, it was a sort of a blow because we thought that we did know a lot. But the longer I live, the more I appreciate how little I know, and the more grateful I am that I have had the opportunity to have the foundation which would permit me to work out problems that had to be worked out, and build on it the structure that had to be built. In starting my talk with a remark of that kind today, I am not saying it with the idea of discouraging you with the work you are about to take up, but simply to let you know that the experience that we have when

we get out and commence to apply the things which we have been studying, we are bound to run into all sorts of oppositions that, if we were not prepared for them, would be discouraging.

Now let me outline to you the kind of difficulties that we run into when we go out and attempt organization work. It does not matter whether it is the organization of an office, or the organization of a factory, or what kind of organization it is,—whether it is followed up by efforts to increase production of some kind or another or not, you will always run into a certain set of difficulties, and the first of these, I think I would call a purely mechanical difficulty. It is a very difficult thing in itself to go in and physically make some change in an existing organization, even if everything else is favorable and satisfactory—if the people for whom you are working tell you the world is yours,—go ahead and do what you please,—and even if you go out with an excellent training in the technique of what you want to do,—when you come to actually apply that technique, you are going to find out what a hard thing it is to do of itself.

I had an experience of that kind in a leather factory some years ago. This matter of organization had to do primarily with manufacturing, but when I am talking of manufacturing, you may apply the same thing to office organization. Everybody was perfectly willing for us to come in and do whatever we pleased. I had some training in Philadelphia at the Tabor Manufacturing Company, and had gone through all of the minutia of the technique. I had seen how easily this worked out at the Tabor Manufacturing Company, and thought it would be very simple for us—simply to outline the organization with the definite functions of the different people, have clear planning, good routing of work, give out time tickets, and issue material. In this leather shop, we were told to go ahead and do it. Now, the thing didn't work. I was a little green at it, but I thought I could do it. I thought it was easy from the things I had observed, and that it was the easiest thing in the world to do in this leather factory.

I had lost sight of the fact that what I had seen work was the result of the daily experience of years of hard work. When I started out with my route sheets, and time tickets, the workmen did not pay any attention to the time tickets and the clerk did not properly check up the route sheets. In less than no time I found an accumulation of incorrect sheets, misused blanks, and the whole thing in an awful mess, and I had to start and dig in and smooth the thing out again. This was the result of my lack of practical experience. I should have had this fundamental instruction which I did have backed up by some practical experience in working with some men who had been through this game, and knew it. Until we get that sort of experience, we are never going to be able to get things through without always running into mechanical difficulties.

I am talking largely about factory work. If I illustrate with the experiences I have had from the factory, please understand that the same sort of thing applies in any kind of organization work.

One of the first difficulties will be from the fellow doing the work in any organization in which you go. With your eyes that have been trained by the theoretical and technical experience that you are getting here, you will see the weaknesses of any organization into which you go, but you will also find, on the part of the people you are dealing with, a perfectly natural and instinctive opposition to doing anything new,—and that is to be clearly understood from the start. It is not an unnatural thing. Because you have a very much better way of doing something than some other fellow is no assurance that the other fellow is going to welcome it. Later on,—perhaps after he has had a chance to try it out, and see for himself that your way is a better way than his, will he be glad to do it. It is perfectly natural and instinctive for any man to oppose something new.

I had an experience in a paper mill, where we had made some very intense studies of the best way of arranging or organizing the work of trimming some paper,—a very simple operation. Our study led us to believe that the man who was operating the trimming machine could turn out on an average twice as much work as he had been turning out with no more expenditure of effort,—or with practically less expenditure of effort—than he had been employing on the work as he was doing it. But do you suppose that this meant the minute we told him this, that he did it our way? Not at all. The thing was, "What do you

know about trimming paper? I have been running this trimming machine for fifteen years. Did you ever run a trimming machine?"

"No, I didn't."

"How are you going to show me how to trim paper?" I had to go on and explain to him how we had studied this, and we knew that we were right about it.

"Well, that is all right, but I trimmed paper before you were born, and now you are coming around here to show me how to do it."

It's a perfectly natural thing. That fellow was taking a pride in his work, and was doing his job successfully, and he could not see how we were going to offer him any advantage. We could not say to him, "Now, it has got to be done this way," but we had to be very patient and tactful, and little by little, as opportunity offered, show him how our way was better than his way, and incidentally accompanied by an increased earning in case he did it in the way in which we outlined. Presently one of the fellows tried it out our way and found it worked, and then the thing became comparatively easy. We had to get over that stage with the man who was actually doing the work himself.

Another form of opposition that you will encounter is from the men above the fellow who is actually doing the work,—the foreman or the superintendent or the man in charge. You are going to find that that opposition is greater than the opposition from the worker. This man is a man who has had more education than the fellow who is doing the work. This is the man who has probably outlined to the man under him how he was to do the work. If, in an office, this man himself planned the present form of organization, and you are treading on his toes when you try to do a thing of that kind, he wants to know what is to become of him. Let me illustrate that to you by a practical experience which I had. This also was in a paper mill, but a different mill from the other I mentioned, and was a different problem,—that of calendering paper. Our study of that process led us to find that, with very little change in the arrangement of paper as it was brought to this machine and the speed with which the machine could be run, very much more work could be turned out in a given time than had been done before. Now you must be absolutely sure that you are right in any of this work before you make any statement. The eyes of everybody are riveted on you, and are looking for the least little de-

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