Again, I want to call your attention to a parallel that it seems to me exists between an industrial organization, a factory, and this great thing which we embrace under the name of the United States Government. A factory to-day is made up of individuals, and they have names, and their hair is of different colors, and they have different dispositions. The intelligent manager tries to know them by name if possible, to know their characteristics, and as much as he can of the individuality of those units that make up that organization. Now that is a distinctly modern conception. I suppose the man that built the pyramids in Egypt, who is said to have spent twenty years and employed 200,000 people in that work, could hardly have been expected to have come at his industrial problem that way; but I happen to know one man in the army who employs a good many hundreds of people and who knows a great majority of those people by name; and in many instances he knows where they come from, and how their families are composed. Now, we cannot manage in a scientific way to-day unless we have that record for the units in our organization, We have heard of the Bill Jones idea, Bill Jones being one of the strong men of the Carnegie plant. It was not for Bill to go into the refinements of his organization in that way, but it is today.

As to the problem here in Washington, all these different supply divisions or these subdivisions for the warehousing of the Quartermaster's supplies, all these training camps for the Signal Corps, it seems to me, can be looked upon very much as the individ; uals in our industrial establishments, and that an enlightened management goes forward very largely(through considering the state of each of these units of organization, and does not attempt to create at the top too definite control over them. To get really democratic, spontaneous and in the end efficient and effective action you have to consider them.

I wrote a little memorandum for this Society some time ago calling attention to the desirability of somebody taking the time to write a terminology. I want to suggest that there is a great opportunity for somebody to write something on the terminology of this

Mr. Kendall used the word superorganization. Seven

nothing in that to prevent the nation from going in situation. Now, these superorganizations are not going to dictate details to the organizations whose activitles they are trying to supervise and correlate. A few years ago the president of a company felt he could tell a man how he could sweep the floor, or empty the wastebasket; but there is no good organization now where the president would assume to criticize the way a wastebasket is emptied or a floor swept, because he knows that the man who goes around periodically and empties those wastebaskets and sweeps the floors has been taught to do that and the method he uses is the result of careful thorough research. The president of the company does not do those things in industry; he realizes that he has a function to perform, it may be financial, it may be selling, it is at least outlining policies, doing the broad thinking for the concern. In the same way these superorganizations are going to have a brand new function, something we have never had in industry. It is the problem of correlation. It is, for example, the problem of showing how the Food Administration and the War Industries Board, and the various shipping departments of the War and Navy Departments, can be made to play together and utilize the transportation facilities of the country to the best advantage-brand new problems that must be approached in an entirely different way.

There are two or three things that I think we, are apt to overlook in estimating this situation, especially we who are not in Washington all the fime, who are not given the privilege of sitting down beside these men that have these definite responsibilities and thrashing out with them the various kinds of difficulties that they have, to the satisfaction of their superiors and the country.

In the first place, the difference between Government action and industrial action is very great. It is not only the laws you have to contend with, but it is the right of people to criticize. I have met cases where men have made charges in their expense statements on account of "entertainment." That is a word that I will not stand for. They tell me that they have to buy eigars and things of that kind, and I tell them that that has been the death-knell of many people who have held public office. Men are not supposed to spend public money for cigars, and things of that kindthe public will not stand for it. You may say that my position is wrong, that there are occasions where you ought to spend for cigars. But the public does not think so. That happens to be a matter of fact illustration, but there are lots of other things that you cannot do. There is the question of paying for publicity agents. We ought to have thousands of publicity agents, men who would be doing nothing but explainyears ago we all wondered what he meant by super- ing to the employes what we are trying to do, men

who would explain to the manufacturers what we are trying to do, men who would explain to the public what we are trying to do; but that is not a matter on which the public thinks very efficiently as yet, and you cannot put a man on the pay roll of the public to do publicity work without great danger unless Congress has authorized it, unless it is a place where Congress has said that we want the public enlightened.

It is still true that organizations, often big ones, can be pulled up by the power of one man or a strong group of men on the Board, but this thing is too big to be pulled up by one man or any group of men. I think you will find that, while we criticize, action is nearly always initiated from the bottom. Every once in a while I feel like bawling out the Secretary of War or somebody else because he does not do something. It seems to me that governmental action in the future is to be precipitated in increasing measure by an agitation from below, and that the President and his Cabinet and other administrators are only going to act as we from the bottom urge them to do it, force them to do it, and that the comparatively recent idea that we had a concern where all our activities were dictated by a strong man at the top, has disappeared. The crowd is not going to respond to the dictation of the strong man at the top; it has its own ideas, which it will follow whether you like it or not. About the only thing you can do in any high governmental position is to stand for ideals, hold up ideals, and hope that the mass will gradually come to them.

Another thing, we see such agencies as the Fuel Administration and the Food Administration started, we see men of strong personality like Dr. Garfield and Mr. Hoover come to Washington and immediately get around them a force of able men, and they go to it, and get lots of newspaer publicity, and they do perfectly tremendous things. But I want to remind you that they are doing something that has not been done before, they are doing something for which there is no existing governmental agency, and it is relatively easy to coordinate those new activities and put them in the hands of one man. But the moment you start doing something that has been done before and for which provision has been made, you are up against absolutely a different problem. In the first place, you are likely to offend Congress. Congress has decided it shall be done by certain departments and they have made the appropriation that way, and the personnel has been selected, and the personnel protected by Civil Service rules, the whole thing protected by a perfect maze of tradition and statutes. Now the moment you start in to cover that field, you have your work cut out for you, and in many instances, the President of the United States himself cannot affect the you will get the contrast; consult these five people situation. We all of us have had the experience of that are to be coordinated, and when they have come

seeing men in high places issue drastic orders that have been obeyed in hardly one per cent of the cases to which the orders applied. Why? Because they did not have the law with them or they did not take into account some fundamental thing that prevented action along the suggested line.

We are just coming out of an industrial period in which the "captain of industry" has shone conspicuously, and has been advertised and has been efficient unto his day. It has been a time of short-period policies. We could not sell scientific management thirty vears ago we can hardly sell it today. I remember when Mr. Taylor first talked to people at "Boxly," and told them they would have to stick to this thing for two years, he sort of choked when he said it. · because he found when he said two years were necessary for anybody to get results, they wanted to make for the front door. Later, he got to the point where he told them, "if you are not going to go in it and stay with it for five years, don't start it, don't play with it." Now there are men in this room who would not think of working for a man unless he said he was going to make it his life-time work.

So it seems to me there is a change coming over industry, and over government, in the length of its policies. In the past we worked on short-time policies. Yet the thing that was determined on for two years was almost invariably the wrong thing for a ten-year policy or a national policy.

Now, democracy is the policy of the people, and unless you are going to make war, even, along democratic lines, then we do not want to make war. We are going to make war now along democratic lines, and we are going to build up, in my opinion, a more effective war machine, before we get through with it, than has ever been dreamed of.

I am not saying that in any braggadocio spirit, God forbid; I am on my knees before the problem; but I am going to insist wherever I can affect the situation, that it shall be done on democratic lines, because I believe that democratic lines are, in the end, the effective lines, whether we want it or not. People will not have it any other way.

Now, in conclusion, there is a little rule that I have found effective which perhaps will help somebody here with the problem. At any rate, it seems to be good scientific management. You have five agencies, we will say, that you are trying to correlate. Perhaps you pick out Bill and say: "Bill, go to it; you have the authority, and I will back you up; knock their heads together; make them efficient." Now, there is another method-I am stating both a little baldly, so