

drive, drive, drive, without system, is high compliment. He said, "We got an order last Sunday morning at 9 o'clock for a very large miscellaneous shipment. We got it off at 5 o'clock that same night. We could not have done that without our stores control."

"All this has been accomplished in a quiet, unostentatious way by the development of the plan referred to by Mr. Cooke as coming from within the department itself.

The scientific way of developing such methods in other departments of the government, the way which unquestionably would accomplish the best and most perfect results, would be to allow the leaven to work slowly—if there were time. But by all means, even now, let the leaven work—it is working, and we find already various other departments inquiring about the plan that is beginning to show such good results in handling supplies. Until now I believe the development from within has been the only proper way, but is it not time also to attempt a start from the top downward? In developing scientific methods of management in a shop, just as soon as the owners of the plant, the president and the directors, become thoroughly interested and are backing the project because they appreciate its value, and become enthusiastic, then it is that the quicker progress begins and the plant manager and superintendent begin to work together to assist in pushing instead of being carried along.

The work of the Government in the war is of such magnitude and so diversified that we cannot simply consider the Ordnance branch, or the Quartermaster's branch. We have the problem of the whole, the coordination of all the departments by extensive planning, and until the men at the top become thoroughly interested, until the problems at the top and at the bottom can be tackled together, we cannot make the progress required for full production.

MR. C. C. HEYL:¹ I am very reluctant to add anything to what has been said here tonight, and anything I do say I hope you will understand is not said as coming from the Food Administration or for the Food Administration, as there is a department there that controls all its publicity.

I have been very much interested in listening to this discussion. I have a thought that in something I learned of within the last two weeks there is a concrete illustration of the fact that notwithstanding all that Mr. Cooke has said and all that Mr. Cooke's fine work has accomplished—his activities in the various

¹Of the Food Administration.

departments—a *sine qua non* for success is Mr. Kendall's idea of control at the top. I will give the illustration and leave it to you. There is in this country at this time a traffic executive for the Allies, not only for Great Britain, but for Italy and for France, and for Belgium, and I think for the Belgian Relief. This traffic executive, Captain Guthrie, who has been here three years, has three hundred men in his organization. He has brought practically all the fastest merchant ships of those countries under his control, for service between our shores and France and England. Captain Guthrie controls absolutely the movements from this country of all the supplies of all those Allies purchased in this country. Copies of all contracts go to the Captain and he does not permit a seller or shipper *ad libitum* to make shipments to seaboard, but says, "Hold it until I tell you to ship." He has a "going concern" which is a splendid machine—*controlled absolutely from the top*. It has in its organization all those fine things which, working from the bottom up, are harmonized with a supreme control reaching from the top down; but his efficiency is only retarded by the fact that in moving supplies from the point of origin to the seaboard, he is confronted with the individual activities of five American Governmental Supply Departments, each directed by the head of the individual Supply Division, each securing priority as far as possible for the things that his division is primarily interested in bringing to the seaboard, without regard to just when the goods are needed; and it is primarily this great mass of American supplies *uncontrolled at the top* that is blocking the eastern part of this country now.

Suppose there are just one hundred Allied ships in Atlantic harbors. One day's demurrage on those ships means one hundred days delay, four days' demurrage means four hundred days, and if, as is reported to have happened recently, ships are obliged to go from one port to another in order to secure their loads, you can see in the continuation of this feature of delay alone, the possibility of the defeat of our cause in Europe.

I think it is common knowledge that France has only one-half the food she requires. Her morale is being taxed to the uttermost. You can imagine the Germans calculating very carefully this situation and deciding: "If we win this war in the next five or ten years, we are going to win it before next July."

And so I say, if there is any possibility of coordinating and *controlling at the top* those four or five individual American supply activities, bringing them in harmony with each other under the direction of a supreme traffic executive, it ought certainly to be done.

MR. MEYER BLOOMFIELD:¹ I am very sorry that I came in late and Mr. Kendall was closing his speech.

Perhaps you want to know what Mr. Cooke referred to when he spoke of the Industrial Service Department of the Shipping Board. I don't know whether I am talking to the subject, I don't know what the subject is this evening. I could not quite make out where Mr. Kendall and Mr. Cooke differed, and that is why I cannot quite phrase the topic of the evening—because each was right from the angle which he took to view the situation; they were right from the angles from which they respectively viewed a common subject, and which later speakers developed—Mr. Thompson and others.

Now, when General Goethals and, later, Admiral Capps and other officials of the Shipping Board and Fleet Corporation, wished for some central control, some place where all sorts of industrial questions might center, it was first suggested that such a department be called a labor department. It was at once suggested by somebody that such a department might be very busy with controversial questions which belonged in one domain of management or might interfere with an uncontroversial approach to the shipyard problem.

We therefore took as harmless a name as possible for a branch of work that would have to define itself as it went along, and so this perfectly colorless and inoffensive title of Industrial Service Department was suggested. This department deals with what you might call the man-power problem, as contrasted with the technical, the material problems.

Now, the man-power problem in connection with shipyards has just three points—getting of men, the keeping of men, which is as hard as getting men, and fitting them for the work they have to do.

We have learned in a few weeks of experience—it is common knowledge to all of you who are in this sort of work—that the more we learn how to keep men the less we shall have to worry about labor shortage; and it has been proved, rather strikingly through the efforts of shipbuilders themselves, that where they face the problem of organizing, the outlook for the holding power in reference to men becomes brighter, and there is less reaching out elsewhere for that strange and elusive worker who is supposed to be missing to-day and so much needed in the yards.

Now, how far that holding power will go in solving the man-power problem nobody knows, but it has certainly helped. In addition to the policy of a highly centralized and responsible body, there must be worked out details, which are vital and far-reach-

¹Industrial Service Department, Emergency Fleet Corporation.

ing from any view-point, which are always of supreme importance, whenever you get an assemblage of wills—and that is what a working force is—and the key to an assemblage of wills is to develop just that democratic interest, that contribution which a man can make who wants to contribute—or whether he wants to make it or not—which it would be a waste of man power not to recognize. The men who work in the shipyards—and who, are doing patriotic work—believe that they have a mind and a spirit and a will to contribute, and the ship-builder who appreciates that fact finds that it tells in the output, it tells in the number of rivets driven. So both democracy and good management may be interpreted, restated, in the process of getting these wills to play together to the ends that we have in common.

MR. CARL G. BARTH:¹ I don't know that I can say anything that will have a direct bearing on this momentous subject. It is appalling that the country is called upon to do this tremendous work. However, it is possible that after all the organization problems involved are not essentially different from those we have to deal with in large industrial establishments, and with such I have had considerable experience. Some reference to these may at least be of some value to members of our Society, even if of but slight, if any, value in connection with the real subject before the meeting.

In a large industrial establishment consisting of various departments contributing to a common end, I always aim at establishing a central planning room that deals with each manufacturing department as does a local planning room in each of the several manufacturing departments deal with its individual machines and other work-places. The central planning room, for example, prepares route sheets on which all the work done by a department is listed as a single operation, no matter how many actual operations a local planning room lays out for the routing of the material through its own department. It therefore orders all material from the store room to the department first involved, receives a report when the work is done in that department, then orders it moved to the next department involved, and so on, without taking any official cognizance of how the actual work is done by each of the various manufacturing departments. That is strictly up to each of the local planning rooms, which thus runs its own department as much as possible as if it were an independent plant of its own. Lest I be taken too literally, let me state that, dependent on conditions, the central planning

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