

facturer of the automobile, for one engineering and production organization to give the functioning accessories the concentration and attention necessary. They demand the aggregate efforts of engineers and producers who are specialists.

As a brass manufacturer I have had occasion to come in contact with the brass divisions of several large automobile companies. With becoming modesty, but to prove the point, I must acknowledge I was thoroughly disappointed at the inefficiency and apparent lack of knowledge and experience of their brass departments. The impression was immediately created in my mind that because it is a minor division it does not receive the attention given to other and larger departments.

The tire of today is an outstanding example of what can be produced by specialists. Why not employ the services of manufacturers who are leaders in their line of accessories? Why not take advantage of the publicity which standard manufacturers create in the minds of the public through the advertising of their accessories? Why not take advantage of the servicing which is also offered to the public in the case of many standard accessories?

I hold no brief against the motor car manufacturer who advertises that his car is built complete under one roof, although the public knows that this is not true. The public has been educated to the use of standard accessories. Does it not prove our point that so many motor car manufacturers, by their everyday practice of purchasing the important accessories,

admit that they can be built better by specialists who are concentrating on the one thing? Is not the point proved also by the fact that the automobile manufacturers of today are outstanding in the efficiency of their methods in all branches of their business? Surely if it were better that the manufacturers make their own accessories, the keen competition and necessity of efficient methods of today would force them to a common practice.

I wish to quote in conclusion from a letter which I received from one of my friends, who is a large manufacturer of important accessories:

Our conviction is that a specialized manufacturer of accessory parts, due to combined volume, is in better position to develop low overhead than a large plant not specializing on that particular type of product. Such an arrangement enables the accessory manufacturer to employ more skilled supervision because such expense is distributed over the greater volume.

Manufacturers of engineering specialties are generally better equipped to control a patent situation for their particular product than larger companies and to concentrate on the advancement in the art and development in manufacturing methods better than manufacturers to whom this work is a secondary consideration to some other class of product.

Your own experience parallels ours all along the line, as we have learned by very real experience that foundry practice for our specialized type of product requires entirely different practice and supervision as compared for example to the ordinary brass foundry to be found in an automobile plant. This same condition holds true through all of the machinery and assembling and is again emphasized at test.

### The Taylor Society Abroad

#### Organization of Japanese Branch

ONE of the most significant developments of this year is the increasing interest in scientific management in countries other than the United States. This has been reflected in increasing interest in the Society abroad and most recently by steps taken by the membership in other countries and by the Board of Directors, leading to the organization of branches abroad.

The Japanese Branch of the Taylor Society is the first to effect complete organization. By letter ballot June 15 the Japanese members elected officers:

Yoichi Uyeno, Managing Director, and Shinzo Uno and Goro Togano, Directors; and established the office of the branch in the Institute of Industrial Efficiency, Tokyo. There are at present fourteen members in Japan.

It is expected that this branch will do important and constructive work for Japanese industry and will eventually come to have great influence for better management.

Meanwhile members in England have been conferring with reference to the formation of a British Branch, and there is every indication that the organization of this important branch will be consummated by the end of the year.

## Why Systems Fail<sup>1</sup>

Ready-Made Systems and Systems Which Just Grow Up Are Seldom Efficient—  
An Efficient System Must Have Purpose and Unity

By ROBERT JULIUS ANDERSEN  
Bowen Products Corporation, Auburn, N. Y.

EXPERIENCE has proved that if a thing is to be done efficiently, it must be done systematically. Yet if there are two words which have been a curse to industry, they are *efficiency* and *system*. Some of those "engineers" who have exploited American industry have employed these words as though they mean the same thing. They have conceived efficiency as the certain result of a system, and have conceived system as red tape. Efficiency means the securing of results in the best possible way—in the least time and with the least expenditure of effort. A system may contribute to this end or it may not—too frequently it does not.

Our plants are loaded with production, accounting, cost, statistical and other systems, and many of them, at least large parts of most of them, are useless. A general manager would receive a rude shock were he to ask the operatives concerned a number of leading questions such as the following:

1. Do you believe this is a good system? A necessary one?
2. Do you think you could devise a better one?
3. What use is made of the output of your unit of the system?
4. Do all the people concerned with the system understand what they are doing and why they are doing it?

The principal reason for the failure of a system is that it does not reflect a definite purpose and a comprehensive plan. Most systems just grow up. A man starts in any kind of business. For a time he is general, captain, sergeant, private—the whole force. The business grows and he finds it necessary to secure assistants and to put on record things that should be generally done and things that should be generally understood. Not one time in a thousand does he do this with any general plan in mind—he simply jots

<sup>1</sup>Abstract of an address at a meeting of the New York Southern Tier Section of the Taylor Society, at Elmira, N. Y., April 13, 1925.

down things as they occur to him. Before long an analysis would show that many essential things have been omitted, and many things included are unnecessary and unprofitable.

Another reason why these planless and unprofitable systems develop is because department and other unit heads are left to devise their own unit systems. These units eventually become united into a whole which operates with much working to cross purposes, duplication and waste. Generally speaking, no department head has his eye on the same goal precisely as the general manager or as other department managers. The general manager is interested in net results—in net profits. The department manager may be interested in department net profits—or he may not; he may, for instance, be interested in system for its own sake, which usually means a complicated and costly system.

Another kind of system that is likely to prove inefficient and costly is the ready-made, installed system, even though it may originally have expressed a general plan and have possessed unity—in another place. There is no idea possessing managers which retards progress more than the idea, "my business is different"; yet there are local conditions in every plant which cannot be disregarded with respect to their bearing on details of a system. The plastered-on system seldom fits, or if it at first seems to fit, it is because local conditions have been temporarily modified to fit the system. Gradually these local conditions return to their normal and it is discovered that the system doesn't work. A young tree may be shaped by tying to a stake, and sometimes such shaping is permanent; but generally after the stake is removed the tree will shape itself according to its basic characteristics modified by local conditions of soil, winds, shade and light. A tree is a living, growing thing, with dominant characteristics influenced by environment. So also is a live business.

There are four good tests of a system.