gement. And adjustment to it, we may add, must e by way of scientific management — scientific anagement applied more intensively to proced-res of enterprises as independent units and to rocedures of enterprises as interdependent links a processing and distributing chain.

WE are pleased to be able to present a statement by so competent an authority as M. de Freminville concerning Henri Fayol nd his Doctrine Administrative. Fayol was a oble character, a great engineer and a successful dministrator. His doctrine is a significant contri-ution to the science and the art of management, nd has attracted much attention in France; so uch, in fact, that there was organized some years go an association of Fayolists—Centre d' Etudes rancaise. There is also in France an association f students of the Taylor doctrine, Conference de Organisation Francaise, of which M. de Fremin-ille is president. Recently, we are happy to record, hese two organizations have become associated n the Comité International de l'Organisation Fran-aise, which is in turn a Section du Comité Inter-ational de l'Organisation Scientifique. France is deed, fortunate that her characteristic interest in cientific inquiry provided a common interest which nspired and promoted a union of these influential anagement societies.

THE article by M. de Freminville, the interest-ing account by Wallace Clark of his work and observations in Poland with the Kemmerer ission, and the group of addresses on "Inter-ational Evening," together emphasize the extent o which the doctrine of scientific management has ecome international. We have recently received letter from Henry S. Dennison, now in Geneva, n which he expresses astonishment at the amount f printed matter concerning scientific management nd the unanimity of acceptance of the theories in urope. International cooperation in the develop-ent of a science of management must now take he form of world-wide analysis and comparison of xperiences under varying social and industrial onditions. Organizations for such cooperation are n process of development. For years the French ave been close students of management, have had heir groups of Fayolists and group of Taylorites, nd these groups, as M. de Freminville explains in his article, have joined for the study of doctrines and practices of management. The First International Management Congress at Prague in 1924 stimulated the interest of central and eastern Europe, which resulted in provision for future international congresses and in the organization of scientific management societies in half a dozen countries. "In Russia, Germany and Czechoslovakia, scientific management is the guiding principle of the national economic system." A second international congress was held in Brussels in 1925, and the third international congress is to be held in Rome in September, 1927. We hope that those Americans who are planning European trips this summer will so shape their plans as to be able to participate in the congress at Rome. We are able to give assurance that these meetings as organized and conducted in Europe yield more of pleasure and profit than can be imagined before or explained after the experience.

THERE has also been organized at Geneva an International Management Institute whose functions will be on an international scale analagous to those of national management societies with which we are familiar. It has been established under tripart auspices: the International Labor Office, International Committee on International Management Congresses and the Twentieth Century Fund of Boston, all of which institutions are represented in its directorate. Mr. Paul Devinat, formerly of the International Labor Office, is its director; Percy S. Brown, formerly of the Corona Typewriter Co., and President of the Taylor Society, is in Geneva for a period as technical attache. The objects of the Institute specifically are (1) "To provide facilities for personal contact between specialists and persons practically interested in problems connected with the rational organization of production and distribution, by offering opportunities for effective collaboration and for the exchange of useful information; (2) To make arrangements as it sees fit for a regular exchange of information and documentary material between the various national specialist institutions; (3) To study, in so far as its resources permit, all the problems connected with the rational organization of production and distribution and to give its support to all activities of a general interest pursued by the national institutions."

Some Central Problems of Overhead Costs[1]

An Inquiry Into Aspects of One of the Most Delicate Problems of Business Policy

By JOHN MAURICE CLARK
Columbia University, New York

Introduction

THE central problem of business is efficiency; and efficiency means getting the utmost amount of useful results out of the facilities used—the labor and materials, the physical plant, technical knowledge and commercial opportunities. It is essentially the getting of a maximum result in proportion to the expenditure of means. But the business measure of these quantities is financial, and efficiency in the business sense is gauged by a maximum surplus of income above cost. Thus value and cost become the well nigh universal measures of the useful results on the one hand and the expenditure of means on the other. They are the tests of whether a thing is worth doing: whether it is financially worth while to a business or economically worth while to the community at large. Are these tests accurate, as they are actually used? For present purposes I do not propose to raise the question whether the price a thing sells for is an accurate measure of its usefulness, or whether any other measure is possible. I shall confine myself to the other side of the question and ask whether costs, as they are commonly used, are an accurate measure of the expenditure of productive resources, for the purpose of solving the questions of industrial efficiency.

And one of the key points in such an inquiry is the proper handling of those costs which may be blanketed under the general term of "overhead." These are, in general terms, costs which are not specifically traceable to the doing or making of a particular thing. There are, however, different varieties of overhead costs, chiefly because there are different methods of tracing costs and assigning responsibility for them. Tracing may be by the methods of accounting, or by statistical methods of comparative analysis, or by the exercise of expert judgment, or by a combination of all three. All alike have their shortcomings: none gives a perfect picture. But even if it were possible to find the perfect measure of costs and to agree on it, there would still be an unavoidable dilemma. The whole business, or the whole productive process, must pay all the costs incurred or it does not meet the basic test of economic self support. But, since part of the costs are untraceable, any particular part of the business may be self-sustaining even though it does not contribute its full quota of overhead. The cost of the whole is greater than the separate costs of the parts, and the parts between them must make up the cost of the whole. But to say just how much any part of the business must contribute toward these untraced costs is arbitrary. The allocating of overhead costs contains some of the most delicate problems of business policy.

One of the most troublesome aspects of overhead costs consists in the fact that some of the costs do not vary much with variations in output. They are, in certain situations, at least, "constant," or relatively so. Whenever this is the case, it is a symptom of a more fundamental industrial fact. It means that some of the productive facilities for which expenses have been incurred have unused capacity. They can produce more than they are producing. The same railroad track can carry more trains, or the same building house more productive workers, or the same machine turn out more goods, or the same managing or selling staff can plan the production or carry out the sale of a larger output. And unused capacity is always "waste," even though sometimes it may be unavoidable. The efficiency of American industry is probably due in part to an unusually keen sense of unused capacities and an unusually urgent drive toward their utilization.

In pursuing this goal and endeavoring to utilize the unused capacities, the chief obstacle is repre-

[1]Paper presented at a meeting of the Taylor Society, New York, December 10, 1926.