

working in their own countries is increasing also, and the next ten years will show an enormous increase in this group, and we may look for noteworthy results. Visits to this country of research men and of teachers are also increasing, though it is to be noted as of extreme importance that these are often of too short a duration to prove as profitable as we would desire to make them. A mistake of Taylor's, being repeated by a majority of our foreign visitors and also by many in our own country, is to underrate the great value in the education of a manager of actual experience with the old fashioned methods of management. It was exactly that contact which developed Taylor, who, we all know, was not naturally adapted to be a manager. It was his actual contact with problems under the old type of management that brought out the Taylor system of management. Taylor was a great scientist, philosopher, economist and engineer, but he was not a psychologist nor was he naturally a manager. Yet thru his experience with the old he became great with the new methods of management.

It would enable engineers and managers on this side to do much more for visitors if they were to have had previously actual experience with the problems of management and also a thorough acquaintance with the literature of scientific management, and knew exactly what they desired to find out, whom they desired to meet, how much time they could allow to each branch of their investigations, and the amount of information they could reasonably expect to acquire in a given time. We have personally met many young men from Europe who have had a comparatively short experience in one or two American plants, and have returned to Europe with the firm conviction that they had learned scientific management. The editors of our management papers should correct this impression and should disseminate the distinction between application of the principles of scientific management in any one shop and the knowledge of the underlying principles of measured functional management for enforcing the conditions for obtaining the One Best Way to Do Work. Perhaps no one thing has injured the reputation of American management methods so much as has the return to Europe of young men who have spent time in one or two shops in America, and have seen the application but have not been taught the underlying universal philosophy of scientific management.

Besides accounts of visits made to this country, there is at the disposal of the foreign reader the liter-

ature written here, but too often the writers of such literature do not have the foreign reader in mind. It is, perhaps, too much to expect that highly technical literature shall be expanded with the aim of making it more comprehensible to foreign readers. There is much room in this country for less technical treatment of the fundamentals of scientific management and this will be useful not only to foreigners but to beginners in this country. There is also much room for interpretations of scientific management from the psychological, economic and other viewpoints presented in simple form, yet with a background, a degree of indisputable accuracy and an amount of reference material that will lead the reader to have confidence in what he learns and to continue in his learning.

The number of those acquainted with scientific management traveling through foreign countries is increasing, and this is a source of information there. Unfortunately, however, many who have done much of the talking and some of the installations abroad are not adequately informed or trained and have done much more harm than good. We may perhaps look forward to exchange professorships which would bring us much profit, in that we would learn much of foreign opinion and feeling and be able to orient ourselves in the foreign fields. No one who has visited in foreign countries can fail to have noted the hearty welcome extended, the enormous desire to profit by any information offered, and, in many cases, the masterly manner in which all such information is extracted from the willing or reluctant visitor. When one of the writers had the pleasure of accepting an invitation to visit Czechoslovakia recently, he was met at the frontier by an official with an official program covering practically every moment of the day and night, and left after a short but most stimulating visit, mentally enriched thru contacts and experiences that will remain a treasure of a lifetime.

Foreigners have also at their disposal, as a source of information, translations of the classics of scientific management, but only one who has suffered from a typical translation can speak from the heart as to their value. Many foreign translations of American books on management have had the sense completely changed, because the translator preferred to rewrite in words that he himself could understand, regardless of the meaning of the result. It is interesting to note the volume of translations now existing.

We are told that twenty thousand copies of Taylor's "Principles of Scientific Management" have been sold in France alone, and we know that translations of this and other classics have been made into most of the languages of Europe and several of Asia as well.

Another source of information most valuable to foreigners is that which comes through American firms having affiliations or branch offices in foreign countries. Where these American firms are properly systematized, the results must be, in time, far reaching. However, few of our large industries with branches in many countries stand at present as exponents of any complete installation of scientific management, as we understand the term.

Expression of Reactions to Scientific Management In Other Countries

As for the reactions to information received, we get in touch with these partly through the lectures that our visitors deliver when they return to their countries, and through the translations made. We must not forget that to most foreigners a translation means something very different than it does to us. An American translating a foreign book has in mind conveying the ideas of the writer as clearly as possible and in the most nearly correct English possible. A foreigner translating an American book too often has the idea of interpreting the thought to his countrymen in the best language possible. He hesitates not at all, usually, to change the form of expression or arrangement, and all too often changes the thought as well. This is not only acknowledged but defended by the average translator and his countrymen. This does not apply alone to translations into foreign languages. It applies to American books printed in England. Often, even the title of books have been changed "to make them sell," and the entire meaning of the title is not only changed but lost.

While there are many fine translations, it certainly would be of value if the Taylor Society would make it its business to go over carefully every translation of any of Taylor's works and ultimately of any of the recognized standard books on scientific management to evaluate them as translations, for much has been done to discredit scientific management abroad through translations that are not worthy of the name. If such books were published as interpretations or reviews of the Taylor System it would be one thing, but they have no right to stand as translations or as presenting the principles and practice.

Further vehicles of expression are papers and books which usually come to us soon after they are written and which often cause us to turn to the material upon which they are based, questioning the adequacy of our own American thought and expression. There is also the teaching, the effects of which we see in the young men who come to us for instruction or positions. Their viewpoints again often lead us to consider the adequacy of the American literature. A most striking outcome of the reaction to scientific management is the amount of testing being done abroad, both in the schools and in industries. This is taking place in England, France, Germany, Iceland, Belgium, Holland, Czechoslovakia, Japan, and in many other countries. Finally, there are rapidly being formed abroad societies or institutions most of which, so far, take up either vocational guidance, applied psychology or some such ally to scientific management. The conventions and proceedings of such societies or institutes form a most valuable source of information. It must be remembered that while scientific management cannot claim credit for—does not even antedate—psychology, vocational guidance, etc., it has done much to foster the growth of applied psychology, of "psycho-technic" and of the making of actual tests in the industries themselves. The library of the Taylor Society would be much enriched through the proceedings of the meetings and conventions of such societies, which, while they are not always closely affiliated with scientific management, not only are much influenced by it, but will certainly influence its future developments.

Objections Advanced and Obstacles Encountered

In our review of progress during the last ten years abroad, we must pay special attention to objections advanced and to obstacles encountered. Personal observations abroad and much of our recent correspondence make this clear. In France we find that advances in scientific management have been retarded by a feeling that knowledge of what is happening must be confined to those in the industry itself, and in most instances in the particular plant. We know that this feeling still exists to some extent in this country. It must be overcome. No real progress can be looked for while such a feeling exists. Mistakes are repeated, advances retarded and thorough cooperation is impossible. This feeling that advances should be kept secret exists to some extent also in Germany and Switzerland, but in Germany the feel-