horizon to join in the conclusion of their work. Both were pioneers and reformers in quest of the good of all concerned in industry, of the welfare of their country and of the world at large.

The chief difference is found in the place where the first studies of the one or the other were made; Taylor started with the man at the bench or the lathe and built upward; Fayol, more concerned with the task of the chief executive and even of the board of directors, followed the consequences of their conduct all the way down to the working man.

Both of them were men of intellectual culture and high ideals, and they were fighters to the same extent, never satisfied with a more or less benevolent approval. Nothing but the actual practice of the principles they had brought forward could please them. Both encountered more opposition than praise.

While Taylor was misrepresented as trying to drive the workmen, to which practice he was absolutely opposed, Fayol was accused of leading industry towards the obsolete and unpopular methods of the great public administrations of his country, which he was really fighting with the greatest energy. It may be said that Fayol was evoking the work of the great French pioneers in management of public affairs, whose spirit had been corrupted by their successors, and that Taylor was striving to bring the industrial world to a better understanding of and more effective and humane use of the equipment which had been developed to such an extent in the United States. Both were acting as reformers of the evils they were accused of fostering.

Again, both of them had to hear people saying that there was nothing new in the work they had done, that their so-called principles were known to everybody. What everybody knows is simply wonderful, but it is no less wonderful that everybody makes such little use of what he knows; that it requires a great leader and a lifetime work to bring him to do it.

Taylor had departed when Fayol began his missionary work. But at that time Fayol made a thorough study of Taylor's work, to check up, as it were, his own ideas and principles. Like Taylor, he was far more concerned with finding what was true than what could be termed new. At first he was startled with the idea that he did not agree with Taylor. Being anxious to find out how this could be, he came to me in 1916 to discuss the matter, and from that year we were friends.

The confusion came from Taylor's opposition to the omniscient and omnipotent foreman of old. This at first appeared to Fayol as a disregard of the principle of "Unity of Command," which he considered essential in good management. He was not immediately convinced by my argument that Taylor was calling on the management to fulfill completely its own duty—it may have been because I did not put the thing clearly enough before him at that time. This misunderstanding came to an end at the opening of the International Scientific Management Congress in Brussels in October, 1925, when, after arguing once more on the point, I told him that it could be said without the smallest hesitation, that Taylor was absolutely the man who made efficient, even to the smallest operation in the workshop, the "Unity of Command," the method in use being closely controlled by the management. This was a state of affairs which had not existed at all before him; through the functional foreman, functional unity was secured in the whole system.

Then Fayol saw clearly that it could be said that, actuated by the same spirit and guided by the same method, Taylor and himself, starting from opposite directions, had met halfway to reinforce their actions.

No general planning can give its best without a thorough analysis and complete preparation of the smallest operations, whereas, to proceed securely with the organization of the work in the shop it is necessary to forecast the future according to Fayol principles. This pleased Fayol immensely and he told me that, when I should precede him in speaking at the opening meeting of the Congress, I must make such a statement, and that he would enlarge upon it and declare that men like Taylor and himself, moved by the love of truth, could not be in opposition as formerly he had feared. That he did in a splendid manner, and before he died very suddenly, a few days later, he declared repeatedly to his friends that this had been the greatest joy he had experienced for a long time.

L'ADMINISTRATION n'est ni un privilège exclusif, ni une charge personnelle du chef ou des dirigeants de l'enterprise; c'est une fonction qui se répartit, comme les autres fonctions essentielles, entre la tête et les membres du corps social. (Henri Fayol, *"L'Administration Industrielle et Générale,"* p. 13.)

American Management Methods Applied to Foreign Government Industries[1]

A Management Engineer's Informal Description of His Work for the American Finance Commission to Poland

By WALLACE CLARK
Consulting Management Engineer, New York

LAST spring the Polish Government asked Professor Kemmerer to go to Poland to advise them in regard to their finances and the stabilization of their money, and to bring with him experts on taxation, banking, government accounting and customs, and a management engineer. This is one of the rare instances where a foreign government has retained an American management engineer in a consulting capacity and your Program Committee has asked me to tell you something about this work.

The greatest need of Poland was the stabilization of its currency and obviously one of the most important steps in that direction was the balancing of the budget. The governmental expenditures of a new country, such as Poland, are very heavy, and it is necessary to secure as much income as possible. A large part of the income of the Government is secured from the industries which it owns and operates, and it was my task, as the engineer member of the Commission, to advise as to how this income could be increased. The Polish Government owns a great many industrial enterprises of various kinds, most of which were taken over from the three powers which occupied Poland before the war. This field was so extensive that it was impossible to cover it with any degree of thoroughness within the eleven weeks of my stay in Poland. I therefore looked over the sources of income from these industries and found that the largest part came from the three monopolies—salt, tobacco and alcohol. The alcohol monopoly was not studied, since its plants were shut down during the summer and would not reopen until the potato crop had been harvested in the autumn.

The salt and tobacco monopolies employ thousands of workers and have many millions of dollars invested in plants, equipment and stocks of materials. In the case of tobacco, for instance, the Government not only purchases raw material and manufactures it into tobacco products, but controls every step of its distribution.

In the study of these two monopolies my first step was to get a bird's eye view of the situation by studying the history of the industries as it was recorded in reports, books and articles, and by learning the present status through interviews with men who controlled the operation and the policies of the monopolies.

The next step was to visit the salt mines and the brine evaporating plants of the salt monopoly and the cigarette and cigar factories, the warehouses and the growers of the tobacco monopoly.

The third and last step was to write a report embodying my recommendations for their reorganization.

Before taking up these three steps in detail, I would like to give you an instance of the attitude of Poland toward the United States of America.

Attitude Towards the United States

We arrived Saturday evening, July 3, and the following day we attended the most impressive Independence Day celebration I have ever witnessed. It was the one hundred and fiftieth anniversary of the signing of our Declaration of Independence and, as you know, the Polish people had sent to help us in our struggle for freedom their two greatest national heroes, Kosciusko and Pulaski. When Poland emerged from the Great

[1]Paper presented before a meeting of the New York Metropolitan Section of the Taylor Society, November 18, 1926.