

have been told that the proper way to handle a situation of this kind is to make changes immediately when every little alteration in conditions is noted. My difficulty has been that while I can note these differences, I find it very difficult to convince the operators that a 2, 3, 4 or 5 per cent variation in conditions has actually taken place, and when they do not believe that a change in conditions has been brought about, they regard any correction of a standard as a cut in piece rate. Of course, I am still talking about those departments where incentive wages are paid.

Now I do not need to discuss with you the effect of cutting piece rates. Better men than I have enlarged upon this subject until you doubtless know more than I can tell you. I do know that where there is a reasonable confidence that wages and standards will be maintained, that over a period of years we can expect, and we do obtain, remarkable increases in production and continual lowering of labor costs, with wages sufficiently high to attract the best quality of people available for employment in the field in which we operate.

### Notes on Discussion of the January 27th Meeting Addresses

**D**R. MILDRED FAIRCHILD, Assistant Professor of Social Economy, Bryn Mawr College, urged the special study of this situation on the part of the Taylor Society group because she believes it involves so much more than the ordinary depression, in that the techniques worked out by the engineers have so drastically cut down the number of people permanently employed. She pointed to the fact that, while labor and material costs have been reduced, managerial costs have been increased, and directed the attention of the group to this field of economy.

The important thing in her opinion, however, is not costs but markets. During the past ten years markets among our farmers have been materially curtailed. The upper and middle classes and the workers have been left to buy. But in the case of the workers increases in wages, which would have increased their power to buy, from 1922 to 1929 were more than offset by increased productivity and reductions in employment. Western Europe and the Orient are not in a position to furnish markets. And we lost our chance to sell to Soviet Russia. We must depend on our own markets, and to do this we must be sure that any bond issues, credit devices, etc., really supply buying power to the wage earner and consumer.

A combination of all the suggested plans is perhaps the only way to accomplish this. Mr. Warner's plan (see p. 52) would have to carry with it a guaranty that the subsidy granted to manufacturers, builders and transportation people would get into the hands of the wage earners. An intricate organization would be

necessary to give this guaranty. Perhaps the Rochester plan combined with Mr. Warner's could do it. Organization on a large scale is necessary unless some invention should come along to start things going.

Dr. Fairchild suggested that the Taylor Society take the lead in working out such an organization.

**I**MAURICE WORMSER, Professor of Law, Fordham University, and author of "Frankenstein, Incorporated," advocates a federal bond issue of not less than \$5,000,000,000 to feed starving men and women. This can be done through the employment of the men now out of work on public improvements of one sort or another. School construction, road improvement, the elimination of all railroad grade crossings, necessary public buildings, Mississippi flood control, reforestation, the improvement of river and lake navigation, slum clearance, the construction of overflow reservoirs for use in times of water famine, the improvement of sewage disposal, and above all else, the building and maintenance of huge parks and recreation centers should be undertaken. Stuart Chase has pointed out that "the blueprints for the useful expenditure of huge sums are already in the files of the federal engineers, and work may be started any day without waste or lost motion."

If some measure is not immediately taken, there will be serious consequences for the next generation in the effects of malnutrition, and none of us can disown responsibility.

## Standard Costs<sup>1</sup>

### As an Element of Managerial Technique

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**O**VER thirty years ago in the City of London, England, then regarded as the accounting center of the world, I was an innocent party to one of those peculiar agreements known as "Articles of Apprenticeship." Under this agreement my parents undertook to pay a Chartered Accountant the sum of fifteen hundred dollars out of which sum during my five years of service I was to receive as total salary one thousand dollars. In other words, my parents gave this gentleman five hundred dollars and a loan of a thousand, and I, five years of my time, in return for which I was to receive a certain alleged benefit. What was this supposed benefit? To quote from the wording of the articles, in return for cash in hand and faithful service said Chartered Accountant undertook to instruct me in what was grandiloquently described as "the science and art of accounting."

It took me a long time to wake up to the fact that in one important respect I was "buncoed" in that contract. As a matter of fact, it took me quite a time to get any idea of what accounting was all about. For the first few months of my five years' sentence I was employed in copying balance sheets and profit-and-loss statements longhand. Even today I feel a burning resentment when I recollect how many hours which could have been spent in worthwhile dissipation were squandered in substituting for carbon paper. I assume that my thrifty employer, knowing that he was paying me no salary whatsoever, figured out that carbon paper, no matter how cheap, could not be quite as cheap as I was.

While my parents faithfully lived up to their part of the agreement, the cash-in-hand part (the Chartered Accountant's lawyers looked after that), and I partially, as regards the faithful service, the Chartered Accountant did not live up to his agreement as regards the instruction in the "science and art of accounting." He could not live up to it; no then living accountant could have done so because, considered in its broad sense, accounting, as it was understood thirty years

ago, as it is taught in many schools today, and as it is still practiced by the great majority of public accountants, had no more science in it than medicine had in the thirteenth century or than astrology has today.

Standard costs represent the entry of the scientific idea into the realm of accounting. In its broadest and most fundamental sense "science" means the ability to foresee—to look ahead. It was Huxley, I believe, who said that "it is the business of science to predict," and this same idea was expressed by Louis Pasteur, who in addressing the French Academie de Medicine in 1874 on scientific thought and method said:

"True theories are the expression of actual facts and are characterized by being able to predict new facts, as a natural consequence of those already known."

The field of accounting today embraces the past, the present and the future. Until the advent of science in accounting, as represented by standard costs, the functions of accounting were regarded as being properly confined to the past, as expressed in the profit-and-loss statement, and the present, as reflected in the balance sheet. Standard costs are truly scientific in that they project accounting thought into the future.

There exists some confusion of thought as to exactly what standard costs are. The conception of standard costs commonly confines their scope within the four walls of the factory. This is easy to account for because the earlier standard-cost systems were directed solely and entirely to factory operations. The first published reference I have been able to find to standard costs was that made about twenty-five years ago in one of the earlier works of the late Mr. Harrington Emerson. In that book Mr. Emerson drew attention to the limitations of the then accepted methods of cost accounting and claimed that cost accounting, to be of any real service, would have to supplement actual cost data with standards. As he pointed out, a comparison of actual costs with standard or "should-be" costs was necessary for the cost system to disclose inefficiencies and excessive costs, something which the job-order or

<sup>1</sup>Paper presented before a meeting of the Taylor Society, New York, December 3, 1931.