

I was not deceived as to the importance of Taylor's ideas. After having marched at the head of civilization for some hundreds of years, Europe must now go to America for counsel. Thanks to an unparalleled prosperity, you are gradually becoming masters of all the world's market. In order to keep our place in the sun we must study your methods and try to assimilate them. Missions of engineers and of workmen are continually going to the United States to inform themselves regarding this industrial evolution, of which Taylor was the initiator.

In a recent article in the Saturday Evening Post, an American journalist, Garet Garrett, regarded the discoveries of these missions in a humorous vein. One sees the conveyor-belt in workshop practice as the keystone of your success, another, the bonus system, a third, the institution of shop councils, etc. The author of the article very reasonably remarked that these observations in themselves only distinguish certain effects but by no means the causes of American prosperity. He would ascribe this prosperity to the American spirit, but unfortunately he does not make clear to us in what this spirit consists, nor in what quality or degree it differs from the European mind.

I have given this problem some thought. One of the most important factors of your success is, doubtless, enthusiasm in work, but among the leaders of industry on both sides of the Atlantic, this quality appears to be about equal. If our workmen accomplish less than the American workmen, they are also paid less and their wages do not accordingly increase the cost of production. For them this only results in an inferior social situation, without its constituting a very serious obstacle to our economic development. A second essential factor in the creation of all wealth is the education, the knowledge of the engineers who direct the factories. But our schools seem to be fully equal to yours; our methods of teaching are often adopted by you.

In order to advance civilization, that is, to make scientific discoveries and to utilize inventions, imagination is needed. We have never been reproached with lacking it. We can cite many French discoveries and inventions; the creation of chemistry by Lavoisier, of thermo-dynamics by Sadi Carnot, of electro-dynamics by Ampere. Likewise in the field of industry we are justified in being proud of the hydraulic cement industry created by Vicat, of the soda industry founded by Leblanc and Schloesing, of the aluminum industry, by Henri Ste. Claire Deville, of cast steel, by Martin, etc. In these industries we have as yet no competition to fear.

If labor, knowledge and imagination are marvelous tools in the production of all wealth, it is the more essential to know how to employ them. A chisel does not make a sculptor, nor a brush, an artist. Here, unfortunately, is our weak point. We lack the practical sense, wasting our labor in unproductive ways. In this matter we have much to learn from America.

Taylor's great merit has been in his organizing labor on the basis of common sense. For that very reason he is at times reproached with having invented nothing, with being satisfied to accept principles which have long been common knowledge. The great difference between simple declaration of some more or less banal truths and putting

them into practice, is not sufficiently taken into account. Taylor demanded that before setting to work, one should study the best means to employ. This is plain, practical sense, but it requires a great effort on the part of the industrial manager, and this so upsets him that generally he prefers not to make the effort.

All profit resulting from the lowering of costs ought to be divided, Taylor maintains, among capital, labor and the consumer. This seems perfectly logical, but each wishes to keep everything for himself, and guards his personal interests as a dog guards a bone.

Finally, Taylor enjoins upon employers and employes the policy of friendly co-operation which is indispensable for economic success, but each is suspicious of his neighbor and the class struggle prejudices the spirit of collaboration.

The putting into practice of these simple maxims of common sense has provoked a veritable industrial revolution, and America has been able to profit by it before us.

You are, Mr. President, one of the most authoritative representatives of the new mentality to which your country owes its present prosperity. In assuming the Presidency of the American Iron and Steel Institute which is comparable to our Comité des Forges, you have recommended to your colleagues that they deal with each other in a spirit of friendly co-operation, you have pledged them to the task of replacing competitive wars with agreements founded upon mutual respect between the personnel of one establishment and that of another.

This example set by the leaders has been understood and imitated by workers. In accomplishing friendly co-operation between employers and employes, you have attained higher wages than are paid in any other country, and lower costs, in spite of all competition. We must applaud this result and hope that we shall not have to wait too long before emulating you.

Permit me to remind you that seventeen years ago, when I wrote the preface to Taylor's principles of scientific organization of labor, I already foresaw this league between masters and workers as the essential condition of our industrial rehabilitation. I am flattered to find myself thus in agreement with the old president of the greatest technical society in the world and the new president of the greatest industrial syndicate.

When the ways of friendly collaboration will have been established in the heart of each of the nations of our old Europe, we may hope to see them flourish elsewhere and also to influence the relations between peoples. Upon that day civilization will have achieved a new advance without precedent in the history of the world.

### Reviews

*Business Cycles and Business Measurements, Studies in Quantitative Economics.* By Carl Snyder, The Macmillan Company, New York, 1927, pages xiv, 326.

This is the first book since the publication of Mitchell's "Business Cycles" (1913) that eschews "business forecasting"

and presents us with a series of "Studies in Quantitative Economics" that are sane, painstaking and exhaustive. The author's conception of what constitutes "Quantitative Economics" may be summarized in his own words:

"Although there have been notable brilliant forecasts of certain economic series . . . there have been also innumerable dismal failures . . . But the importance of an intelligent analysis of the various factors of the business cycle, a measure of their intensity, an understanding of their changing relationships, and an exact quantitative expression of the measurement of economic events should lead to a much more intelligent prevision of business, and to a lessening of the severity of business cycles. Within reasonable limits we can now understand what is happening, and what has happened, and we can estimate roughly what is going to happen. And it is through measures of the type described in the preceding chapters, that much can be done toward the intelligent understanding that should eventually lead to control of the business cycle." (p. 236)

The measures of the type described in the preceding chapters are, of course, not altogether new in the field of economic statistics. Between Mitchell and Snyder have come Persons, Day, Stewart, King, Rorty and others. Prices, production, volume of trade, the securities market and numerous other "time series" have been subjected to statistical treatment—have had their secular trends and seasonal variations computed, and eliminated and their "cycles" exposed to the gaze of the initiated as well as the uninitiated. In this respect the author has done no more than extend these series further back, to the 1870's, than most others, lacking his facilities, were able to do. But he has done more than that. He has brought most of these series together, compared them and reached two very important conclusions: first, that, alone, no one economic series, however basic, can be employed as a satisfactory barometer of general business conditions; second, that bank clearings, reduced to a volumetric basis through deflation by an appropriate price index, yield as satisfactory an "index of business" as the most comprehensive "index of the volume of trade," Carl Snyder's own composite of fifty-six series. And this "clearings index of business," as the author calls it, is of course the more readily available.

Not the least service rendered by the author is the inclusion of sixty-four pages of tabular matter, fifty-six charts, and for most of the series considered, the equations for their secular trends and their "seasonals."

JOSEPH M. GILLMAN

*Currency and Credit.* By R. G. Hawtrey, Longmans, Green, and Company, London, 1928, pages vii, 477. (Third Edition.)

The establishment of a sound monetary system is a matter of vital concern to every individual but progress along this line will be vacillating and slow until a much greater proportion of business men and politicians have mastered the fundamental principles which are discussed in this book.

<sup>1</sup>Economist, Cavendish Trading Corporation, New York.

In this third edition, Mr. Hawtrey has made a clear division between the theoretical portion (Part I) and the historical (Part II). The reasoning in Part I "has been elaborated or amended, in the light of the multifarious discussions evoked by the monetary experiences of the last few years" and matters of fact have been brought up to date.

To the great majority of people, the sole guides to an ideal system of currency and bank credit are that: (1) There shall be ample supplies of both currency and credit to meet the legitimate demands of industry and trade; (2) banks shall always be in a position to pay out currency to meet the full requirements of their demand depositors, and (3) currency of all forms shall be freely redeemable in gold, at least for foreign exchange purposes. Although all of these qualities are still fundamental to a sound monetary system, their strict observance will not prevent major cyclical and secular changes in the general price level such as we have had in the past, and which have been the cause of really stupendous economic losses and injustices, and untold social evils. As Mr. Hawtrey points out, our monetary system should be so set up and administered as to provide us with a relatively stable price level.

He does not work out in detail a plan for the accomplishment of this objective, but suggests that: "What is desirable is not the indiscriminate abandonment of the old gold-reserve conventions, but the regulation of gold reserves by international agreement with the express object of preventing either a rise or fall in the wealth value of gold," (p. 106), and, "The Genoa Resolutions of 1922, combined with the credit policy adopted by the Federal Reserve Banks in America during recent years, hold out hopes of a more scientific system. A timely intervention by the central banks of the world, to check an expansion of credit before it has gone too far, will escape the need for a subsequent contraction. The price level all over the world will become relatively stable; the unemployment and financial crises associated with the fall of prices will be avoided; so will the friction arising from the continual adjustment of wages to the cyclical variations in the purchasing power of money." (p. 155).

In connection with Mr. Hawtrey's reference to the policies of our Federal Reserve Banks it should be noted that these banks have no authority under the Federal Reserve Act to conduct their operations with a view toward stabilizing the purchasing power of money, however desirable this policy may be.

Such are the main theses of this book, but the many ramifications of the subject are discussed somewhat in detail and the historical materials is of much value, although it is largely restricted to English and French monetary affairs.

For one who has never made a study of monetary economics the book will require very careful reading as the reasoning is quite involved and the difficulty of following the line of thought is further enhanced by the use of terms which are peculiar to the author's own nomenclature. Without this peculiarity the book would undoubtedly have a wider reading.