Like Filene's earlier work, stress is laid throughout on "mass production" but instead of employing this in the ordinary sense of large-scale production, to which is often ascribed so many a woe, he defines mass production as "production for the masses."

With all the recent tirades against "overproduction" and the superficial treatises on "technological unemployment," it is refreshing to read the prophecy that "for decades to come there should be work enough for everybody under the most scientific management, to provide things for the masses which the masses eagerly want, but which only a small percentage of the masses as yet enjoy."

Many, especially those who confuse mass production as defined by the author, with unscientific large-scale production which overlooks consumption possibilities, will criticize the book as advocating a panacea for all ills. A casual reading, which might indicate that mass production *per se* would have prevented our present depression, must, however, be supplemented by a thoughtful examination of the masterly chapter on "Credit" and the later one on "Mechanism," which bring out in logical fashion the part played in our business fluctuation by unscientific management of finance and credit.

In the common view of profit and pricing the fact is overlooked, Mr. Filene brings out, that the amount of money in any society "depends not upon how many certificates called dollars are in existence, but upon how efficiently these dollars are serving human needs." This in turn depends not only "upon how advanced the machinery of production and distribution is, but it depends equally upon whether the money is being distributed so that those who need things are able to buy. Under the old system business sought to sell to those who happened to have dollars. Under the new system, business seeks to supply human needs and to see, therefore, that all would-be consumers are adequately supplied with dollars."

Credit and finance, in Mr. Filene's opinion, have not kept pace with science in business. The traditions of banking, he says, were developed in the process of transforming an agricultural civilization into a machine civilization. Those traditions must be discarded only because the machine civilization has now been created.

In the old days "we could not have factories unless we could raise capital and we raised the necessary capital through putting our money in the banks. The banks then loaned it to business men who used this money to buy machinery and to pay wages." Bankers then were eminently sensible when they advocated thrift.

"But presently one of the strangest events of human history happened. . . . By this financing of production and discovery of more efficient methods, industry was perfected to such a point that it was necessary for the masses to spend their money freely and unlearn their previous habits of thrift." The masses now needed credit as the producers had needed it earlier. But the bankers did not understand the capitalism of the new day and did not respond. The conservative financier induced the masses to stop instalment buying and invest their savings in stocks. So instead of putting two hundred dollars into an electric refrigerator, they became two-hundred-dollar capitalists.

When millions bought stocks instead of goods, two things happened. First, the orgy of speculation bottled up the buying power of the masses. Second, manufacturers having plenty of money, expanded, but sales did not expand in proportion. In many cases they shrank, profits shrank, and employes were being laid off, even before the crash in the stock market.

Now the author does not claim that saving is not wise. It is not only wise but necessary. But he points out that "these times demand credit for the masses as surely as the times ever demanded credit for business enterprise."

Following this treatment of credit, which is one of the most striking chapters of the book, the author turns to an analysis of unemployment. He says, "The cure for unemployment does not lie in sharing the work which we are now doing, but in organizing the production and distribution of more wealth."

There are two ways, the author says, in which this can be done. In the first place there is the organization of new industries such as the automobile industry with its employment, direct and indirect, of several millions of men and women. "Technological unemployment," the freeing of men from other industries, provides the opportunity for new development. The automobile would have been impossible without the man power thus provided.

But when we survey the field of man's wants, we do not have to wait to organize new industries. "There are limitless opportunities in the reorganization of familiar industries so that they will supply the wants of the masses instead of catering to relatively few."

Then follow the views of the author on unemployment insurance, balancing the alternative of industry versus state insurance. "The ideal solution," he says, "would be for the business leaders of America to get together and publicly accept the responsibility for unemployment . . . Business can succeed only as it creates success for everybody."

Mr. Filene calls the period in which we are now living the Second Industrial Revolution which he defines as "the dawn of industrial consciousness." Business is discovering that it pays to give service and that it pays best to give the greatest possible service to the greatest possible number. Applying this same principle Filene contends that world peace no longer is a far-off dream but a logical destiny. No individual and no group can be independent of others, we must go in with all our heart for mutual service.

The influence of scientific development with the consequent higher standards of living are discussed in subsequent chapters with relation to politics, to education, to health, to religion, to beauty and to the effect upon the family.

Finally the author treats of the excesses and perils of mass production. Mass production brings its peculiar evils by emphasizing our industrial ills when they do occur. It has placed great reservoirs of capital under control of those "who do not yet know how to use it for the production of more wealth."

But none of these things suggests or implies that we should go back to the old order; they emphasize the need of the further extension of the principles of scientific management, the substitution of fact for opinion, as fundamental elements of our entire business world.

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Consumer Engineering. By Roy Sheldon and Egmont Arens, Harper & Brothers, New York and London, 1932, pages vii, 259.

Precisely what is "consumer engineering"? After a careful reading of this informative and well-written book, I confess that I am still puzzled. Mr. Ernest Elmo Calkins, whose name commands respect, contributes an introduction in which he gives us a two-pronged definition: "Briefly it is shaping a product to fit more exactly consumers' needs or tastes, but in its widest sense it includes *any plan which stimulates the consumption of goods.*" The words I have italicized appear to provide a key to the author's conception. But this leaves out of the reckoning the underlying economic factors which in the end control consumption. It centers attention on devices for inducing consumers to spend more money, regardless of consequences. If this be "engineering," then that much-abused word no longer implies painstaking analysis of *all* pertinent data for the purpose of assuring structural soundness.

Lack of definition seems to your reviewer a fundamental fault of the book. It leads to loose statements and inconsistencies. We read in Chapter III, to cite only one example, an impassioned plea for the promotion of "obsolescence" of consumption goods—in plain language throwing them away while they are still quite usable; in the same chapter we find a recommended "abandonment of high-pressure methods." Perhaps the authors have discovered some other means of persuading customers to exchange good dollars for the transitory pleasure of having something new to show their friends; but if so, their formula is not published in this book.

For the most part, the authors are actually concerned not with the economics of consumption in relation to production, but with methods, ideas, stunts for pushing sales; with market research, suggestions from modern psychology, designing, packaging, and getting distribution. Out of twelve chapters, seven are directly devoted to these topics. Here the authors are evidently treading on familiar ground. They are dealing in facts and specific proposals—including a full description of the kind of passenger train that would attract travelers and an interesting plan for disposing of our wheat surplus through advertising. This material is meaty and stimulating.

Yet even in these chapters a candid reviewer can scarcely fail to remark on what will seem to many readers a shallow and outdated approach to problems of present-day marketing. All the phrases and modes of thinking of the new era—underconsumption, prosperity from high wages, beauty in the home, mass buying, and the rest—parade before us. Those dear, dead days of 1929 almost live once more. The existence of some vaguely unpleasant thing known as a depression is hinted at once or twice; but obviously it is only a disturbance slightly retarding Expansion of Purchasing Power.

One trouble with this prescription is that we gave it a thorough trial from 1922 to 1929. We had a grand booze party while it lasted, but the next morning's nausea has left most of us unenthusiastic over swallowing more of the same. It seems to me that the least one might expect from "consumer engineering" would be a new cocktail of more appetizing flavor.

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Wage Methods and Selling Costs. By Anne Bezanson and Miriam Hussey, University of Pennsylvania Press, Philadelphia, 1930, pages xxi, 405.

This volume is the result of a study, undertaken at the request of the National Retail Dry Goods Association, of the effectiveness of the various methods of wage payment in use in retail selling. The problem which was put to the investigators was to determine whether, and to what extent, any particular system of compensation was identified with low selling costs and therefore with efficient store operation. This was a task of no mean proportions but one which the investigators have proved by this volume they were well equipped to undertake.

For the purposes of the study, Miss Bezanson and Miss Hussey collected detailed records of individual earnings and sales for one year in the Hosiery, Ready-to-wear, Men's Clothing, and Housefurnishings departments in a selected group of stores, and the major portion of the volume deals with the findings of the study of these departments. The relationship between method of wage payment, earnings, sales, and selling cost, is considered from all possible angles—length of service, length of working day, basic salary, average sales-check, and number of transactions.

No one who has read and studied this report of wage methods can fail to be impressed by the thoroughly scientific and scholarly approach to the problem manifested in the organization and analysis of the statistical data which form the first three-quarters of the volume. But the business executive is most impressed by the soundness of the conclusions drawn from the material at hand. The chief conclusion, encouraging and discouraging at the same time, is that not method but administration is the key to low selling cost.

In other words, no executive responsible for selling cost may hope to escape any share of his responsibility by finding a sure-cure in any one system of compensation. In the last analysis, intelligence must be applied to this, as to all problems, and also knowledge of the factors influencing a rise in salary expense. The real answer to the question, "How can we secure low costs for the organization and insure adequate earnings for the employe," lies in one word: "Opportunity." No employe, no matter how capable a salesclerk, can sell more than the number of customers who present themselves.

The service which the authors have performed for retail stores is to make available to individual store executives a method of testing results in their own departments and comparing them with those included in the study, and to provide these executives with a technique for continuing further researches along the same lines. Progressive stores, willing to experiment and to appraise their efforts honestly, have already reached conclusions through their own experience, similar to those set down by the authors. But all executives will find in this volume much material for thought and for enabling them to test their solitary efforts toward efficiency and economical operation. To this end the tables of earnings, costs, sales, wage payment systems, etc., included in the appendix are a great help.

To Miss Bezanson and Miss Hussey, retail-store exec-