

BUT the engineers have been thinking along new lines also. Disposed by training and by environment to accept the governance of "the iron man," they nevertheless have been manifesting an increasing interest in social problems of industry. One of the first substantial books on human relations in industry was by an engineer—Hartness' "The Human Factor in Works Management." The Robert Wolf, demonstrator of scientific management utilizing the individual's impulse to self expression through creative effort, is an engineer. Herbert Hoover, an engineer, is leader in practical efforts to regularize industry and secure continuity of employment. Frank B. Gilbreth, an engineer, investigated fatigue and monotony. Engineers have come to appreciate that there are principles pertinent to management in economics, sociology and psychology. "There are times when an excursion into economic history is just as important to business planning as the consideration of current production costs and market fluctuations." That is a reason why teachers of management in engineering schools should be brought into touch with teachers having the point of view of the social sciences.

THEREFORE the importance of the technical paper presented at the session of teachers of management at the December meeting and printed in this issue, is not determined solely by the subject-matter of the paper. It is important also because it is the joint product of a teacher of management in an engineering school and a teacher of management in a school of business administration, and because its presentation was the occasion for bringing together for the first time teachers of management from both types of schools for consideration of a common problem. It should be noted that although the authors of the paper are in essential agreement, the discussors show divergence of opinion. If more teachers of management could have been present and put their views on record, a still wider divergence between the two groups would unquestionably have been in evidence. The Taylor Society believes it has rendered a genuine service in providing the auspices for continuing cooperation of both groups in study of common problems.

MANY interesting questions arise in this matter of the teaching of management and in the respective attitudes of the engineering-

school teachers and of the commerce-school teachers. Generally the commerce-school teachers disbelieve in the teaching of technique—"that can be learned in experience." But if management is a profession, one cannot disregard the fact that the older professions have learned that they must teach their respective techniques. On the other hand the engineers seem to believe that engineering training is necessary to develop the "engineering mind." But is it not probable that the "engineering-mind"—which is a different thing from engineering technique—is something the young man brings into instead of acquires from the engineering school, and may he not bring it as well into the school of commerce? Furthermore, in a recent article in the *New Republic*, C. E. Ayres, discussing the function of schools of business administration, suggests that business cannot be taught, that business ability is acquired by contacts with men and situations in college life and in business life, and that what is taught in the class rooms is the principles and technique of various specialized professions which are utilized by business. There may be something in this, and if there is, it may have a bearing on the problem of objective, curriculum, content of courses and method of teaching in higher education for management.

Management With Vision¹

MANAGEMENT has focused its attention almost exclusively upon men and mechanisms, and the principles and laws which govern their utilization. In the past fifteen years we have developed too few executives who have done or are doing things which are inspired by vision. How pitifully few, in the multitude of executives, are the Coonleys, Dennisons, Feisses, Filenes and Kendalls of today! How few have set a new standard in managerial activity!

Men and mechanisms!—and the great actuating, energizing influence known as "management" practically neglected! Is it not a sad commentary on the industrial situation of this country that in our concern for higher wages for the individual, for better living conditions, for greater influence in the conduct of industry, for sanitation, for productivity, for quality of

¹From an address at the annual dinner of the Taylor Society, December 4, 1924, by Percy S. Brown, Works Manager, Corona Typewriter Company, Inc., Groton, N. Y.; President of the Taylor Society.

workmanship, for promotion, and for endless other things that have to do with man power; for speeds and feeds and automaticity, for quantity production, for reduced costs, for better quality, for lower inventories, for control of manufacturing processes, and endless other things which have to do with mechanisms; we have failed to create a great group of executives who can show anything approaching the development attained by the man at the bench or the machine used in industry.

We may see, as one of the greatest boons to our country, the time when the men and women in industry may be reasonably assured of continuity of employment, and this, to my mind—and I make no pretense of voicing a new or original thought—is the greatest goal for which the executives of this country or any country should now strive. We of the Taylor Society may be justly proud of the fact that from among our membership have arisen the Washingtons and Lincolns of industry, who are now recognized internationally because of what they have done to point the way to the national attainment of this great ideal.

If the Taylor Society does nothing in the next five years to justify its existence other than to strive by every means within its power to break through the crust of reserve that surrounds the majority of industrial executives and inspire them to the great ideal of continuity of employment, to be attained through scientific study of markets, and the utilization of budget control methods and such interrelated data or mechanisms as may be needed for the purpose, it will have placed itself in the position of having contributed more toward individual happiness and national stability than has been done by any organized effort since our nation was founded.

The Service Motive¹

THE justification for any undertaking whether great or small, individual or collective, is accomplishing a service to the community. Businesses may be created primarily for profit to the investor, but unless in accomplishing this selfish aim, they render service to the community as a whole, they cannot continue to exist. Associations, whether of individuals or corporations, are usually formed for

¹From an address at the annual dinner of the Taylor Society, New York, December 4, 1924, by Howard Coonley, President, The Walworth Manufacturing Company, Boston; Vice-President, the Taylor Society.

a particular service which is largely for the benefit of those taking part and only incidentally for others on the outside. But associations also must eventually serve the community as a whole if they desire to continue to exist.

The Taylor Society, more than any other association within my knowledge, has been inspired by the unselfish purpose of securing and contributing to business and the world a better understanding of sound management. For many years this unselfish aim was not generally recognized, but nevertheless, with what might almost be called religious fervor, the small group of pioneers struggled on against misunderstanding and abuse, with broadening vision and the determination to keep alive the movement inspired by Taylor.

In the earlier years of the scientific movement those on the outside who did not understand felt that the movement stood for something so scientific, so inflexible as to be impracticable. There was a time, in fact, when many a manufacturer hesitated to advocate the adoption of the Taylor philosophy, fearing the adverse criticism of his board of directors or his fellow manufacturers. But, as usually happens, prejudice and emotion have so far yielded to reason that the principles of scientific management are now accepted without question as the basis of good practice.

Fortunately, the world has moved fast in the last few years. With the development of business towards a profession, with the organization of schools of business administration all over the country, the eyes and minds of business have been opened. The time is not in the future but is at hand, when the seed that was sown by the loyal followers of Taylor will bear fruit. The old-time manager with his "strong-arm" and "hunch" methods is disappearing. Present-day conditions call for executives who are not ashamed to use the tools of the scientist—if they have proved their worth—whether for production, sales, or administration.

Strange as it may seem, there is not a modern process, not a scientific operation in industry today, that has not been influenced by Taylor's fundamental theories. That influence is slowly but surely being recognized. The new generation of executives now being educated in our schools of science and business will soon be poured into our workshops, prepared to carry on as a matter of course the principles which it is the service of this Society to make known to everybody.