veloped and effectively used, we can safely take up the subject of "determination of standards on individual operations."

The Production Control reports referred to a few moments ago, coupled with such simple personnel reports as Departmental Attendance and Tardiness, Labor Turnover, etc., serve as a basis of healthfully stimulating the self-seeking instinct of department supervisors. They provide a distinct incentive to him to exercise his constructive ability to organize and administer the work of his unit in a most economical manner, realizing as he will that the results of his efforts will come to the attention of his superior currently, and in a systematic and equitable manner, and that his reward or censure will be forthcoming accordingly. The production control units must of course be recognized by department supervisors as being fair and equitable, and each supervisor should have a hand in determining the proper unit or units used in his particular department. Once this confidence is established, the administrative problems having to do with the planning of operations and personnel activities become greatly simplified, and the highest type of cooperation naturally follows.

Two years ago this plan was instituted in the life insurance company with which I am now associated, employing approximately 350 clerical workers. The year following its introduction we handled an increase in volume of business of approximately 18 per cent with an actual decrease of 6 clerical employees. We have found our departmental supervisors much more amenable to constructive suggestions from the planning staff, and more reluctant to requisition additional clerical help indiscriminately, knowing as they do that it has an undesirable effect upon their departmental ratio of production to cost of production. These desirable results will only be forthcoming, however, when the highest administrative officers use the facts as recorded as a basis of supervision, holding department heads strictly accountable for the results reported.

In closing, I should like to present for your further consideration, an observation I have entertained concerning this whole subject of office development work, which seems to me to be fundamental. It is my personal opinion, gained from rather a wide experience in planning and administrative work, that the greatest impediment to the introduction of economies in the field of clerical administration is the diffidence with which the whole subject is viewed by the highest executives. This situation may be accounted for in two ways: first, except in a very few instances plans of clerical administration do not provide for a simple and effective method of reporting relative operating costs, results and other administrative data. Without this information the element of quality becomes unduly stressed, and no equitable recognition is forthcoming for economical administration. The plan as outlined above presents a basis for meeting this difficulty. The second reason for the passive interest taken by many administrative executives is even more fundamental and involves an economic viewpoint which has a deep significance in the science of management in general. It is illustrated in an experience (which I will quote) of an organizing engineer whose field of activities has been primarily among the British industrialists. He relates it as follows: "The Managing Director of a large mercantile house refused to consider a recommendation whereby a saving of six thousand pounds per annum could be effected in the operation of one department. The fact that the saving amounted to more than 25 per cent of the total expense of that department had no influence upon his decision. The important fact to him was that the saving was insignificant compared to the result of a fractional change in the market price of any one of the commodities handled." The author commented that this state of mind is due to the inertia of habit and the hesitation and reluctance to face the temporary annoyances attendant upon a change in the plan of operation or personnel.

Savings and economies in home office operations must be viewed by the management from a different angle if the necessary incentive is to be provided for those directly responsible for operations. In my opinion the field of office operations presents one of the most fertile grounds for the exercise of scientific management. Unlike many other sources of operating economy, the savings resulting from improvements have a cumulative effect—a realized economy in operation of a few thousand dollars a year may properly be multiplied by the number of years that the work is performed.

NECROLOGY

H. A. Ackerstrom, Student Branch, Wharton School.

Mr. Ackerstrom died in April under distressing circumstances—overwork and undernourishment brought on by his heroic effort to secure an education and at the same time support his mother in Sweden. The University of Pennsylvania granted him a posthumous degree.

"He Builded Better Than He Knew"[1]

Review of F. B. Copley's "Frederick W. Taylor"[2]

By John A. Fitch[3] {658. 658.92

(Prepared for the Machinists' Monthly Journal by the Workers' Education Bureau of America.)

THE biography of Frederick W. Taylor by Frank Barkley Copley accomplishes two things. In the first place, it reveals the personality of the "Father of Scientific Management," as nothing previously written has done. It introduces the reader to a warm-hearted, impulsive genius, who went his own way with amazing perversity, who laid the basis for a new and better conception of the responsibilities of management. In the second place, the book reveals clearly—albeit somewhat unconsciously—why organized labor opposed the Taylor System, and why it had to do so. It is unfortunate that the author did not deal with the more recent trends of opinion in both scientific management and organized labor circles, for such a discussion would have revealed the development of a point of view on both sides that indicates a better understanding in each camp of the aims of the other than was true while Taylor was alive.

As a whole, this biography is singularly comprehensive and entertaining. No one who has anything like an open mind can read it without acquiring an enlarged appreciation and a new respect for Frederick W. Taylor. It does not make so much difference whether you believe in the Taylor System or not—even an opponent must be fascinated by the personality of the man. Here was a protagonist who fought hard for the principles in which he believed, and kept his faith even when misunderstood and misinterpreted by men of his own class. Here was a man, furthermore, who believed so firmly in the idea with which his name is associated that he could not doubt its validity, nor stop to understand everyone who opposed him; it was "law" and beyond questionings; and yet who believed so wholeheartedly and so disinterestedly that he gave the last fourteen years of his life absolutely without pay to spreading the gospel of scientific management. And here, too, was a craftsman of the highest order to whom there was joy in the work itself and who saw in every other craftsman a fellow and a brother. He had no use for "financiers" who are "looking merely for a turnover," who "have absolutely no pride of manufacture" and with whom it is "all a question of making money quickly."

You cannot read this biography without understanding why Frederick W. Taylor had friends such as few men ever do have. "Disciples" his biographer calls them, and that is the right word. But you understand why he had enemies, too; for he was often bitter and vehement and arrogant in his attitude toward those who opposed him.

One must be very careful to keep in mind the distinction between Taylor, the man, and the principles of scientific management that bear his name. Taylor, the man, was erratic and often very unscientific. He was the victim of an impetuous nature that prevented him from weighing all evidence coolly when pet theories were at stake. He was a curious combination of democrat and autocrat. He hated "putting on lugs"; he disliked senseless conventions or sham; he believed that the differences between men are apt to be superficial. He told the Harvard students that "the working man and the college professor have fundamentally the same feelings, the same motives, the same ambitions, the same failings, the same virtues . . . We are all of the same clay and essentially of the same mental as well as physical fiber."

On the other hand, he used to say to subordinates who were too free with suggestions: "You are not supposed to think. There are other people paid for thinking around here." He could not have men "starting a debate" when an order was given. He believed in instant obedience and respect for authority, so he deliberately set out, as a foreman, to be a "holy terror." He was abrupt and domineering even when giving praise. As Copley tells us:

> He would send for a man and say, "I've been watching you," and then, while the man was wondering what he had done, he would add, "Yes, I've been watching you, and I've discovered you are the kind of man who works just as well when the boss isn't around as when he is. Just for that I'm going to raise your pay. Now, damn you, keep your mouth shut."

And yet the men liked him. If we take the author's word for it they were devoted to him—probably because they knew he was honest, straight-

[1] Reprinted, by permission, from *Machinists' Monthly Journal* (Official Organ of the International Association of Machinists), Vol. xxxvii, No. 4, April, 1925, page 199. The title is ours.

[2] "Frederick W. Taylor," by Frank Barkley Copley. In two volumes, Harper & Bros., New York, 1923.

[3] Director of Industrial Courses, New York School of Social Work.