while opening a wonderful vista, in the very ruggedness of its story makes the philosophy essentially work-a-day.

Mr. Copley has achieved a remarkable work. He has faithfully and picturesquely recorded the life of Frederick Taylor, yet at the same time has presented like a panorama, the growth of a philosophy, of which Frederick Taylor was the leading artisan. While he traces the life of Taylor to that stone memorial on a hill, which stands for all that mortal frame endured and conquered, he makes us see the contribution of Taylor to human thought as a stage from which the curtain is but half withdrawn. Of the life, the tale is told; but of the philosophy, the play has barely begun. In this, Mr. Copley has succeeded in an immensely difficult task. Rarely has a man, either in fact or in popular thought, been so closely associated with a movement as was Frederick Taylor with scientific management. Rarely has a man lived to see the growth of definite principles out of his own groping experiments as Frederick Taylor saw the principles of scientific management emerging from his work at Midvale and Bethlehem. Rarely has a man lived to bear upon his own shoulders both the praise and the execration accorded to a new movement of thought as Taylor in his own lifetime did. Rarely have the name of a man and the name of a movement been so readily interchangeable and in fact so actually interchanged as the names of Frederick Taylor and scientific management. Yet, in spite of the close and personal relation between the man and the movement, Mr. Copley has succeeded, while treating the man and his work as a whole, in distinguishing between the two, and leaving us distinct impressions of each. The sun of the man has sunk to its inevitable setting, but the sun of his philosophy has but barely broken the clouds in its dawning. To write the biography of such a man is no easy task. It cannot be just the bare record of a man's life and what he did. It must give that, and more, for what he did was not something which ended with himself. The task of the biographer was not only to tell a life-story, but to relate that story to what was yet to follow—to trace the fleeting life to its premature close, whilst its philosophy was waxing to its springtide. This Mr. Copley has achieved with singular success. He has given us a living picture, with all its lights and shadows, of Taylor, the man; and a wise survey of what Taylor aimed at and achieved, and how his life-work swelled into a mode of thought, which we believe is destined to redirect the whole trend of industrial progress. If the words spoken by a certain gentleman are true of the man—"What Mr. Taylor did was to go out into the works and start a revolution"—they are true also of what Mr. Taylor's philosophy will yet achieve in the whole fabric of industry.

To those who, like myself, have studied scientific management from afar, who have not had the opportunity of coming into touch with its pioneers, who have not experienced the rough-and-tumble of its youthful encounters, this book comes as an illuminating story. It has rendered the whole thought of scientific management far more intimate and personal. It has clothed it with human form, and brought all the kaleidescopic thought, activity and experiments back to the thought of a man strolling across the sloping lawns, beside the herbaceous borders, under the rose arches and between the box hedges of a garden. This philosophy which I have studied and endeavoured to apply is not now something abstract and theoretical; it is very human. It is a delightfully living medley of time studies and weird golf clubs, of planning rooms and forceful epithets, of minute experiments and amateur theatricals, of tool rooms and of "my little intellectual friend," Putmut the cat. I am glad to think that the chief exponent of scientific management was a brilliant tennis-player, a fine gymnast, captain of his Exeter baseball team, and, later on in life, a most stimulating father to two lads. It puts a complexion on scientific management which makes me believe in it all the more. It is no longer something imposed on the world out of an ethereal void, but something that has welled up from the work of a man who made his daily trip to the factory and, at night, read aloud "The Lure of the Labrador Wild" to his family . . . .

Indeed, Frederick Taylor seems to have been more normally human in many ways than most men who have left their imprint in history. No man of whom it can be said—and by a lady too—that he "never seemed more of a gentleman than when he was swearing," and who can come out with such sweeping statements as "All Germans are liars," and "You can't introduce economical methods by sitting up and howling," can but be held as a human among humans. He found public speaking a stumbling block; he wrote with difficulty; mental agility was not his strong point; his swearing, when necessary, was forcible—all features of the people one meets in the day's march. His home life was wholly delightful. His relations with his adopted children—now stern, now mischievous; now tender—tell us of a man to whom fame brought no pride. "He was kept humble by his knowledge of the ability he did not have and the things he did not know. There was much that was wistful in his attitude towards men who spoke familiarly of things upon which he felt he had no light." Despite the strain of his work, despite the opposition he encountered, and despite the increasing reputation which brought him scores of visitors and shoals of correspondence, this man, of whom things both laudatory and damnatory were spoken with unusual vigour, retained a character singularly free from the faults which are associated with fame. Nothing from this outside world could break the serenity of his home. No reports or rumours could disturb the openness of his hospitality, the sociability of his nature, or his loyalty to and thoughtfulness for his friends. It is not to be wondered at, therefore, that those who visited him should, having come to see the leader of a new movement, have left, admiring not only an able thinker but a manly character. Thus, Mr. Brandeis wrote:

> I quickly recognized that in Mr. Taylor I had met a really great man—great not only in mental capacity, but in character, and that his accomplishments were due to this fortunate combination of ability and character.

And Rudolph Blankenburg expresses the same dual charm of the man in the eloquent words he delivered at the Taylor Memorial Meeting:

> Mr. Taylor was to me a paradox. On one hand we find his rugged intellect blasting its way through layer after layer of conventions formed by generations of prejudice, tradition and ignorance until he became recognized as perhaps the world's foremost industrial leader. When truth was at stake, he was resourceful, robust and tireless. The problem once even dimly visioned he pursued with the zest of a hunter until he conquered. On the other hand, those whose contacts with him were, like my own, only casual and who went to him as converts, rather than to be converted, could hardly sense his power. He was born and bred to a gentle manner. His sweet smile and courtly bearing were only the surface indications of an innate and broad spreading sympathy and kindliness. He knew he had much to give and he gave it with a generosity which knew no limits.

Mr. Copley has been both faithful and wise in including in this book so much of Mr. Taylor's personal life, as distinct from his work. Character, indeed, plays a leading part in the achievements of a man; how much, I fancy, we sometimes underestimate. Brandeis glimpsed how much the character of Taylor had contributed to Taylor's life-work. Perhaps others in his day would have viewed scientific management in a different light had they known the character of the man behind it. How alien to Taylor's character was much that they attribute to scientific management! How contrary to Taylor's ethics were some of the motives attributed to the man whom they knew only through the second-hand channels of books, newspapers, rumours and the experiences of others! A downright man, true; an outspoken, often brusque man, true; a strict, exacting, imperious man at times, true; a man, who, having suffered, was perhaps 'a little intolerant, perhaps a little stinging, true; an impatient, tactless man, maybe. "But, however much he might irritate men, they had a habit of saying: 'Well, you know where you stand with the doggone cuss, anyway.'"—and that sentiment is not a tribute either to a great thinker or a great scientist and inventor, but to a commanding character,—a character which flamed with enthusiasm and courage, and bore honesty and a meticulous regard and respect for justice emblazoned on its shield. It was open to men to question Taylor's abilities, if they could find a cranny wherein to fire a shaft, but none could gainsay either the qualities and motives he brought to his work, or the charm and friendliness he displayed open-handedly in his home. Here, indeed, was a man, a chip of common manhood, a whole-hearted liver of life.

Like all men who have set in motion or furthered great mental revolutions in the world, however, Taylor brought to his work, not only a high character but also a truly remarkable mental ability. Primarily, his mind had in the highest degree those qualities which we associate with the scientist—critical, inquisitive, thorough, painstaking, logical, tenacious, persistent, constructive. He had preeminently the scientist's passion for truth, the scientist's reliance only on those facts which, by endless experiment and testing, are proved to be true.

> His reputation (said Henry L. Gantt) does not depend upon the fact that he designed and built the most successful big steam hammer in the world, or that he developed a method of treating tool steel that trebled its cutting power, or that he determined the laws of cutting metals, or even that he was the father of scientific management. These were incidents in his career, and only the logical results of his methods. At an early date, he realized how much of the world's work was based on precedent or opinion, and undertook to base all his actions on knowledge and fact.

In other words, his chief claim to fame, as indeed it was the chief attribute of his mind, was his use of the scientific method and his elaboration of a science for