

ing invention inspired by a desire to make these novel ideas acceptable to the youth of sporting inclinations in the factory:

In order to give a correct idea of this original spirit and of the influences under which he was moulded, it was necessary to tell the story of his life as Mr. Copley has told it, to review his ancestry and the first signs of his natural tendencies and of his character; to scrutinize the circumstances under which his personality was formed, as well as to visualize the industrial environment in which he first distinguished himself. It was necessary to study his various assignments and to be present at the ardent discussions in which, while valiantly defending his ideas, he was led to give them coherence and to formulate those principles of organization whose economic and social bearing he was demonstrating.

Unlike John Fritz, William Sellers and many others, Taylor is a man with a new principle, rather than the incarnation of a stage of evolution undergone by industry in the ordinary course of events.

He represents an external force penetrating the factory and changing its whole orientation—"a breeze had come into the works—a new force."<sup>1</sup> Being very little understood at first it provoked nothing but ridicule.

Taylor was, indeed, a revolutionary, as Copley has said. But the life of Taylor is also presented to us as the story of a "pilgrimage into industry," the pilgrimage of a man sprung from a very different environment. He was not born into industry and he was not educated by industry. Neither did he undergo the conventional "technical training" which is designed to prepare one for an industrial career, and his sole equipment was a remarkable habit of observation and a very keen critical sense which was subject to rigid discipline by a determined will placed at the service of a high ideal, the love of truth and a desire to serve the common good. In a word, this pilgrimage into industry is the pilgrimage of an intellectual.

How had he acquired this quality of mind?

After following the development of the youthful Taylor in the vivid and detailed chapters of the biography, no doubt remains that Taylor's character is best explained in his passion for sports. It is sport which taught him at an early age the value of the minute analysis of motions, the importance of method-

ical selection and training, the worth of time study and of standards based on rigorously exact observation. In a word, it was sports which made him understand the necessity of the scientific method and gave him an admiration for the discipline of the arena which St. Paul had already suggested as an example to the Corinthians. Because of these things he qualified as an intellectual. But they did not make, a dreamer of him; much less a writer of romances. He does not see things by halves and he is not satisfied with rule of thumb measurements. He demands absolute exactness. He does not waste time on sentiment or seek to build up theories. He is a realist, and if he tries to introduce the sporting spirit into the shop, it is with a definite object in view. He wishes to increase production in order to establish the relations of employer and employee on a fair basis, and as he is essentially a wrestler, obstacles serve only to stimulate him. He boldly attacks everything that does not seem to him to be based on sound foundations, and he does not stop until victory is achieved, victory over matter or victory over men, but victory by which his adversaries are always the first to benefit.

Many people have attributed a workingman's mentality to Taylor. This is an error very promptly dissipated by the reading of his life. Taylor was not developed, as the workingman so often is, in the school of hard necessity. He is not a man who from his childhood has known to his sorrow the necessity of earning his daily bread and the continual fear of losing his job, or a man who in spite of himself has had to submit to painful and more or less revolting tasks; neither has he had to learn the hard lessons of advancement in the face of innumerable obstacles. "Where can a school be found," asks John Weare, an American writer, "which prepares a man of the most humble origin to leap more or less rapidly over the most diversified conditions of society as so many distinguished Americans do and to reach the first rank of power and fortune? What apprenticeship makes it possible for a young man to begin as hotel porter and end as a statesman or as the captain of some powerful industry?"

The school of necessity.

In France as in America, the greatest men have been trained in this school. If it does not break them it develops their will power and energy so thoroughly that they may attain the highest honors

<sup>1</sup>In a lecture given at the School of Social Economics founded by P. F. Le Play.

while preserving at the same time the workingman's quality of mind and the strong imprint received in their youth. But this was not the case with Taylor. Taylor became neither statesman nor captain of industry. He might have done so had he been obliged to begin his career by selling daily papers in a railroad train. Evidently his goal was to be a more exalted one. He was able to listen to the voice that calls fortunate souls towards an ideal lying always farther on; first an ideal of spiritual excellence and strength; then an ideal of physical and moral vigor; an ideal of determination coupled with an ideal of fairness and an ideal of duty—and he was able to compass in this way the various stages of intellectual development. He says that very strong will power is not required to excel in the things which one enjoys, while a great deal is necessary to excel in the things which bore or repel one. This is true. But all the more is it required when one is not impelled by urgent necessity. So it seems probable that the first manifestation of Taylor's unusual nature can be seen in the pleasure which it gave him to conquer himself. Following the austere traditions of his family, he imposed on himself that discipline in whose practice the great educators of humanity have found the best means of developing the mind.

The two forces which orient life are attraction and necessity. Their association makes necessity less of a trial and gives to attraction all its creative power. In the pursuit of his ideal, Taylor collaborated with his less fortunate brother, the workman, for whom he felt the most sincere sympathy. He instinctively contributed to the great cause of the well-being of the whole world's workers his good fortune in being free to listen to the summons towards greater and greater heights. He pursued his ideal to its inevitable conclusion, welcoming with joy the day when, without relaxing his activity, he declared, "that he could no longer afford to work for money," a decision which surely entitles him to be called an exceptional man.

This is the personality which seems to us to emerge from the pages of Copley's life of Taylor as an example to be pondered by the many young men who are fortunate enough to be free from necessity's carping cares, and who find it so difficult to realize their good fortune in being able to turn their thoughts toward an ideal. It furnishes also a precious lesson for those whose mission it is to educate the youth of their time.

## II.

As we have said, Taylor sounded the note of warning, called attention to the inadequate production of industry, condemned the errors practiced, and tried to bring about a change of orientation.

Such an attitude could not fail to make a lively stir in France as elsewhere, and each of the questions raised is worth discussing from the French point of view.

The workman seemed to be particularly the object of Taylor's scrutiny. He denounced with energy restriction of production, "systematic soldiering," which he insisted was a general practice. This point was the occasion of prolonged discussion between Taylor and the workers. It was possible to infer that he would not hesitate to compel "speeding up" in order to achieve his ends, and it was against this that the workers sought to defend themselves, with ample justification.

To what extent does this criticism of the restriction of production apply to the French workman? It is no doubt human nature to perform the minimum amount of work, when, with or without reason, one thinks it is not to his own interest to do more. And there is no question that systematic soldiering is practiced in France as it is everywhere else. But it is none the less true, fortunately, that a love of work exists also and that there are many good workmen who ask nothing more than a chance to use the energy that they can regularly supply on condition that they be properly recompensed. It is even true that they are not averse to speeding up their work when inspired by the desire to increase their earnings, and generally the incentive lies in the necessities of their families.

It is hardly necessary to stress the fact that speeding up is incompatible with intelligent organization, whose object must always be to secure the greatest regularity in output with the lowest possible labor turnover. There can, therefore, be no question of imposing it upon workers or even of approving it. On the contrary, it must be stamped out wherever it exists.

But the workman has also a tendency to limit production for a reason other than fear of fatigue. On the one hand, lack of coordination of the tasks in a shop does not as a rule permit of his exerting all his energy, and on the other hand, he is convinced that the more he exerts himself the more likely he is to suffer unemployment. This conviction is all the more difficult to combat because the workman has