

self. Such a fact ought not to lower him in our estimation, but rather the contrary, as also should the fact that he did not fully comprehend the nature of the subject he worked upon. That this was so is shown by his expectation that his induction "was to end by no very prolonged or difficult processes in absolute certainty. And next it was to leave very little to the differences of intellectual power, it was to level minds and capacities." —(Ch. Eng. Men of Let., Bacon, p. 180). He aimed at nothing less than a comprehensive scheme of philosophy and science, which should cover the whole ground of those subjects. His "Instauratio Magna" was divided into six parts, but their working out is scarcely more than commenced. What then did Bacon accomplish? And how did his work so largely influence the subsequent course of thought. Like Descartes, he begins with a universal scepticism, which is his starting point for reconstruction. Before he could build, the ruins of the old edifice must be cleared away from the site; and when this was done, then he laid the foundations of that wondrous palace of knowledge, which, though still incomplete, has since been reared on it. More than this he did not do, but this was sufficient to justify his position as one in the first rank of Englishmen. He did not invent anything, but he taught all succeeding ages the road to invention. He did not discover anything, but he indicated the sure methods by which discoveries were to be made. It is his insistence upon the true method of experiment, observation and verification that makes Bacon so great a man. It was not merely genius that distinguished him, but also the possession of the true prophetic spirit, which seems dimly indeed, but surely to see the end before it, which knows the truth and the importance of its message to mankind by intuition, the surest of all knowledge, and hence makes the propagation of it a life work. He was inspired with the desire of gaining knowledge, of discovering the secrets of nature in all its departments. It was an ever-present desire, maintained with a steady enthusiasm which has borne great and rich fruits. The love of knowledge filled him, not only for its own sake, but also for the sake of the good which would flow to the race from it. Benevolence to mankind was a chief aim of Bacon.

From Bacon dates the reform of the methods of natural science. As we, to-day, survey the wondrous results of that reform, we at once see how great the influence of Bacon on subsequent researches has been. Of modern invention he is the father. He prescribes the method, he leaves it to others to carry it out. He has been compared to Moses surveying the promised land from the mountain top, but not permitted to enter therein.

But to make a true estimate of the influence of Bacon, we must not look on the good results of his life-work alone. True, it is, that benevolence was what he aimed at, but how disappointing in many respects is the event.

Pains-taking and self-denying men have indeed done much to alleviate misery and pain, to save life and to prolong it. Science has performed tasks beside which the labours of Hercules seem but trifling. But the men of this generation have seized upon inventions and discoveries with rude, unscrupulous hand, and distorted them to their own ends, to aid them in amassing wealth. Not only has inventive science been thus harnessed to this degrading service, but principles of business, of political economy, have likewise been wrested from their proper use, to enable the sharp man to get the better of his less-gifted fellow, so that the result has not been the amelioration of all, not "the survival of the fittest," but of the sharpest. More than this—if science has taught us to save, it has taught us also to destroy. Engines of war, dealing death wholesale on all sides, powerful explosives, which can be ignited by reckless hands from a distance, so as almost to defy discovery, on the one hand, and on the other, subtle devices for accumulation of wealth at the expense of life and health, as for instance, the adulteration of food and drink. We have purchased our luxuries, often at the expense of our health. Moral as well as physical science has placed wealth in the hands of the few, and for them 'as made life idle and selfish too often.

The nervous disorders which prevail to such an alarming extent have not descended from our ancestors, but are a development of our altered conditions of life.

Yet, in spite of these considerations, which cannot be omitted, the general result of the application of improved methods of thought to the world and its contents, we believe have been beneficial. Some of the branches of science are yet very incomplete. When we gain a clearer knowledge of the science of political economy, for instance, the manifest unfairness of much in the existing departments of business, notably in the case of speculation, may be removed.

We have yet to mention the influence of Bacon upon philosophy proper. This was so entirely indirect that it may be dismissed with a few words. In insisting upon experiment and observation, he prepared the way for that modern, empirical, sensual school of philosophy, whose founder was John Locke. Locke had, indeed, a precursor in Hobbes, who, however, achieved distinction rather in the field of moral and political science.

Locke, like Bacon, may be said to begin with a universal scepticism of all previous philosophy. Bacon had shewn that experiment and observation was the true way to arrive at certainty, and had condemned anticipations of the results. So, too, Locke applies the same method to the investigation of the human understanding, and was against the theory that the human intellect possesses innate ideas. "Nihil in intellectu, quod non fuerit in sensu" is the motto of Locke. He combats all those philosophers, from Socrates downwards, who had concerned themselves with the grounds of being. The