

physical studies may be made subservient to the progress of industry, which is a conquest of mind over matter. By a happy connection of causes and effects, we often see the useful linked to the beautiful and the exalted. The improvement of agriculture in the hands of freemen, and on properties of a moderate extent—the flourishing state of the mechanical arts freed from the trammels of municipal restrictions—the increased impetus imparted to commerce by the multiplied means of contact of nations with each other, are all brilliant results of the intellectual progress of mankind, and of the amelioration of political institutions, in which this progress is reflected. The picture presented by modern history ought to convince those who are tardy in awakening to the truth of the lesson it teaches.

Nor let it be feared that the marked predilection for the study of nature, and for industrial progress, which is so characteristic of the present age, should necessarily have a tendency to retard the noble exertions of the intellect in the domains of philosophy, classical history, and antiquity, or to deprive the arts by which life is embellished of the vivifying breath of imagination. Where all the germs of civilization are developed beneath the ægis of free institutions and wise legislation, there is no cause for apprehending that any one branch of knowledge should be cultivated to the prejudice of others. All afford the state precious fruits, whether they yield nourishment to man and constitute his physical wealth, or whether, more permanent in their nature, they transmit in the works of mind the glory of nations to remotest posterity. The Spartans, notwithstanding their Doric austerity, prayed the gods to grant them “the beautiful with the good.”\*

I will no longer dwell upon the considerations of the influence exercised by the mathematical and physical sciences on all that appertains to the material wants of social life, for the vast extent of the course on which I am entering forbids me to insist further upon the utility of these applications. Accustomed to distant excursions, I may, perhaps, have erred in describing the path before us as more smooth and pleasant than it really is, for such is wont to be the practice of those who delight in guiding others to the summits of lofty mountains: they praise the view even when great part of the distant plains lie hidden by clouds, knowing that this half-transparent vapory veil imparts to the scene a certain charm from

\* Pseudo-Plato.—*Alcib.*, xi., p. 184, ed. Steph.; Plut., *Instituta Læconica*, p. 253, ed. Hutten.