wonderful inductive philosophy to which all the advances of science are due, in its most improved form, rising by inductions from phenomena to their causes, and then descending by deductions from those causes to the detail of phenomena. His master-mind clearly saw, long before *Newton*, the fallacy of some of the ideas of motion, and it is from this wonderful man we get our knowledge of the importance of the study of nature, as he agreed that the general principles must be reached by induction from special facts and studied out by the technical rules of logic.

It was in the city of Alexandria that *Euclid* worked out his great problems, destined to challenge contradiction from the whole human race. After more than twenty-two centuries they still stand models of accuracy as well as standards of exact demonstration. The day will never come when these propositions will be denied. He also wrote on optics, discussing the hypoptheses of rays, issuing from the eye to an object. In the philosophy of *Pythagoras* we find a resemblance to chemistry in the number being invariably connected with the name of the thing of whatsoever description it may be, fully carrying out a line in Pope's Essay:—

"We think in numbers, for the numbers come."

Lucretus, in his time, anticipated many of the generalizations of the best scientific thinkers. He, like modern astronomers, believed that the solar system was once a fiery dust, which became condensed into suns and planets. La Place says: "In an observation, made by the Greeks, of a summer solstice, in 432 B. C., we have, for the first time, a combined system of observation, made with instruments for measurement of angles, and calculated by trigonometrical methods." It is quite safe to say that astronomy then took the form which subsequent ages have only perfected.

Archimedes, born in Syracuse, 287 B. C., was eminent as a geometrician and mechanic. He discovered the ratio between the circumference and diameter of a circle, the method of ascertaining specific gravity, besides inventing the endless screw, concave mirror, and catapult for throwing large stones. It would take too long to enumerate the great names which head the study of science, sufficient be it, that we owe to these never-tiring thinkers, the invention of the lever, the sun-dial, perspective drawing, suction pump, water wheel, and the grist mill. We will find as a matter of experience, if we know the best that has been written, thought or uttered in the world, we shall find that the sentiments of men who lived perhaps long ago, who had the most limited natural knowledge, and who had the most erroneous conceptions about many important matters:—that have not only the power of refreshing and delighting us, but have also the ability of fortifying, elevating, quickening, and suggesting to the extent of wonderfully helping us to relate the results of modern science to our need for beauty.

A comprehensive history of the last phase of the subject under discussion, viz.: "The *influence* of *Greece* on the *art* of the *present age*," would include a record of all the endeavors which man has made through the ages to bring the world of sense in subordination to that of spirit, or to make the real a true reflection of the ideal. There are few things better fitted to produce mental clearness and skill than the study of art, especially Greek art—with its clear appeal to the reason of things and its foundation of principles laid deep in nature. It is unnecessary to say that the art of Greece, penetrating through life as it did, not only favored, but to a certain degree demanded the multiplication of its works. When the deeper fountains of imagination and creative power were dried up, their influence, nevertheless, still continued centuries after its extinction. After the age of Alexander the Great, creative art made no further progress, but the impulse given in better times worked on, the tradition of excellence remained,—external respect for art was still propagated,—adroitness in art was ever increasing, and, as the fountains of new creations were exhausted, the works of earlier times were imitated. Hence we perceive in so many later works the peculiar beauty of antiquity. In poetry, painting and sculpture alike, Greek art has been regarded as pre-eminent. The clearness, the truth of composition and the simple beauty of form, have rendered the models of this people unchangeable and eternal. The sense of harmony which dwelt in the souls of *Phidos* and *Sophocles* is now but the echo of what it once was, and still—modern minds are trying to reproduce to themselves the absolute grace