

may be taken as an exponent of intellectual progress, or just as the Christian religion may be considered as the highest type of the moral forces that are guiding mankind towards a higher ground of right-doing. As the pupil has to be subjected to his three drills—body-drill, mind-drill and soul-drill—in order to secure for him an even development of his whole being, so has the world, or society, been subjected to three great social forces, or processes, to bring about its nineteenth century development. In this sense God stands as the first of schoolmasters.

Education means the fullest development of the whole being of man. As a branch science of Sociology, the *scientia scientiarum*, its history may be likened to the history of science itself. Science had its birth in the investigation of the physical or the fixing of a Cosmology, when men surprised to find that a fish had weight in water as out of it, began to run away from a faith-reading of the spheres; and education as an *ology* had its beginnings in the mere physical arrangements by means of which the old pedagogue was said to run a tidy school with a moderating use of the thong. But refusing to stop short in its identifications of natural law in the physical constitution of things, while tabulating them in the sub-sciences of physics, chemistry, geology, astronomy, science saw man himself and his environment affected by the forces of heat, light and electricity, and finding in these the evolvers from a lower to a higher condition of life, from the jelly-fish to the kings of men, laid the foundation lines of a new branch of science and called it Biology: and so in the same way, education, having tarried long near the outs and ins of empiric methods, came to discern its foundation lines in the "new education," in the psychology that was ready to father the

true pedagogy, and took to identifying the natural laws that affect the mind on its way from a lower to a higher activity. With Cosmology as a classifying knowledge of the world in its physical aspects, and with Biology as a knowledge of the laws of nature found in the activities of its vital order, science had to take a further step in advance when it came to see that the present was but a developed past, or an undeveloped future, when it came to detect the laws within us and without us, but not of us, that are said to work for righteousness; and that step, it is needless to say, was the movement in favor of the "new philosophy" that fathers the science of Sociology.

In these three great families of sub-sciences, Cosmology, Biology, and Sociology, we have the right hand terms of a second striking analogy between the developing stages of the world's knowledge, and the developing stages of the sub-science of education. And as Sociology may be looked upon as the crowning glory of all science, in which the function of the individual is identified as the issue of a natural law, co-ordinating with the other social energies in the environment, so may the moral value of the individual be considered the most seriously important of the problems the educationist has ever been called upon to consider. Sociology is the science of the sciences, including Cosmology and Biology, just as character-building includes physical culture and mind development. The close inter-relationship is undeniable in both cases. A sound mind in a sound body is a necessary part of moral responsibility. The three go hand in hand. *Mens sana in corpore sano* is a good enough adage to force us to keep always in view the necessity for physical culture in school, be it vocal drill or calisthenics. And as I have another adage, with a reform