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THE EVOLUTION OF THE SCIENTIFIC INVESTIGATOR.*

Among the tendencies characteristic of the science of our day is one toward laying greater stress on questions of the beginning of things, and regarding a knowledge of the laws of development of any object of study as necessary to its complete understanding in the form in which we find it. It may be conceded that the principle here involved is as applicable in the broadest field of thought as in a special research into the properties of the minutest organism. It, therefore, seems meet that the comprehensive survey of the realm of knowledge on which we are about to enter should begin by seeking to bring to light those agencies which have brought about the remarkable development of that realm to which the world of to-day bears witness. The principle in question is recognized in the plan of our proceedings by providing for each great department of knowledge a review of its progress during the century that has elapsed since the great event which the scene around us is intended to commemorate. But such reviews do not make up that general survey of science at large which is necessary to the development of our theme, and which must include the action of causes that had their origin long before our time. The movement which culminated in making the nineteenth century ever memorable in history is the outcome of a long series of causes, acting through many centuries, which are worthy

* Opening address of the president of the International Congress of Arts and Science, at the St. Louis Exposition, September 19, 1904.