present time. The continent grew by continuity, and improved by ever increasing specialization. The great delta started at a point and grew by additions to itself, and by ever widening relations to the land, and ever increasing complications of structure. So every feature of the earth grew. The whole history of the physical world exemplifies a method of specialization through continuity.

Consider next, the realm of organic matter. Under what method does Nature produce an animal or a plant? By what method has the world been populated? What method has been pursued in the geological succession of organic forms which we have passed in review?

To learn by what method Nature produces an animal, we must trace its history from the earliest condition in which it exists. Every animal exists first as an egg-that is, a certain amount of yolk with an included cell in which is a point where the force is seated which we will call "vital," and which, though inscrutrable, is the essential part of the egg. In viviparous animals, the eggs are developed within the parent. In any order of animals, when the conditions are suitable, the yolk, whether of an external or an internal egg, begins to undergo changes. The yolk, or a portion of it, divides into two parts; then each of these, into two; and this subdivision proceeds until the whole yolk, or the divided portion of it, is a mass of globules aggregated together, and presenting the appearance of a mulberry. On and within this mass, a disc (blastoderm) appears, consisting of two layers, the upper (epiblast) formed of nucleated cells, and the lower (mesoblast) of irregularly rounded cells. From the upper are destined to be developed the skin and walls of the body, together with the nervous chord; from the lower, the heart and vascular system, the stomach and intestines. I will only mention a few features in the development. The lower layer undergoes progressive changes. We perceive the faintest rudiments of head and tail, and abdominal cavity. The outlines of the neural canal appear, and of some of the first vertebræ. Now the lower layer splits, and one part proceeds to