arithmetically and that therefore wars, pestilence and famine are unavoidable, unless some other means of checking the increase of population should be found.

As Darwin read this book he thought of the great number of animals and plants that are produced and how comparatively few of them manage to survive and in turn to produce offspring. Then it occurred to him that this might be the key to the origin of the many types of plants and animals that exist. Since no offspring is exactly like its parent he assumed that in time a great variety of offspring would proceed from any one source. Out of this great variety, only those with characteristics that could enable them to meet the conditions of their environment or to overcome the attacks of their natural enemies would be able to survive and produce further offspring. Thus gradual changes would occur. Darwin thought of these possible changes as being quite unlimited, and therefore able to produce extremely great results over a period of time. Although he called his idea "natural selection" he later said that perhaps it might better have been described by the term "survival of the fittest," which Herbert Spencer had originated. As soon as the idea of "natural selection" occurred to Darwin he decided to gather facts that would support it. He wrote out a statement of his theory and placed it in a safe, returning to it from time to time to add further evidence, and intending eventually to publish a large work in which he would deal fully with the matter.

In 1858 a young naturalist named Alfred Russell Wallace was engaged in scientific study in the East Indies. As he pondered over the varieties of plants and animals that he saw there, he was laid up by illness for a few days and amused himself by reading Malthus' Essay on Population. As he did so he