

ment help us here over all obstacles; for when in the animal kingdom we follow the gradual progress towards perfection of the eyes and ears, step by step, we find such a finely graduated series of improvement, that we can clearly follow the development of the most complex organs through all the stages towards perfection. Thus, for example, the eye in the lowest animal is a simple spot of pigment which does not yet reflect any image of external objects, but at most perceives and distinguishes the different rays of light. Later, we find in addition to this a sensitive nerve; then there gradually develops within the spot of pigment the first beginning of the lens, a refractive body which is now able to concentrate the rays of light and to reflect a definite image. But all the composite apparatus for the movement of the eye and its accommodation to variations of light and distance are still absent, namely, the various refractive media, the highly differentiated membrane of the optic nerve, etc., which are so perfectly constructed in higher animals. Comparative anatomy shows us an uninterrupted succession of all possible stages of transition, from the simplest organ to the most highly perfected apparatus, so that we can form a pretty correct idea of the slow and gradual formation of even such an exceedingly complex organ. The like gradual progress which we observe in the development of the organ during the course of individual development, must have taken place in the historical (phyletic) origin of the organ.

Many persons when contemplating these most perfect organs—which apparently were purposely invented and constructed by an ingenious Creator for a definite function, but which in reality have arisen by the aimless action