was first formed, or in its infantile life, but *to that which is proper, according* to the time of life in which it is reproduced—proper because like that which the same part had at the same time of life in members of former generations. Thus in the reproduction of the leg of the full grown Salamander after amputation, it is clear from the first that, whilst the process itself is of a similar nature to that concerned in its first developement, it is tending to produce, not to the leg of a larva, but that of the animal.

The power, therefore, by which this production is accomplished, would seem to be not the mere revival of one which, after perfecting the body, had lapsed into a dormant state, but the self-same power which, before the removal of the limb, was occupied in its maintainance by the continual mutation of its particles, and now *engages itself*, with more energy, in the reconstruction of the whole. These views receive important confirmation from observations made by Mr. Barry, and quoted by Mr. Carpenter, and renders the question extremely interesting; for, since we observe, as the result of injury or impaired nutrition—even inflammation—a free supply of white cell growth, so do we find in the earlier periods of embryonic life, when all the constructive energy of the system is required, a similar abundant presence of these very bodies. It has been noticed by Mr. Gulliver that, in the very young embryo of the mammalia, the white globules are *nearly as numerous* as the red particles: this he has frequently noticed in fœtal deer of about 1½ inches long. In a still smaller fœtus, the blood was pale from the preponderance of the white corpuscles. It is, therefore, adds Mr. Carpenter, a fact of much interest, that even in the mammiferous embryo, at the period when growth is most rapid, the circulating fluid has a strong analogy to the invertebrata: and let it be remembered that (as in the Salamander) the developing force is at its height. In states of impaired nutrition, in and about parts which are undergoing repair, and under certain conditions, as shown by Mr. Addison, there is an abundant supply of white blood corpuscles, material readily furnished, for the uses of the part or of the system at large. That the solids act an important part in assimilation, is admitted by the best Pathologists and Physiologists, and as we shall presently show, must be taken into account in all our considerations of growth and development, while at the same time the part which the blood plasma itself performs, is not to be forgotten. Thus Prof. Vogel remarks—"Two different causes may be supposed to effect the transition of the blastema in development; *firstly*, the cause may be grounded on *the nature of the blastema*, and the formation may be developed with the same necessity which, under favourable conditions, compels the separation of certain crystals from their mother-liquid; or, *secondly*, the trans-