

nascent cells, together with the superabundance of the gemmules derived from both parents, and the subsequent self-multiplication of the gemmules, throws light on a widely different group of facts, which on any ordinary view of development appears very strange. I allude to organs which are abnormally transposed or multiplied. For instance, a curious case has been recorded by Dr. Elliott Coues⁵⁸ of a monstrous chicken with a perfect additional *right* leg articulated to the *left* side of the pelvis. Gold-fish often have supernumerary fins placed on various parts of their bodies. When the tail of a lizard is broken off, a double tail is sometimes reproduced; and when the foot of the salamander was divided longitudinally by Bonnet, additional digits were occasionally formed. Valentin injured the caudal extremity of an embryo, and three days afterwards it produced rudiments of a double pelvis and of double hindlimbs.⁵⁹ When frogs, toads, &c., are born with their limbs doubled, as sometimes happens, the doubling, as Gervais remarks,⁶⁰ cannot be due to the complete fusion of two embryos, with the exception of the limbs, for the larvæ are limbless. The same argument is applicable⁶¹ to certain insects produced with multiple legs or antennæ, for these are metamorphosed from apodal or antennæ-less larvæ. Alphonse Milne-Edwards⁶² has described the curious case of a crustacean in which one eye-peduncle supported, instead of a complete eye, only an imperfect cornea, and out of the centre of this a portion of an antenna was developed. A case has been recorded⁶³ of a man who had during both dentitions a double tooth in place of the left second incisor, and he inherited this peculiarity from his paternal grandfather. Several cases are known⁶⁴ of additional teeth having been developed in the orbit of the eye, and, more especially with horses, in the palate.

⁵⁸ 'Proc. Boston Soc. of Nat. Hist.,' republished in 'Scientific Opinion,' Nov. 10, 1869, p. 488.

⁵⁹ Todd's 'Cyclop. of Anat. and Phys.,' vol. iv., 1849-52, p. 975.

⁶⁰ 'Compte Rendus,' Nov. 14, 1865, p. 800.

⁶¹ As previously remarked by Quatrefages, in his 'Métamorphoses

de l'Homme,' &c., 1862, p. 129.

⁶² Günther's 'Zoological Record,' 1864, p. 279.

⁶³ Sedgwick, in 'Medico-Chirurg. Review,' April, 1863, p. 454.

⁶⁴ Isid. Geoffroy Saint-Hilaire, 'Hist. des Anomalies,' tom. i., 1832, pp. 435, 657; and tom. ii. p. 560.