by natural selection.[1] Thus Du Bois-Reymond: "One of the greatest difficulties presents itself in physiology in the so-called regenerative power, and — what is allied to it — the natural power of healing; this may now be seen in the healing of wounds, in the delimitation and compensation of morbid processes, or, at the farthest end of the series, in the re-formation of an entire fresh-water polyp out of one of the two halves into which it had been divided. This artifice could surely not have been learned by natural selection, and here it appears impossible to avoid the assump-

[1] "Still less explicable in any way thus far proposed are certain remedial actions seen in animals. An example of them was furnished in § 67, where 'false joints' were described — joints formed at places where the ends of a broken bone, failing to unite, remain movable one upon the other. According to the character of the habitual motions there results a rudely formed hinge-joint or a ball-and-socket joint, either having the various constituent parts — periosteum, fibrous tissue, capsule, ligaments. Now Darwin's hypothesis, contemplating only normal structures, fails to account for this formation of an abnormal structure. Neither can we ascribe this local development to determinants: there were no appropriate ones in the germ-plasm, since no such structure was provided for. Nor does the hypothesis of physiological units, as presented in preceding chapters, yield an interpretation. These could have no other tendency than to restore the normal form of the limb, and might be expected to oppose the genesis of these new parts." — HERBERT SPENCER, "The Principles of Biology," Vol. I. New York and London, 1909, revised and enlarged edition, p. 362.