

presented in attractive form and for the beginner is one of the best books of its kind with which I am acquainted.

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SCIENTIFIC JOURNALS AND ARTICLES

The Journal of Experimental Zoology, Volume III., No. 4 (December, 1906), contains the following papers: 'The Physiology of Regeneration,' by T. H. Morgan. Experiments on salamanders, earthworms and fish show that the rate of regeneration in a posterior direction is more rapid the further the cut surface from the original end. In other words, the more of the old part removed, the more rapid the new part regenerates. Other experiments show that this is not due to food conditions, but that the rate depends on a formative factor. It is suggested that it is the relation of tension in the old and the new part that is a controlling factor in regeneration and growth. 'Hydranth Formation and Polarity in Tubularia,' by T. H. Morgan. Experiments on tubularia show that the polarity is an expression of the direction of the gradation of the differentiated materials. The greater the differentiation in one direction the longer the road that must be traveled to produce a different kind of structure. The gradation acts as a physical factor in development, determining the tension relations in the old and new part. 'Studies on the Development of the Starfish Egg,' by D. H. Tennent and M. J. Hogue. This paper describes the parthenogenetic development of the starfish egg following treatment with CO_2 , the phenomena occurring as a result of first treating the egg with CO_2 and later fertilizing it, and the results of subjecting fertilized eggs to the influence of CO_2 . 'Some Experiments on the Developing Ear Vesicle of the Tadpole with Relation to Equilibration,' by Geo. L. Streeter. A study of the normal development of the function of equilibration in the tadpole, and the variations produced by removal and transplantation of the ear vesicle during the early larval period. 'The

Relation between Functional Regulation and Form Regulation,' by C. M. Child. The organism is to be regarded as primarily a dynamic or functional complex, and structure and form are visible expressions of dynamic conditions: consequently the regulation of form and structure is fundamentally a dynamic or functional regulation and only as such can its phenomena be satisfactorily interpreted. 'Study of the Spermatogenesis of *Coptocyela Aurichalcea* and *Coptocyela Gut-tata*, with especial reference to the Problem of Sex Determination,' by W. N. Nowlin. An investigation of two species of beetles revealed the presence of an unequal pair of chromosomes, the so-called 'idiochromosomes' of Wilson, which, we have strong evidence for believing, transmit or determine the character of sex. The small one invariably occurs in the male somatic cells and represents the recessive form of the female character; the large one in the female somatic cells and bears the male character. 'Torsion and Other Transitional Phenomena in the Regeneration of the Cheliped of the Lobster (*Homarus Americanus*),' by Victor E. Emmel. A comparison of the regenerative with the ontogenetic method of development. 'The Influences of Gases and Temperature on the Cardiac and Respiratory Movements in the Grasshopper,' by Eulalia V. Walling. The influences of gases and temperature on the respiratory and cardiac activities were found to be practically the same on segments of the isolated heart and isolated respiratory centers as in the normal grasshopper. Moreover, it was found that these activities may continue in such specimens as long as four days in an atmosphere of pure hydrogen.

DISCUSSION AND CORRESPONDENCE

NORTON'S ELEMENTS OF GEOLOGY

THE review of Norton's 'Elements of Geology,' which appears in a recent number of SCIENCE, Vol. 24, p. 590, prompts one to repeat the suggestion recently made, that the legitimate function of a review in such a periodical as SCIENCE is to give to the reader an accurate impression of the general character of the work, both as to the ground which