

of Orford, made the same observation, writing against him in defence of Aquinas. He said for example: "Rationes quas (Egidius) reprobat et solvit sunt rationes fratris Thome" (Cf. MS, Merton Coll., Oxford, 276, f45rb) and "Quod vero in fine distinguit . . . verum dicit . . . unde et fratris Thome est illa distinctio, sed aliquid oportuit dicere ut in doctis doctus appareret" (Cf. *ibid.* f.47ra).

In spite of this criticism the proofs of Dr. Koch remain convincing, and the Aegidian authenticity can, it seems, no longer be contested.

In the last two sections Dr. Koch gives the sources used by Giles, and the dating of the "*Errores*". The Latin critical text is very satisfactory. Two different apparatus are given; the one under the Latin text gives the *lectiones variantes*; in the other, under the English text, we find the sources. The translation by Dr. O. Riedl is accurate and free from the heaviness too often met in translation of philosophical works. The whole work deserves the thanks of all students of Mediaeval Philosophy. We hope that soon Dr. Riedl will be able to supply the missing section, adding a Bibliography, which the present work lacks. A. VELLA, O.P.

WHAT IS LIFE. By Erwin Schrödinger. (Cambridge University Press, 1944; 6s.).

Professor Schrödinger, one of the greatest of living physicists, has broken through the barriers of the specialists and given us, in this lively and readable book, a physicist's approach to the phenomena of the living cell. The marriage of the statistical method in physics with the facts of genetics is a fertile one, and the book will be read with a special excitement by those familiar with either of these fields of science. But it is a masterpiece of popular scientific writing for the intelligent reader; it does not insult his critical faculty, it does not seek to impress by mystifying; rather it seeks the clarity which leads to understanding and wonder.

The work falls into three sections, of equal charm but (so it seems to the reviewer) of unequal depth. In Chapters I to V, the author outlines the laws of heredity and the theory of chromosomes, genes and mutations devised to account for them. He applies statistical physics to the picture. The argument is roughly as follows. The persistence of hereditary traits through many generations indicates a considerable permanence in the structure of genes (which make up chromosomes, which control hereditary characteristics). But genes are very small—only big enough to contain about a million atoms. So small an assembly of uncombined atoms would not behave reproducibly; appreciable deviations would be expected from the statistical laws which govern ordinary macroscopic bodies. Therefore the atoms of a gene must be rigidly bound to one another—they must form a molecule. This conception of the gene as a rigid and permanent molecule is consistent not only with the familiar facts of Mendelian inheritance, but also with

the observed effects of temperature and X-rays on the frequency of mutations. So far the argument seems solidly grounded and the conclusion is a very important one.

In Chapters VI and VII the author attempts to proceed by similar methods to a physical explanation of life, i.e. of the unity of an organism; he seeks to answer the great question, Are living organisms subject to the laws of physics only? But the answer seems quite unsatisfactory, because it presupposes that an organism is fundamentally similar to (say) a crystal, and this ignores the fact that the order in an organism (manifested in the co-operation of its parts for the preservation of the whole) is specifically different from the order in a crystal or any other non-living system. This second part of the book seems to reduce to an attempt to make one science do the legitimate work of two. In the Epilogue, "On determinism and free will", the author contrasts the dependence of our bodies on physical laws with our consciousness of responsible action, and draws pantheistic conclusions. This third part of the book exhibits the usual depressing divorce of philosophy and science.

The great significance of this book, then, is that in the main it outlines an important synthesis of biological and physical lines of thought, and does so in a style that is both readable and free from facile short cuts. It deals only superficially with the question posed in the title. A book to buy, study and criticise.

E. F. CALDIN.

#### NOTICES

**EVERYBODY'S GUIDE TO PARLIAMENT.** By W. J. Brown, M.P. (Allen & Unwin, 7s. 6d.).

This is a breezily written account of that venerable paradox, the British Parliament. Informative chapters on such subjects as parliamentary procedure, the Party system, Mr. Speaker and members' pay, reveal in Mr. Brown a mixture of veneration for tradition and a desire for reform which must be the despair of the political theorist. He writes from an independent angle, and indeed his plea for the member free from the tyranny of the part Whip is one of the best chapters of an always interesting book. M.P.

**THE FAMILY FACES FORWARD.** (National Catholic Welfare Conference, Washington, D.C. n.p.).

A volume of addresses given at the Family Life Conference in February, comprehensive in their scope and notable for clarity and soundness on the application of moral principles. It is good to see so many Catholic mothers listed among the speakers. English Catholics have plenty to learn from America.

**PERSONALITY AND SUCCESSFUL LIVING.** By James A. Magner. (Bruce, Milwaukee; \$2.75).

This is the sort of thing that the Americans do supremely well. It is Christian psychology, firmly rooted in both revelation and