

1985 by men with vision. Now, 30 years later, we have reached Volume 23 and the year 1875, 16 years after the *Origin* and seven years before his death. By now, Darwin's major work was done and he was enjoying himself on little problems, like insectivorous plants. He was the recipient of a huge correspondence and in turn he was writing letters to friends, strangers, the learned, and the very uninformed but eager to learn.

One item of great interest in the year of this volume is the battle over vivisection, with Darwin working hard to make sure that the practice was allowed, if with supervision, in order that the undoubted medical benefits could continue to flow. At a more intimate level there was the battle with the new vicar in Darwin's home village of Downe, with Darwin determined to continue in his role as *de facto* squire with the rights and responsibilities that entailed.

Most important is that slowly but surely we are getting an unbelievable source of information on one of the greatest of scientists who ever lived and thought and worked. Who knows what treasures future generations will uncover? For now, as always, the edition is exemplary, with huge amounts of pertinent information in the notes and with amazingly accurate transcriptions of Darwin's appalling handwriting. A true monument of scholarship. My fervent hope is that I shall live to see the completion.

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HISTORY AND PHILOSOPHY OF BIOLOGY.

By Robert Kretsinger. *Hackensack (New Jersey): World Scientific Publishing*. \$98.00 (hardcover); \$58.00 (paper). ix + 351 p.; ill.; author and subject indexes. ISBN: 978-981-4635-03-5 (hc); 978-981-4635-04-2 (eb). 2015.

Its title notwithstanding, this book does not only engage with the history and philosophy of biology, but with the history of the natural sciences more generally. Its 46 chapters are grouped into four sections: History and Philosophy; Physical Sciences; Biology; and Society and Science. The volume touches upon a broad range of subjects. The first section has chapters on topics as different as Islamic science and emergence; the next section ranges from phlogiston to geology; the third section from medicine to race; and the final section from global warming to free will.

Each chapter begins with a short preview, followed by a chronological narrative, which highlights the main protagonists who have contributed to the respective focus area. The discussion of each protagonist covers roughly one paragraph. Hence,

in the chapter on Hellenic science we start with Thales, followed by Pythagoras, then by Euclid, and so on.

History and Philosophy of Biology covers a vast array of topics in relatively few words. It provides a quick overview of the canonical figures in the history of science, with an emphasis on biomedical history. The book is easy to read and rich in factual content. But it has serious limitations. Like any other volume, it faces a tradeoff between the breadth and depth of exposition—and its breadth comes at a cost. Kretsinger, who is an emeritus professor of biology at the University of Virginia, moves through history and philosophy with broad brushstrokes. Readers with an interest in historical detail and philosophical nuance may find the book shallow, and be annoyed by its small errors.

The lack of detailed discussion is particularly problematic in the latter chapters, where the author touches upon some controversial issues. In the chapter on race, Kretsinger cites, among others, the views on heredity expounded by Herrnstein and Murray in *The Bell Curve: Intelligence and Class Structure in American Life* (1994. New York: Free Press), as well as a quote by James Watson, according to whom there are racially based differences in human intelligence. Several scholars have severely criticized these views on both scientific and ethical grounds, as Kretsinger should be aware. One gets the impression, however, that the author cites his sources with approval. A similar impression transpires upon reading the chapter on faith and intelligent design (ID), where Kretsinger offers a "sympathetic analysis" of the views of some creationists and ID-proponents. Once again, the author's own stance remains somewhat implicit. Whatever this stance might be, here, as elsewhere, the book would have benefited from a more rigorous and critical discussion.

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GENERAL BIOLOGY

A BRIEF HISTORY OF CREATION: SCIENCE AND THE SEARCH FOR THE ORIGIN OF LIFE.

By Bill Mesler and H. James Cleaves II. *London and New York: W. W. Norton & Company*. \$27.95. xix + 312 p.; ill.; index. ISBN: 978-0-393-08355-2. 2016.

From long before Haldane's primordial soup, the origin of life has been a hard nut to crack. In this delightfully written and fairly comprehensive survey of the centuries-long history of the field—from