## Book Reviews

## Geologists and the History of Geology - An International Bibliography from the Origins to 1978

By W.A.S. Sarjeant Arno Press, New York, 5 volumes, 4526 pages, 1980 \$350.00

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"It takes a sort of inspired idiot to be a good bibliographer, and his inspiration is as dangerous a gift as the appetite of the gambler or dipsomaniac." So thought the American bibliographer and ornithologist Elliott Coues, who with less subjectivity also called bibliography "a necessary nuisance and a horrible drudgery that no mere drudge can perform." Such is the nature of this complex task, which demands many of the skills - but provides few of the rewards - of problem oriented research.

Although geology has been fortunate in the number of capable bibliographers that have laboured in its service, huge gaps - topical geographical, biographical - still presented problems. A major gap has been magnificently filled by this new work, which makes available for the first time a single comprehensive guide to the enormously diverse and scattered literature relating to the history of geology. At a time when increasing interest in the topic is everywhere apparent, it will be an invaluable research tool for historians of science, of ideas and of economics, as well as the librarian, educator and practising geologist.

Geology has played a major role in the development of Canada, yet it has been hard to gain an overview of its growth here. There are few modern studies apart from Zaslow's monumental history of the Geological Survey, and most early works are out of print, little known, and relatively unobtainable. Such important fig-

ures in Canadian science as J.W. and G.M. Dawson are unknown to the average Canadian. Adam's 'Birth and Development of the Geological Sciences' has been one notable Canadian contribution to the international history of the science, and it is gratifying that another Canadian Geologist has made the time -over two decades - to undertake this massive bibliography.

Professor Sarjeant is on the faculty of the University of Saskatchewan, and is well qualified for this task by the diversity of his geological interests, the extent of his own field work and research on five continents, and not least his notable collection of books on the history of geology.

The traditional task of the reviewer is to read critically every page of the work entrusted to his judgement. A bibliography of five volumes and four and a half thousand pages demands special treatment; I have read all the sections of written text, and sampled the bibliographical sections by critical examination of at least one entry on every page.

Its scope is nothing less than the biography of geologists and the history of geology on a world-wide scale, since the earliest development of the science. This inclusive goal is deliberately limited only by a reasonable exclusion of items in languages using non-latin alphabets. The first volume deals with the overall history of geology and allied disciplines. Geology is an untidy science, with complex inter-relations with other human endeavours. The select bibliographies of allied sciences are thus useful, though so many early geologists were medical men that a brief selection of sources in medical history would have been a useful addition. Valuable sections cover the history of museums, societies, voyages of geological discovery, and such significant events as earthquakes and volcanic eruptions. Canadian geologists will appreciate the notable section on economic geology, and there is room for such recondite (and fascinating) topics as the folklore of petroleum.

Volumes two and three are the heart of the work; the biographical material on geologists. The compiler has taken an appropriately broad view of contributors to geological science, and the ranks include such figures as Goethe and Ruskin, better known to society at large for contributions to other fields. Volume four indexes individual geologists by nationality, countries studied, and topics of interest. The fifth volume provides more conventional indexes of authors, editors, and translators.

The true test of an inclusive bibliography is its comprehensiveness. In the areas of European and North American Geology with which I am most acquainted, I have noted only one major omission, though there are others of lesser significance. This reviewer's current interests in the development of geology in western Canada, and of vertebrate palaeontology in North America, have been strikingly served by the bibliography, which has drawn to my attention a number of important sources not unearthed by other literary researches.

Coues' sweeping generalisation receives some support from Professor Sarjeant's commitment to continue the work. The supplements are likely to underline the value of his initial achievement, by presenting a limited number of omissions in the company of a body of geohistorical scholarship that shoud be stimulated and aided by this splendid achievement.

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