

reviews

Solar energy boom

D. O. Hall

Solar Energy: The Awakening Science. By D. Berham. Pp. 379. (Routledge and Kegan Paul: London, 1979.) £8.95.

WITH worldwide government-sponsored research and development on solar energy in 1979 approaching $\$1 \times 10^9$, it would be very worthwhile for anyone interested in solar energy, however remotely, to read this book. It provides an excellent and well written background to the technologies and personalities of those who have developed and are currently participating in the solar energy boom around the world.

As the United States has the largest and longest running government solar energy budget, about half the world total, its solar energy scene naturally occupies the majority of the book. However, the French solar energy scene is given wide coverage, as they have the third largest programme in the world and have had a sustained effort for many years. Unfortunately the very large Brazilian bio-fuels programme ($\$300 \times 10^6$ per year) is not dwelt on; nor is the large Saudi Arabian programme ($\$25 \times 10^6$ per year) nor the other Arab solar energy programmes which are also large. The German solar energy effort is also not discussed, even though their R & D budget is over $\$30 \times 10^6$ per year; and like the French they have substantial government tax incentives for industries and individuals to install solar energy devices. The United Kingdom solar energy effort (government R & D spending $\$3 \times 10^6$ per year and no tax incentives) commands a whole chapter. We are credited with having "the thread of originality" (a passively heated school near Liverpool, built in 1961) but "certainly do not believe in trying to solve the problem of solar energy by throwing money at it"—does this sound familiar?

I can thoroughly recommend this book. I read it from cover to cover in a short time but I am probably too interested in solar energy so as to be termed "unusual" or other less kindly epithets. The background work and interviewing which the author (a science writer for UNESCO in Paris) obviously put into the writing of the book comes across clearly. The technical details are kept to a minimum,

and the explanations of the various solar energy systems now operating, or on the drawing board, for houses, factories, swimming pools, satellites, power towers, farms, and so on, are remarkably lucid. It is therefore good for all sections of the community who want to find out what is behind all the jargon which inevitably seems to accompany a technical field. Sometimes one wished for less snippets about the motels and meals and even more about some of the personalities, but the personal flavour of writing is attractive—don't be put off by the first two or three pages (unless of course you like Brittany!) A truly excellent index provides a ready means of finding any topic, person, place, laboratory, company, committee, country (and so on) mentioned in the book. In fact just reading through the index gives one quite an overview of the varied interests and technologies in the field of solar energy.

The final chapter was completed in 1978 and gives an up-to-date view of the status of the implementation of

solar energy programmes in the USA—5,000 solar heated and 50,000 solar hot water houses ($\$30 \times 10^6$ annual market) with a projection of 2.5×10^6 solar heated houses by 1978 ($\$1 \times 10^9$ annual market). The State of California could not wait for the federal government (which at the end of 1978 offered tax credits up to $\$2,200$ for each solar energy installation) and became the first State to offer generous incentives—"home owners get a tax credit of 55% up to $\$3,000$ on a purchase and installation of a solar energy system. Businesses are also given a 25% tax credit if their systems cost more than $\$6,000$ ".

The author is not a starry-eyed "solar nut", as he asks searching questions, expresses many doubts throughout the book, and rightly stresses energy conservation techniques right from the start. □

D. O. Hall is Professor of Biology at King's College, University of London, and chairman of the UK Section of the International Solar Energy Society.

Medicinal botany

Healing Plants: A Modern Herbal. Edited by W. A. R. Thomson. (Macmillan: London, 1978.) £9.95.

UP to a few years ago very few books on medicinal plants had been written this century for the layman, certainly in English. There was Mrs Grieve's *A Modern Herbal*, published in 1931, as well as some charming if rather less practical books by E. S. Rohde, which came out about the same time. Mrs Grieve's work covers a wide range of plants, is packed with information, much of which is difficult to find elsewhere, and is a sensible, down-to-earth publication even if it does not contain much information on the chemical constituents of plants (a great deal of work has been done on this in the past fifty years). Nevertheless, I think that when reviewing new books on medicinal plants it is fair to use Mrs Grieve as a standard by which to judge them. The kind of people who will buy and use these new books are probably the same kind as those who bought and

used *A Modern Herbal* in the 1930s.

There seems to be a much wider interest in medicinal plants now than was common even ten years ago. This is no doubt partly a spin-off from the ecology movement but is also the result of the related desire for a simple life, especially among townspeople. Whatever the basis for this interest, it is illustrated by the increase in health food stores selling herbal remedies for a wide range of afflictions. The market for books on medicinal plants is provided with an ever-increasing flow of works of varying merit. The one reviewed here is a typical example and like the curate's egg may be described as good in parts. To start with, it is very attractive to look at; the illustrations—both colour photographs and reproductions of old botanical drawings—are on the whole excellent, as is the printing. But I found the matter contained in the book (and its layout) rather disquieting.

The book is divided into a number of alphabetical lists interspersed with chapters on healing plants and their