expressed wish (p. 169) to be regarded as applied radiation chemists. This section is packed with useful information and could be read with profit by any physical chemist.

The future historian of this branch of science will be fascinated by the historical digression in Chapter I and by the remarkable prescience of André Debierne (1874–1949), to whose memory this volume is dedicated and which has been brought to light by the assiduous reading of the editor. The same historian will be saddened by some misspelt proper names, and in particular by repeated reference to J. J. Thompson, but this is a small blemish on an otherwise stimulating and most useful book.

F. S. DAINTON

## **DEVELOPMENTS IN DOCIMOLOGY\***

Views and Prospects from Curzon Street Seven Essays and Addresses on the Future of Education. By Percy Wilson. Pp. v+113. (Oxford: Basil Blackwell, 1961.) 12s. 6d. not.

Examinations and English Education Edited by Dr. Stephen Wiseman. Pp. xx+188. (Manchester: The University Press, 1961.) 21s. net.

INSPECTION is usually thought of, especially by those inspected, as a form of examination, and of course it is. Nevertheless, in the early days of the Inspectorate Dr. Kay—later Sir James Kay-Shuttleworth—said, "this inspection is not intended as a means of exercising control, but of affording assistance". This tradition, steadily maintained from Matthew Arnold to Mr. Wilson (who quotes this directive), has made the Inspectorate a highly civilized institution: examining has been a servant of broader educational purposes.

Dr. Wiseman, in the volume he has edited, comes to examinations more as a technician; but his position is essentially the same. "I believe," he says, "that good examinations are useful and desirable: without them education would be poorer and much less effective." The question is, how to make them 'good'. But good for what—as a test of past attainment, as a means of selection, as a predictor of future academic or practical success, as stimulating or frustrating good teaching and education itself? To the answers to these questions the technicians of examinations have an immense amount to contribute, for it is true to say that very often when we examine we are not clear in our minds as to what we are trying to do, and therefore we are all the less clear about the effects of our examining. But on the other hand, it is the subtle and silent temptation of testers and examiners to forget the larger purposes that they must subserve: ten 'good' examinations that weigh too heavily and in the wrong way on a few brief years of school and university may in their total effect be not good, but bad. Dr. Wiseman believes that it is time for a thaw in what he calls the cold war between the statistically minded psychologists and the traditionally minded teachers, and, especially with his chief collaborator Prof. R. A. C. Oliver, he tries to clarify the issues so that this may begin. He speaks not only with a great deal of evidence behind what he says but also with the voice of forceful good sense.

There are places, of course, where Dr. Wiseman could be challenged. In Britain (whatever may have

been the case in the United States) opposition to selection of able children for specialized education and the preference of some for the comprehensive principle has not been based on dislike of an intellectual élite so much as of a social élite. Again, although Dr. Wiseman promises a consideration of the 'backwash' effect of school examinations on education, and although he does say some useful things under this heading, not a single contributor to his book is a schoolteacher, and one nowhere gets the feeling of what it is like to teach, what difference it makes to one's daily work with border-line Tom or boy-minded Joan to be under the pressure of highly systematized and prestige-conferring examinations (a comparable series of lectures at King's College, Newcastle, held in the same academic year did try to do this, and it is highly important). But the basic position of Dr. Wiseman and Prof. Oliver commands respect and sympathy. They are not merely on the defensive. They are actively looking for means of improvement in educational terms. Not the least interesting part of the book is Prof. Oliver's tentative evaluation of the general examination papers set by the Northern Universities Joint Matriculation Board; it should be read especially by those university people 'know' that such papers cannot be satisfactory.

One is not so happy with all the contributors to this volume. Dr. Petch certainly gives the impression of being on the defensive. He dismisses questions that he ought to have gone into with a merely shoulder-shrugging phrase. It is just a 'simple fact' that there is little correlation between results in English literature and results in English language; we cannot really discuss whether we specialize too young because we cannot be precise as to what 'too young' means; 'any' subject can be used to liberalize the mind of the specialist pupil. As to the first, one might retort that it is at least so odd a fact that it merits investigation; as to the second, there might at least be a little comparison with what happens in other countries; as to the third. one might ask whether all subjects, from history to shorthand and typewriting, are on the same level.

Mr. Wilson would probably dislike very much thinking of himself as a technician. He is a professional, but the profession is incontestably liberal. His book is a printing of papers delivered to teachers and others on subjects ranging from the history of the Inspectorate to the teaching of various subjects. Especially interesting is his account of those very different but both great men, Matthew Arnold and Robert Morant. Morant undoubtedly did major work in giving us a proper system of public secondary education; but one would have liked Mr. Wilson's comments on the charge that by cutting off academic secondary education from technical he set us back for decades in comparison with some of the countries of continental Europe. Perhaps most significant of all in Mr. Wilson's book is his warning that the frontier area now, in which we simply must organize in a rational but civilized way, is not any part of school education, but higher education.

Finally, one small point. Mr. Wilson, a distinguished civil servant, refers to an old rhyme about a man who dreamt that Shakespeare did badly in the English Tripos because 'he had not read his Bradley'. The correct (that is, Cambridge) version of this rhyme begins:

'I dreamt the other night that Shakespeare's ghost Was sitting for a Civil Service post.'

H. L. ELVIN

(my italics).

<sup>\*</sup> Docimology: the science of examining (term due to Prof. Laugier of the University of Paris).