consult some of the references for a fuller discussion of the rationale of the cohort method. In the introduction Professor Backett points out that the records from Scotland can play an important part in elucidating the reasons for regional and secular variations in mortality from cancer of the digestive organ.

A. M. ADELSTEIN

Noise, Hearing and Deafness. By Philip H. Beales. (Pp. 199; 42s.) London: Michael Joseph. 1965.

There is no doubt that a requirement has long existed for a book of this sort. Aimed at the educated layman, deaf person, parents of deaf children, and industrial medical officers, it contains much interesting material.

The sections on child deafness, education of the deaf, and the medical and surgical treatment of deafness will be especially useful to the non-specialist.

The specialist and the industrial medical officer may disagree with some of Mr. Beales' interpretations of the authoritative literature concerning the relationship between noise and hearing. For example the Wilson Committee's sober appraisal of noise and its effect is quite severely criticized. The Committee are upbraided for omitting reference to the scientific work which receives more than occasional mention in this book and which, in Mr. Beales' view, proves that all noise is harmful.

As far as this particular evidence is concerned, the Wilson Committee were correct in their rejection because the comparisons contained in it are scientifically inadmissible. The hearing of a quiet living Sudanese population was compared with that of urban Americans examined during the 1956 Wisconsin State Fair. Reference to the original papers shows that, on the one hand, the age structure of the Sudanese was arrived at by guesswork, and on the other, that the urban Americans were a self-selected and therefore heavily biased group. If more suitable groups are used for the comparisons the differences, of which Mr. Beales makes so much, become less conspicuous and perhaps even trivial.

There has never been, so far as I am aware, any real attempt to discredit the widely held notion that noise is bad for people. It seems a pity therefore that this otherwise interesting and useful book has been spoilt by over-emphasizing one point of view.

G. R. C. ATHERLEY

Principles of Medical Statistics, 8th Ed. By A. Bradford Hill. (Pp. ix + 381; 15s.) London: The Lancet Ltd. 1966.

'The attractions of this little classic lie in the choice of the statistical methods for exposition, the manner of their presentation, and perhaps most of all, on the emphasis implicit throughout the book that these methods are merely aids to, not substitutes for, clear thinking throughout an investigation. . . .' This extract from a review of an earlier edition is as appropriate to the eighth as it would have been to the first, which appeared nearly 30 years ago.

The seventh edition was reviewed in this journal (*Brit. J. industr. Med.*, 1962, 19, 148) and will be well

known to most readers. In the present edition some minor alterations, to what has appeared before, and two major additions have been made. Sir Austin has taken the opportunity to expand his comments on the ethical implications of clinical trials and has included the texts of the Medical Research Council's statement on 'Responsibility in Investigation on Human Subjects' and the World Medical Association's Declaration of Helsinki ('Recommendations Guiding Doctors in Clinical Research'). The final chapter, now titled 'Statistical Evidence and Inference', has been expanded to include an important discussion on the problems inherent in the interpretation of the associations between disease and environment observed in epidemiological studies: the discussion typifies the author's practical approach to such problems by enumerating a series of points to be considered before a 'cause-and-effect' hypothesis can be accepted or rejected.

I shall look forward to future editions because it has always been my hope that one day Sir Austin will introduce us to analysis of variance as painlessly as, in the past, he has introduced us to other statistical methods.

E. A. CHEESEMAN

Particle Size—Theory and Industrial Applications. By Richard D. Cadle. (Pp. 390; illustrated; 132s.) London: Chapman and Hall. New York: Reinhold Publishing Corporation. 1966.

The importance of particle size in relation to pneumoconioses and community air pollution problems is well known by readers of this Journal. Perhaps less well known is the importance of particle size in paint technology, in the ceramic industry, in powder metallurgy, in synthetic detergents and paper manufacture. New technologies in aerospace developments and aerosol packaging, virtually unknown 20 years ago, have also produced new particle problems.

The book includes sections on all these, besides an extensive review of the physics of fine particles and the statistics of particle size analysis. The scope is so great that individual aspects are necessarily covered rather superficially. It is not a book for the beginner, nor for the practitioners of occupational medicine and hygiene. Rather it is for the scientist or development engineer in the field of particle technology who will undoubtedly be stimulated by the ideas and methods used in related fields. Many, but by no means all, of the important references are given in the text.

This is an unusual book, broad in scope and moderately advanced, but quite readable. It is rather expensive at \$16.50 for 390 pages.

S. A. ROACH

Erratum

Evolution of Concepts in Industrial Medicine by T. A. LLOYD DAVIES

On p. 170 of the July issue of this journal the figure in the bottom row of the last column of the table should read 2,086 not 20,786.