the thirty-two chapters is of different authorship, and the authors appear to have been given free rein in the choice of subject, so that a considerable overlap occurs. Some contributions are limited to the specific research field of the author, e.g. "The Determination of the Differentiation of the Skin and the Cutaneous Appendages of the Chick Embryo" by P. Sengel, while others review a wide field, e.g. "Enzymes of the Epidermis" by R. A. Ellis. Perhaps one should begin by saying that nearly half the contributions, or fourteen in all, are devoted to some aspect of keratin, keratinization or the stratum corneum, ten to differentiation, eight to enzymes and metabolism, five to pathology, three to permeability, two each to vesiculation and oncology and one each to the basement membrane and dermatoglyphics. (I know this adds up to more than 32, but my categories are not mutually exclusive.)

Naturally, among so many contributions, a considerable variation in standard may be detected, but several plums are to be found among the pudding. For example, F. D. Malkinson has contributed a comprehensive review of the factors known to influence the passage of compounds through the stratum corneum, G. Swanbeck proposes a theory of the coiling of keratin which accommodates experimental data irreconcilable with previous models, and A. M. Kligman's penetrating re-assessment of the anatomy of the stratum corneum reveals a much higher degree of organization in this tissue than had previously been realized.

Although newcomers to the field would be well advised to begin with a more coherent text (such as W. Montagna's *Structure and Function of Skin*), *The Epidermis* should be of interest and value to anyone directly concerned with the properties and organization of the body surface.

Water Pollution Research, 1964. The Report of the Water Pollution Research Board with the Report of the Director of the Water Pollution Research Laboratory and Cumulative Index for the Years 1952–1964. HMSO, London, 1965. pp. viii+173. 13s.

The major portion of this report is concerned with methods of removing pollution and of improving analytical techniques. Some interesting data are also available on the toxicity of contaminants to fish, and the indications are that the dominant hazards arise from the presence of copper, zinc, monohydric phenols and ammonia (cf. *Fd Cosmet. Toxicol.* 1965, **3**, 365). A study on the toxicity of fluoride to fish is reported, and the results obtained substantiate previous American reports that 1 ppm fluoride does not constitute a hazard to the fish population. Two sources of pollution which will almost certainly tend to increase in intensity in the future are industrial wastes and detergent residues. It is comforting to know that both industrialists and the Water Pollution Research Board alike are keeping these problems under close scrutiny. In the case of pollution, be it of air or of water, prevention is obviously always the best way of coping with the increasing problems.

The Anatomy of the Laboratory Mouse. By Margaret J. Cook. Academic Press, London–New York, 1965. pp. v+143. 35s.

Considering the importance of the mouse as an experimental species in biological research, it is remarkable that an atlas of this kind has not been produced before. However, the need has now been competently met. To fulfil an assignment such as this presupposes a combination of time, expertise, patience and availability of specimens. All four prerequisites were satisfied during Miss Cook's stay at the Laboratory Animals Centre (LAC), Carshalton, and the outcome is a clear and detailed account of the externals, skeleton, viscera and circulation of the LAC Grey mouse strain. This particular animal was selected because it was available

in sufficient number and was large enough to facilitate precise dissection. Mention is made of possible strain variations but these would not be serious enough to cause major error. Coloured latex was injected to demonstrate the vessels and this technique, together with the 125 painstaking line-drawings by the author, has resulted in a volume of value to workers already in the field of biology as well as to students.

What is rather surprising in a work of this kind is the total absence of information on the central or peripheral nervous systems and the eye. It is to be hoped that Miss Cook will make this her next field of endeavour.

Advances in Drug Research. Vol. 1. Edited by N. J. Harper and Alma B. Simmonds. Academic Press, London–New York, 1964. pp. x+209. 50s.

It would seem desirable to limit the number of series entitled *Advances in* . . . . . to those distinct fields in which sufficient major advances occur to justify regular publication, and it is not at first obvious that drug research constitutes such a field as opposed to pharmacology, clinical chemistry, physiology, biochemistry and the other medical and chemical fields already catered for. Moreover the present volume shows some internal signs of barrel-scraping, in that one author has participated in two of the four articles, and of the remaining two, the one on "Physiological Transport of Drugs" seems out of place (to say the least) in this volume.

Penicillin, the subject of the first article, can hardly be considered a recent discovery, but the authors have wisely concentrated on the more recent development of modified penicillins with improved characteristics. The article on "Physiological Transport of Drugs" which follows is more superficial in its treatment. Much of the bibliography refers to publications of the early post-war years which have been reviewed repeatedly, and many important subjects are dismissed in half a page or less. The policy of the editors seems to have been to keep the best parts until last, as the subjects of the last two reviews, antitussives and adrenergic neurone blocking agents, do represent advances in drug research which have taken place over the last few years and are now ripe for collection into review form. But could not room have been found for them in *Advances in Pharmacology* or *Advances in Internal Medicine?*