

### The Nature of Experience

By Sir Russell Brain, Bt. (The Riddell Memorial Lectures, Thirteenth Series, delivered at King's College in the University of Durham, 12, 13 and 14 May 1958.) Pp. viii+73. (London: Oxford University Press, 1959.) 8s. 6d. net.

ACCORDING to the trust deed, the Riddell Lecturer is required to discuss "the relation between religion and contemporary development of thought". It is interesting to look back over past titles, and to see how successive speakers have interpreted their task. In this context, how well these discourses—the thirteenth—fit into the series, and maintain their tradition.

The theme is the field of perception, which the author explores with the object of attaining a view sufficiently comprehensive to restrain, if possible, the excessive specialization which is the outstanding characteristic of modern thought. The three lectures are entitled, (1) "Vision and Fantasy", (2) "The Nature of Perception", (3) "Symbol and Image". Some useful notes and references follow at the end.

Sir Russell is a leading neurologist, and one would expect to find a telling picture of mental processes; in the event, this knowledge is linked with rare aesthetic insight.

The first lecture reviews the conventional sense-impressions and their many contrasts with the structure of matter as the physicist knows it. The author believes that the qualities perceived are constructs of our own brains. Of particular interest is the account of abnormal states produced, for example, by mescaline. The second lecture contains a well-balanced review of the objections which have been raised against the writer's theory. In the last lecture, perhaps the most difficult, art is taken "as the embodiment of feelings in perceptual form", and thus embraces that subjective element deep in human nature which raises it, at times, to an image of the Divine.

F. I. G. RAWLINS

### Kingdom of the Octopus

The Life-History of the Cephalopoda. By Frank W. Lane. Pp. xx+287+48 plates. (London: Jarrolds Publishers (London), Ltd., 1957.) 30s. net.

MR. LANE'S book provides a collection of superb photographs for which the amateur naturalist and professional zoologist must be equally grateful. The full bibliography, clearly representing an immense amount of hard work, will be of value to the teuthologist, making available a number of obscure references and enabling him to examine for himself the provenance of the many curious and often entertaining legends and observations embodied in the text, and thus to make his own estimate of their scientific value.

The text has the inevitable failings of one written by an author who has no (and does not claim to have) specialist knowledge of the subject, and for whom it is therefore hard to assess the relative importance of the different facts and concepts which he has collected. Without such evaluation, however, verbally accurate statements can become misleading, and this fault is intensified, in Mr. Lane's book, by a tendency to dramatic presentation which results in important aspects of the subject receiving less full treatment than relatively trivial but striking details. A similar weakness is to be found in the references

made to authors in the text. Mr. Lane is most careful to quote his sources; but, too often, equal weight is apparently given to the long-established findings of famous zoologists, to isolated observations scarcely yet verified, and even to statements, not necessarily accurate, introduced casually in the writings of specialists on other fields.

These failings will not diminish the interest which the rich anecdotal material and fine illustrations will rouse in the general reader; but, as a result of them, the book is scarcely suitable for the use of the student who seeks accurate and balanced information, and is not a book to be used for professional teaching without constant checking.

ANNA M. BIDDER

### Die gesunden und die erkrankten Zahngewebe des Menschen und der Wirbeltiere im Polarisationsmikroskop

Theorie, Methodik, Ergebnisse der Optischen Strukturanalyse der Zahnhartsubstanzen samt ihrer Umgebung. Von Prof. W. J. Schmidt und Dr. A. Keil. Pp. 386. (München: Carl Hanser Verlag, 1958.) 48 D.M.

THIS book is undoubtedly a classic of its kind by authors who are world authorities in this particular field. It deals in the greatest detail with the normal structure of the calcified tissues of the teeth of man and animals, and then proceeds to a consideration of their structure in disease. The study of the calcified tissues of the teeth has always presented considerable difficulty. The two methods which have been used most are microradiography and polarized light. It seems a pity that no attempt has been made in this book to consider microradiography; but there is no doubt that the use of polarized light as here described and the interpretations given make it a very delicate method for this work. Much difficulty has been caused in the past by faults in interpretation arising from form birefringence and the possibility of birefringence arising from the organic matrices of some of these structures, but these are now all explained in detail, giving a proper scientific basis for further study.

This is the only authoritative work on the subject. It is beautifully produced and very well illustrated. No department, dental or zoological, dealing with the structure of normal or diseased teeth can afford to be without it.

A. I. DARLING

### Hundred Years of the University of Calcutta

Supplement. Pp. xviii+732+95 illustrations. (Calcutta: University of Calcutta, 1957.) n.p.

THE Centenary History of the University of Calcutta was reviewed in these columns a little more than a year ago (*Nature*, 180, 1152; 1957). This massive supplement adds a large volume of material, including descriptive accounts of the 274 colleges which are or have been affiliated with the University; similar accounts of the development and present state of the institutes and departments of the University; a select list of research publications; a list of University and College teachers in 1956; and a record of the speeches and ceremonies with which the centenary was celebrated in January 1957. There are nearly one hundred attractive photographs, chiefly of college buildings. This is the largest University in the Commonwealth—probably in the world—putting itself on record for posterity.

R. S. ATKEN