

may be noted that the lizard is one of the forms of the sex-totem in South Australia. In connection with children, it is interesting to note that we have in the Euahlayi a variant of the Arunta belief recorded by Strehlow, which has also a close connection with the belief of the northern Arunta visited by Spencer and Gillen.

An important subject, on which little information was previously available, is that of the *yunbeai* or individual totem, which is usually confined to medicine men, but among the Euahlayi is held to be granted to their special favourites. More important still is the information about Byamee. Unless Mrs. Parker's evidence can be impeached on the ground of European influence, it will henceforth be impossible to deny that the Australians have gods and a religion. We learn from this work that prayers are offered to Byamee both at the Bora and at the funerals of men.

Mrs. Parker alludes to the boomerang, and provides mathematicians with another problem in the shape of the performances of the *boodthul*, a miniature club which travels further if it is thrown through the top of a bush than if it has an unimpeded flight. The book contains six illustrations by a native artist. Mrs. Parker does not mention them, but she has informed the present writer that the artist had no European training. It may, however, be surmised that he had seen European pictures. N. W. T.

#### BORIC ACID AS A FOOD PRESERVATIVE.

THE report of the English departmental committee on the use of preservatives in foods contains voluminous evidence on the harmful nature of most of the antiseptics employed in commerce. It was issued in 1901, and among its recommendations one finds that the use of any preservative in milk should be constituted a punishable offence. It, however, makes an exception in the case of butter and cream, which are substances taken in relatively small amounts, and allowed 0.5 per cent. of boric acid in the former, and 0.25 per cent. in the latter case.

Those who have had the time to read the evidence will be struck with the almost complete unanimity of the medical witnesses on the harmful effects produced by boric acid and its compounds. Unfortunately there will always be some who disagree with the majority, and it is particularly unfortunate from the point of view of the public welfare that one of these is Dr. Oscar Liebreich, whose opinion is on most subjects entitled to careful consideration and respect. The special pleading on behalf of boric acid and borax contained in Dr. Liebreich's former publications are repeated in the pamphlet just issued, and we fear that the useful work of those who are trying to prevent adulteration, and protect the public from those tradesmen who cover their misdeeds and want of cleanliness by the employment of antiseptics dangerous to health, will be seriously impeded thereby.

The question has also become an acute one in America, and the United States Department of Agriculture appointed Dr. Wiley, their principal chemist, to investigate the matter on a large scale by experiments on human beings, over a long period. Dr. Wiley's report was most unfavourable to the use of these preservatives; the ill-health set up in the subjects of his experiments, and the alterations in bodily metabolism to which this was due, are described in detail, and furnish systematic evidence on the subject which confirms what was known from clinical experience, and to those who had experimented previously

<sup>1</sup> "Third Treatise on the Effects of B-rax and Boric Acid on the Human System." By Dr. Oscar Liebreich. Pp. vii+70. (London: J. and A. Churchill, 1906.) Price 5s. net.

on animals. To the unprejudiced observer Dr. Wiley's report settled the matter once and for all.

The special object of Dr. Liebreich's new brochure is to criticise some details in Dr. Wiley's work. This is always an easy thing to do when the subjects of an experiment are numerous, and in the human subject in particular it is often difficult to obtain precise details. Some of these, on account of the ill-health set up by the drug, had to abandon the continuation of the observations. This obviously reduces the number of observations, but at the same time is in itself a striking piece of evidence against the continued use of borax and boric acid. Dr. Liebreich does not dispute the ill-health of Dr. Wiley's willing subjects, but he is driven to attribute this to other causes, like inefficient hygienic surroundings. He does not dispute the loss of body weight, but says this is not by any means always injurious.

Those interested in this most important question should of course read both sides, and one sincerely trusts that in this instance the weight of a great name will not be allowed to overbalance the all but universal testimony of others to the contrary.

#### PROF. W. F. R. WELDON, F.R.S.

THE 'seventies of last century may be said to have witnessed the renaissance of biological studies in Cambridge. It was in the year 1870, if we mistake not, that Michael Foster, at the invitation of Trinity College, became prælector in physiology and founded the great school for which the university has since been famous. Of his pupils the greatest was F. M. Balfour. He very soon became the centre of a new system which was thrown off, so to speak, from the main body, and rapidly acquired form and influence.

Weldon was one of the most distinguished products of the zoological school which was in this way established. He was the son of Mr. Walter Weldon, F.R.S., the distinguished chemist, and was educated at King's College, London. He entered at St. John's College, Cambridge, in 1878, of which foundation he became first a scholar and in 1884 a fellow. After taking his degree in 1881 he at once threw himself with characteristic vigour and disinterestedness into zoological teaching and research. He became demonstrator in comparative anatomy in 1884, and held the office for one year. In 1885 he was appointed to the newly-established lectureship on the morphology of the invertebrata, which office he held until he left Cambridge in 1891. As a lecturer Weldon is not likely to be forgotten by those who heard him. He was remarkable for the ease and mastery with which he handled his subject, and for the earnestness and clearness of his teaching. It was impossible to sit inert under him; he had the gift of compelling attention.

Weldon's early researches were mainly concerned with morphological problems, the study of which had been so strongly stimulated by the work of Darwin. In the 'sixties, 'seventies and early 'eighties of last century the hope existed that it would be possible by minute morphological study actually to trace the pedigrees of existing organisms and to get some comprehension of the wonders and complexities of animal structure. In the 'eighties, however, with the progress of experience it began to be obvious that these hopes could not be realised, that the problem could not be solved by morphology, and that we must turn to other sources if we wanted to progress in ideas. Weldon was soon touched by the scepticism which thus arose, and cast about in the latter part of his time at Cambridge for new methods. These he saw must come in part at least from an exact study of variation, and