

of species so few details that in its present form it is of little value. This may be the fault of the subject rather than of the authors, but had an attempt been made to give a key-index to the species and their recognition, this would have been of much use. With these reservations, the authors are to be congratulated on having produced a work which must for some time to come remain the standard one on the subject.

The tubercle and acid-fast bacilli met with in milk and the biology of the tubercle bacillus are fully and adequately treated, and a number of coloured and other illustrations of cultures and colonies are given which will be of the greatest service to those who are unable to consult original papers. As regards the relation of bovine and human tuberculosis, a judicial and judicious summary is given, and the authors express the provisional opinion "that tuberculosis in all animals is generally one and the same disease, but that it differs in various ways in different animals and according to the strain and virulence of the infecting bacillus. That human tuberculosis can be transmitted in certain circumstances to animals we do not doubt. There is also *prima facie* evidence to show that the reverse proposition is true, namely, that under certain conditions bovine tuberculosis is transmissible to man. We therefore look upon the two diseases as different species or varieties of one and the same generic disease and intercommunicable. Whilst we hold this view in respect to the communicability of tubercle, we do not for one moment suppose that its transmission through milk is very frequent or very widespread. The great field of infection in tuberculosis is from animal to animal, and from man to man, and cross-infection is probably less common than is generally supposed."

This opinion practically coincides with that expressed in the recent report of the Royal Commission on Tuberculosis. Dealing with outbreaks of epidemic disease due to an infected milk supply, scarlatina, enteric fever, diphtheria, epidemic diarrhoea, cholera, &c., receive attention, and the details of many of the principal outbreaks are summarised. As regards the celebrated Hendon outbreak of scarlatina, the whole of the facts is stated, and not a portion only, as is generally the case, and the authors conclude, "we are of opinion that the exact origin of the London epidemic at that time has not yet been, and now probably never will be, demonstrated." It is to be hoped that future writers on the subject will note this.

The last portion of the book deals with the control of the milk supply (*a*) by the State, and (*b*) by private enterprise, with useful appendices on legal enactments and model regulations for dairies, &c. The summary on milk legislation in the various countries of the world is especially to be commended. Tuberculin is touched upon, and the old and the new tuberculins are described, but no mention is made that it is the *old* tuberculin which is employed for cattle testing. The sections dealing with pasteurised and sterilised milk are very brief, and might well be expanded in a future edition, while condensed milks seem to be unnoticed. The book is well produced and illustrated, but the index might with advantage be fuller.

R. T. HEWLETT.

OUR BOOKSHELF.

Handbook to the Natural History of Cambridgeshire.
Edited by J. E. Marr and A. E. Shipley. Pp. viii+260: (Cambridge: University Press, 1904.) Price 4s. net.

THE little volume before us affords an excellent example of the thorough-going and careful manner in which every detail connected with the late meeting of the British Association at Cambridge was thought out and worked out by the responsible executive. As a matter of fact, the volume in question is likely to be much more than a mere ephemeral production, and will probably take its place as one of the standard text-books in the scientific teaching of the university; for it will scarcely be disputed that a thorough knowledge of the natural history of the district in which the student resides is one of the very best aids towards attaining a comprehensive grasp of biology and geology in general. The term natural history, it should be mentioned, is employed in this work in its very widest and most extensive sense, embracing not only zoology and botany, but likewise geology and palæontology; while the scope of the undertaking is still further increased by an excellent chapter on prehistoric archæology.

For the planning and supervision of a work of this nature no better editors could possibly have been found than Messrs. Marr and Shipley, the one gentleman being an eminent authority on geology in general, and that of the district in particular, while the other is no less distinguished as a biologist. Dr. Marr, in collaboration with Mr. Fearnside, has contributed the introductory chapter on physiography, but Mr. Shipley has contented himself with purely editorial functions. For the other chapters of the work the editors have been fortunate in securing the (gratuitous) services of a number of specialists, at least two of whom happened to be engaged on the natural history of Cambridgeshire for the "Victoria County History," and were permitted by the council of that undertaking to make use of their labours for the benefit of the volume before us. Hitherto no complete lists of the fauna of Cambridgeshire appear to have been published, and Mr. H. H. Evans's account of the birds of the county may be cited as an excellent example of the manner in which such local faunas should be described. It was somewhat unfortunate that in the account of the vertebrate palæontology of the county the introduction of a personal element was unavoidable; but the proposal contained therein, to name a species after the well known palæontologist whose work is criticised, may be taken as an indication of the absence of any trace of ill-feeling on the part of the writer.

Both editors and authors are to be congratulated on the production of such an excellent and comprehensive local "natural history" in such a small compass, the permanent value of the work being largely increased by the beautifully coloured geological map of the county.

R. L.

Theorie der Elektrizität und des Magnetismus. By Dr. I. Classen. Band i. Electrostatik und Electromagnetik. Pp. x+184. (Leipzig: G. J. Göschen, 1903.)

THE conventional text-book of electricity starts with the supposition that the forces exhibited by electrified bodies can be attributed to a something called electricity which resides on material bodies. Quantitative laws are developed, and we are led up to the Faraday-Maxwell conception of the medium as the real seat of electrical action.

Prof. Classen, like many others, finds this method unsatisfactory. The first view presented is too narrow; its arbitrary character cannot always be realised, the