

style and seem to reproduce the spirit of the original as well as could be expected of narratives not based directly on Indian texts. The practise adopted by Mr. Merriam, as before him by Curtin, of speaking of the animal, or better, pre-animal, characters by their Indian names instead of by the English translations of these names is hardly to be commended. Nothing is gained thereby. The Indian names are not really proper nouns, but merely the ordinary words for the animals referred to, so that their use not only taxes the memory of the reader, but, to some extent, gives him a mistaken idea of the character of the mythology. Yet it would be mere carping to dwell on so small a matter. It is to be hoped that this contribution to California folk-lore will be followed by others from the pen of Mr. Merriam.

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The Simple Carbohydrates and the Glucosides. By E. FRANKLAND ARMSTRONG, D.Sc., Ph.D., Associate of the City and Guilds of London Institute. Pp. ix + 112. New York, Longmans, Green and Co. 1910.

This monograph, one of the series on Biochemistry, edited by R. H. Aders Plimmer and F. G. Hopkins, presents an up-to-date summary of the chemistry of the subject, particular emphasis being placed upon those carbohydrates which have a biochemical significance. It would be a matter of no little labor for a physiologist to acquire from the scattered literature a conception of the present status of the subject comparable in any degree with Dr. Armstrong's excellent review. As an illustration of the interesting incidental suggestions which have been introduced appropriately, the following paragraph may be quoted:

From the biological point of view, the fact that glucose exists in solution not as a single substance but as an equilibrated mixture of stereoisomeric γ -oxidic forms, readily convertible into one another, is of fundamental and far-reaching importance. If one of the stereoisomerides is preferably metabolized in the plant or animal, in the course

of either synthetic or analytic processes, the possibility of controlling the equilibrium in the one or other direction, so as to increase or limit the supply of this form, places a very delicate directive mechanism at the disposal of the organism. This question is undoubtedly one which demands the close attention of physiologists (p. 20).

The recent views regarding the structure of sugars are introduced in a way that is logical rather than dogmatic, and without rehearsing all the details of the evidence bearing on the points involved. The mono- and disaccharides are considered at some length, glucose being selected as the typical sugar for discussion. There are further included chapters on The Relation between Configuration and Properties, Hydrolysis and Synthesis, and The Natural and Synthetic Glucosides. The attempt of the author to present the subject by a stimulating method has resulted in a commendable success. A useful bibliography of 17 pages is appended.

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Mineralogie de la France et de ses Colonies. Tome Quatrième, 1^{re} partie. A. LACROIX. Librairie Polytechnique, Ch. Béranger, Editeur. Paris, Rue des Saints-Pères, 15. 1910.

The fourth and last volume of Lacroix's "Mineralogie de la France" is now being published, the first part having just appeared and the second, or final part, being promised before the year is out. The second part of the third volume, which appeared in 1909, was reviewed in SCIENCE, Vol. 32, No. 816, August 19. The present part starts in with the manginites and plumbites, braunite, hausmannite and minium. Under the psilomelane group, romanéchite is described as a distinct species with the formula $H_2(Mn, Ba)Mn_2O_6$ or $(Mn, Ba)O \cdot 3MnO_2 + H_2O$. It is near hollandite in composition, but differs from it in that hollandite is much richer in iron, and has all the H replaced by metals. Romanéchite forms compact or concretionary masses with fibrous structure. Psilomelane is described